

FINAL Site Inspection Report Waiawa Gulch Training Site and Unit Training and Equipment Site O'ahu, Hawai'i

Site Inspection for Perfluorooctanoic acid (PFOA),
Perfluorooctanesulfonic acid (PFOS), Perfluorohexanesulfonic
acid (PFHxS), Perfluorononanoic acid (PFNA),
Hexafluoropropylene oxide dimer acid (HFPO-DA), and
Perfluorobutanesulfonic acid (PFBS) at ARNG Installations,
Nationwide

May 2023

Prepared for:



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Acronyms and Abbreviations

%	percent
°C	degrees Celsius
°F	degrees Fahrenheit
µg/kg	micrograms per kilogram
AECOM	AECOM Technical Services, Inc.
AFFF	aqueous film-forming foam
amsl	above mean sea level
AOI	Area of Interest
ARNG	Army National Guard
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CoC	chain of custody
CSM	conceptual site model
CWRM	Commission on Water Resource Management
DA	Department of the Army
DoD	Department of Defense
DO	dissolved oxygen
DON	Department of the Navy
DOT	Department of Transportation
DPT	direct push technology
DQO	data quality objective
DUA	data usability assessment
EA	EA Engineering, Science, and Technology, Inc.
EDR™	Environmental Data Resources, Inc.™
ELAP	Environmental Laboratory Accreditation Program
EM	Engineer Manual
FedEx	Federal Express
GPRS	Ground Penetrating Radar Systems
HDOH	Hawai'i Department of Health
HDPE	high-density polyethylene
HEER	Hazard Evaluation and Emergency Response Office
HFPO-DA	hexafluoropropylene oxide dimer acid
HIARNG	Hawai'i Army National Guard
IDW	investigation-derived waste
ISM	Incremental Sample Methodology
ITRC	Interstate Technology Regulatory Council
kg	kilogram
LC/MS/MS	liquid chromatography with tandem mass spectrometry
MIL-SPEC	military specification
NELAP	National Environmental Laboratory Accreditation Program
ng/L	nanograms per liter
NOAA	National Oceanic and Atmospheric Administration
NTU	nephelometric turbidity units

ORP	oxidation-reduction potential
OSD	Office of the Secretary of Defense
PA	Preliminary Assessment
PFAS	per- and polyfluoroalkyl substances
PFBS	perfluorobutanesulfonic acid
PFHxS	perfluorohexanesulfonic acid
PFNA	perfluorononanoic acid
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
PID	photoionization detector
PQAPP	Programmatic UFP-QAPP
PVC	polyvinyl chloride
QA	quality assurance
QAPP	Quality Assurance Project Plan
QC	quality control
QSM	Quality Systems Manual
RI	Remedial Investigation
SI	Site Inspection
SL	screening level
SOP	standard operating procedure
TGM	Technical Guidance Manual
TOC	total organic carbon
TPP	Technical Project Planning
UFP	Uniform Federal Policy
US	United States
USACE	United States Army Corps of Engineers
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UTES	Unit Training and Equipment Site

Executive Summary

The Army National Guard (ARNG) G-9 is performing Preliminary Assessments (PAs) and Site Inspections (SIs) on the current or potential historical use of per- and polyfluoroalkyl substances (PFAS) with a focus on the six compounds presented in the memorandum from the Office of the Secretary of Defense (OSD) dated 6 July 2022 (Assistant Secretary of Defense, 2022). The six compounds listed in the OSD memorandum include perfluorooctanesulfonic acid (PFOS), perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA), perfluorohexanesulfonic acid (PFHxS), hexafluoropropylene oxide dimer acid (HFPO-DA)¹, and perfluorobutanesulfonic acid (PFBS). These compounds are collectively referred to as “relevant compounds” throughout the document, and the applicable screening levels (SLs) are provided in **Table ES-1**.

The PA identified two Areas of Interest (AOIs) where PFAS-containing materials may have been used, stored, disposed, or released historically (see **Table ES-2** for AOI locations). The objective of the SI is to identify whether there has been a release to the environment from the AOIs identified in the PA and determine whether further investigation is warranted, a removal action is required to address immediate threats, or no further action is required based on SLs for relevant compounds. This SI was completed at the Waiawa Gulch Training Site and Unit Training and Equipment Site (UTES) in O'ahu, Hawai'i and determined further evaluation under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is warranted for AOI 1 and AOI 2. The Waiawa Gulch Training Site and UTES will also be referred to as the “facility” throughout this document.

The Waiawa Gulch Training Site and UTES facility is located north of Pearl Harbor, on the island of O'ahu. The facility falls 0.75 miles northeast of the H1-H2 freeway merge. The facility is bordered to the north and south by industrial activities and to the west by a privately operated junk yard. The Waiawa Gulch Training Site and UTES facility comprise approximately 20 acres.

The PA identified two AOIs for investigation during the SI phase. SI sampling results from the two AOIs were compared to OSD SLs. **Table ES-2** summarizes the SI results for each AOI. Based on the results of this SI, further evaluation under CERCLA is warranted in a Remedial Investigation (RI) for AOI 1 and AOI 2.

¹ Of the six PFAS compounds presented in the 6 July 2022 OSD memorandum, HFPO-DA (commonly referred to as GenX) was not included as an analyte at the time of this SI. Based on the conceptual site model (CSM) developed during the PA and revised based on SI findings, the presence of HFPO-DA is not anticipated at the facility because HFPO-DA is generally not a component of military specification (MIL-SPEC) aqueous film forming foam (AFFF) and based on its history including distribution limitations that restricted use of GenX, it is generally not a component of other products the military used. In addition, it is unlikely that GenX would be an individual chemical of concern in the absence of other PFAS.

Table ES-1: Screening Levels (Soil and Groundwater)





Analyte ^b	Residential (Soil) (µg/kg) ^a 0-2 feet bgs	Industrial/ Commercial Composite Worker (Soil) (µg/kg) ^a 2-15 feet bgs	Tap Water (Groundwater) (ng/L) ^a
PFOA	19	250	6
PFOS	13	160	4
PFBS	1,900	25,000	601
PFHxS	130	1,600	39
PFNA	19	250	6

Notes:




bgs = below ground surface; µg/kg = micrograms per kilogram; ng/L = nanograms per liter

- a.) Assistant Secretary of Defense, 2022. Risk Based Screening Levels in Groundwater and Soil using United States Environmental Protection Agency's (USEPA's) Regional Screening Level Calculator. Hazard Quotient (HQ) = 0.1. 6 July 2022.
- b.) Of the six PFAS compounds presented in the 6 July 2022 OSD memorandum, HFPO-DA (commonly referred to as GenX) was not included as an analyte at the time of this SI. Based on the CSM developed during the PA and revised based on SI findings, the presence of HFPO-DA is not anticipated at the facility because HFPO-DA is generally not a component of MIL-SPEC AFFF and based on its history including distribution limitations that restricted use of GenX, it is generally not a component of other products the military used. In addition, it is unlikely that GenX would be an individual chemical of concern in the absence of other PFAS.

Table ES-2: Summary of Site Inspection Findings and Recommendations

AOI	Potential Release Area	Soil – Source Area	Groundwater – Source Area	Future Action
1	Firetruck Pump Test Area			Proceed to RI
2	Firetruck Parking Area, Vehicle Maintenance Area, and Storage Buildings			Proceed to RI

Legend:

-  = detected; exceedance of the screening levels
-  = detected; no exceedance of the screening levels
-  = not detected

1. Introduction

1.1 Project Authorization

The Army National Guard (ARNG) G-9 is the lead agency in performing Preliminary Assessments (PAs) and Site Inspections (SIs) on the current or potential historical use of per- and polyfluoroalkyl substances (PFAS) with a focus on the six compounds presented in the memorandum from the Office of the Secretary of Defense (OSD) dated 6 July 2022 (Assistant Secretary of Defense, 2022). The six compounds listed in the OSD memorandum will be referred to as “relevant compounds” throughout this document and include perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), perfluorohexanesulfonic acid (PFHxS), perfluorononanoic acid (PFNA), hexafluoropropylene oxide dimer acid (HFPO-DA)¹, and perfluorobutanesulfonic acid (PFBS) at ARNG facilities nationwide. The ARNG performed this SI at the Waiawa Gulch Training Site and Unit Training and Equipment Site (UTES) in O'ahu, Hawai'i. The Waiawa Gulch Training Site and UTES will also be referred to as the “facility” throughout this document.

The SI project elements were performed in compliance with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA; United States [US] Environmental Protection Agency [USEPA], 1980), as amended, the National Oil and Hazardous Substances Pollution Contingency Plan (40 Code of Federal Regulations Part 300; USEPA, 1994), and in compliance with US Department of the Army (DA) requirements and guidance for field investigations.

1.2 SI Purpose

A PA was performed at the Waiawa Gulch Training Site and UTES (AECOM Technical Services, Inc. [AECOM], 2020) that identified two Areas of Interest (AOIs) where PFAS-containing materials may have been used, stored, disposed, or released historically. The objective of the SI is to identify whether there has been a release to the environment from the AOIs identified in the PA and determine whether further investigation is warranted, a removal action is required to address immediate threats, or no further action is required based on screening levels (SLs) for the relevant compounds.

¹ Of the six PFAS compounds presented in the 6 July 2022 OSD memorandum, HFPO-DA (commonly referred to as GenX) was not included as an analyte at the time of this SI. Based on the conceptual site model (CSM) developed during the PA and revised based on SI findings, the presence of HFPO-DA is not anticipated at the facility because HFPO-DA is generally not a component of military specification (MIL-SPEC) aqueous film forming foam (AFFF) and based on its history including distribution limitations that restricted use of GenX, it is generally not a component of other products the military used. In addition, it is unlikely that GenX would be an individual chemical of concern in the absence of other PFAS.

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2. Facility Background

2.1 Facility Location and Description

The Waiawa Gulch Training Site and UTES facility is located north of Pearl Harbor, on the island of O'ahu (**Figure 2-1**). The facility falls 0.75 miles northeast of the H1-H2 freeway merge. The facility is bordered to the north and south by industrial activities and to the west by a privately-operated junk yard. The Waiawa Gulch Training Site and UTES facility comprises approximately 20 acres.

Prior to Hawai'i ARNG (HIARNG) use, the UTES portion of the installation was owned and operated by the Navy as a military vehicle and equipment maintenance and storage facility from 1943 to 1951. When Navy operations at the facility ended, the land was transferred to the US Army. HIARNG acquired Naval Aviation Supply Depot Waiawa Gulch from the US Army in 1961.

Waiawa Gulch Training Site and UTES facility provides training and maintenance for the various units that support the Hawai'i (HIARNG). The Waiawa Gulch Training Site and UTES facility consists of office areas, a wash bay, maintenance shop, motor pool, and various small storage buildings. Historical aerial photography indicates that a large motor pool and storage facility were located on the northern portion of the property, prior to 2014. The US Navy historically had ownership of the facility property from 3 August 1945. On 21 July 1959, the property was transferred to the HIARNG (Argonne National Laboratory, 1993).

2.2 Facility Environmental Setting

The Waiawa Gulch Training Site and UTES facility is located approximately 1.25 miles north of Middle Loch (Pearl Harbor). Throughout Waiawa Gulch Training Site and UTES, the natural terrain slopes south towards Pearl Harbor and west towards Waiawa Stream, ranging from a maximum elevation of 90 feet above mean sea level (amsl) to 50 feet amsl (**Figure 2-2**).

2.2.1 Geology

Two major volcanic mountain ranges forming the island of O'ahu are the Wai'anae Range in the west and the much younger Ko'olau Range in the east. Both ranges are the eroded remnants of the large elongate Wai'anae and Ko'olau shield volcanoes. After a long period of erosion, volcanic activity resumed with the Honolulu Volcanic Series and its eruption of vents and lava flows. The eruptions produced by these features tended to be discrete, explosive events that produced volumes of ash, which blanketed older sloping Ko'olau basalt baserock.

On the central and eastern side of O'ahu, the underlying baserock extrusive volcanic layers are lava flows from the Ko'olau shield volcano. Layers of 'a'ā flows, pāhoehoe flows, and clinker boundaries can be found in the subsurface (Macdonald et. al, 1983). Geology beneath the facility is older alluvium.

The facility lies predominately on soil consisting of fill materials originating from dredging or hauled in from nearby areas (Argonne National Laboratory, 1993), and alluvium. This soil is composed of primarily silty clay and sandy clay. The soil along the boundaries of the facility consists of Kawaihapai stony clay loam (Department of the Navy [DON], 2016). The total thickness of the soil formation decreases from north to south, with maximum depth to bedrock at 200 feet below ground surface (bgs) (DON, 1990). **Figure 2-3** uses United State Geological Survey (USGS) data from the Geologic Map of the State of Hawai'i to show local geologic units at the facility (USGS, 2007).

SI soil boring depths ranged from 24.25 to 56 feet bgs. The borings primarily consisted of lean clay and sandy silt with varying concentrations of gravel. Fat clay was reported in one boring (AOI01-02) at 5 to 10 feet bgs. Many of the logs also reported fill (described as sandy silt, lean clay, and well-graded sand) at the surface. At greater depths, weathered basalt and basalt rock flour were observed interbedded with the unconsolidated alluvial clayey and silty soils. The facility observations are consistent with the understood land fill material expected. Boring logs are presented in **Appendix E**.

2.2.2 Hydrogeology

In the Waiawa Valley, an aquifer formed in the alluvium is recharged by rainfall, flood waters from Waiawa Stream, and streambed leakage. The alluvial aquifer is approximately 100 to 200 feet thick. The upper zone of the Pearl Harbor Basal aquifer lies beneath the alluvial aquifer and is separated by a layer of saturated saprolite. The low permeability of the saprolite keeps the hydraulic heads of the two aquifers distinct; however, flow from alluvial aquifer groundwater to the upper zone of the basal aquifer may occur (DON, 1990).

The Waiawa basal aquifer, which underlies the Waiawa Gulch Training Site and UTES and alluvial aquifer, is part of the Pearl Harbor Aquifer, the most productive aquifer in the state. The hydrologic and geologic classification of the Waiawa aquifer system (Hawai'i Department of Health [HDOH] Aquifer Code 3-02-02-111, Status Code 11111) at the facility describes the aquifer as a basal, unconfined aquifer in horizontally extensive flank basalt lava flows. The basal groundwater originates as rainwater falling in higher drainage basins to the north and northeast of the facility. The basal groundwater generally migrates seaward towards Pearl Harbor through zones of clinkers (Macdonald et. al, 1983). The basal aquifer can be divided into three layers: upper, middle, and lower. The upper basal aquifer consists of a mixture of rainfall recharge, irrigation return, and subsurface inflow. The middle layer consists primarily of cooler subsurface inflow from mountain recharge areas, and the lower layer is slightly warmer than the middle layer (DON, 1990). The groundwater status for the upper aquifer is classified as the following: a currently used drinking water source that is ecologically important; fresh water (salinity less than 250 milligrams per liter chloride); irreplaceable in uniqueness; and highly vulnerable to contamination (Mink and Lau, 1990). Local hydrogeological units are shown on **Figure 2-3**.

An Environmental Data Resources, Inc.TM (EDR)TM report conducted a well search for a 1-mile radius surrounding the facility, and additional online resources, such as state and local Geographic Information System databases, were used to research wells within a 4-mile radius of the facility. Numerous wells of various use exist in all directions, and multiple industrial, agricultural, irrigation, and domestic wells are located directly downgradient of the facility. Based on the position and depth of these wells, it is possible that some of the wells are screened in the alluvial aquifer. Municipal water supply wells are located both east and west of the facility, within 4 miles (**Figure 2-3**). Based on the position and depths of the municipal water supply wells, they are screened in the basal aquifer. Drinking water at Waiawa Gulch Training Site and UTES is resourced from public drinking water wells that are located cross-gradient, approximately 0.65 miles southeast of the facility. These are the Honolulu Board of Water Supply Pearl City Shaft, Pearl City 1, and Pearl City 2 wells, which range from 140 to 151 feet bgs (State of Hawai'i Commission on Water Resource Management [CWRM], 2022).

Depths to water measured in March 2022 during the SI ranged from 31.96 to 52.21 feet local mean sea level. SI borings were completed in the unconfined alluvial aquifer underlying the facility. Based on the predominant subsurface materials observed (lean clays and sandy silt), the borings did not reach the extensive flank basalt lava flows that characterize the basal aquifer. Because the basal aquifer depth at the facility is unknown, additional data are needed to evaluate the potential for a hydrogeologic connection between the groundwater encountered in the SI borings and the basal aquifer groundwater.

Groundwater elevations at AOI 1 were higher (44.32 to 52.21 feet local mean sea level) than groundwater elevations at AOI 2 (31.96 to 34.98 feet local mean sea level). The SI boring logs and drilling conditions indicate a complex hydrogeological setting at the facility. At AOI 1, the two monitoring wells were installed with well screens at similar elevations; however, based on the depths to groundwater observed, it is possible the wells are screened in discontinuous water-bearing units. Additionally, based on the boring logs for the permanent well installation at AOI01-02, the well screen interval was set below the groundwater table. As a result, groundwater elevation contours are not shown on **Figure 2-4** for the AOI 1 area. Permanent well AOI01-02 is included in the groundwater elevation contours shown to provide a comparison of elevation data between AOI 1 and AOI 2. Additional data are necessary to determine groundwater flow direction at AOI 1. The groundwater elevation at AOI01-02 compared to the groundwater elevations at AOI 2 suggests groundwater flows southwest across the greater facility area, which follows the presumed regional groundwater flow of the basal aquifer south towards Pearl Harbor.

Although groundwater across the facility presumably flows southwest, there is uncertainty surrounding groundwater flow based on the localized groundwater elevation observed at AOI 2 during the SI. In the southern portion of the facility near AOI 2, groundwater elevations indicate a convergence of flow near AOI02-02. This may be due to heterogeneous subsurface materials, such as disconnected clay lenses, or the influence of underground stormwater channels. It is also possible that surface topography influences the convergence at this location, as surface topography indicates a local depression at that point. It is unknown whether Waiawa Stream affects groundwater flow at each AOI. Groundwater elevation contours from the SI are presented on **Figure 2-4**. Depth to groundwater and groundwater elevations are discussed further and tabulated in **Sections 5.3** and **5.4**.

2.2.3 Hydrology

The facility is located within the main Pearl Harbor Watershed, which encompasses 110 square miles and comprises nine subwatersheds. The facility lies within the Waiawa subwatershed, which consists of Waiawa Stream and its tributaries (Commander, Navy Region Hawai'i, 2011). Waiawa Stream partially borders Waiawa Gulch Training Site and UTES along the southwestern boundary (**Figure 2-5**). Waiawa Stream drains south to Middle Loch, within Pearl Harbor, approximately 1.25 miles away, and subsequently to the Pacific Ocean. Stormwater runoff at the facility is directed towards a series of storm drains and a drainage pit located in the southwest corner of the property, near the storage buildings. A dry-well system formerly existed at the facility but has been capped and is no longer functional. The drainage pit was constructed in 2019 and receives stormwater discharge from the wash rack. Facility storm drains ultimately discharge into Waiawa Stream.

2.2.4 Climate

O'ahu is located in the tropics, with a climate characterized by mild temperatures, northeasterly trade winds year-round, and moderate humidity. Hawai'i has two seasons: summer (between May and October) and winter (between October and April). The annual average temperature in nearby Wahiawa is 71.9 degrees Fahrenheit (°F), with temperatures decreasing at higher elevations. The coldest average temperatures are in January (68.5°F), and the warmest temperatures are in August (75.5°F) (National Oceanic and Atmospheric Administration [NOAA], 2022). Humidity on O'ahu ranges from approximately 30 to 90 percent (%). Precipitation predominantly occurs when the island's mountain masses capture and cool the rising, warm, moist ocean air, producing higher rainfall in the windward and mountain areas, and lower rainfall in the leeward and coastal zones. Annual rainfall ranges from 20 inches in the leeward coastal areas to 250 inches on the Ko'olau mountain peaks (Macdonald et.al, 1983) Nearby Wahiawa has an average annual rainfall of 64.8 inches (NOAA, 2022).

2.2.5 Current and Future Land Use

Current Waiawa Gulch Training Site and UTES operations include training and maintenance for the various units that support the HIARNG. In addition to vehicle maintenance and support for HIARNG, periodic training exercises and course work for the National Guard units are conducted at the facility. The facility is staffed by both full- and part-time employees.

Portions of the northern and southern borders of Waiawa Gulch Training Site and UTES are abutted primarily by industrial land use. A junk yard abuts the northwestern boundary of the facility. Across the road of the eastern border is a small industrial park. The closest urban center is Pearl City, approximately 0.1 miles to east.

Reasonably anticipated future land use is not expected to change from the current land use described above.

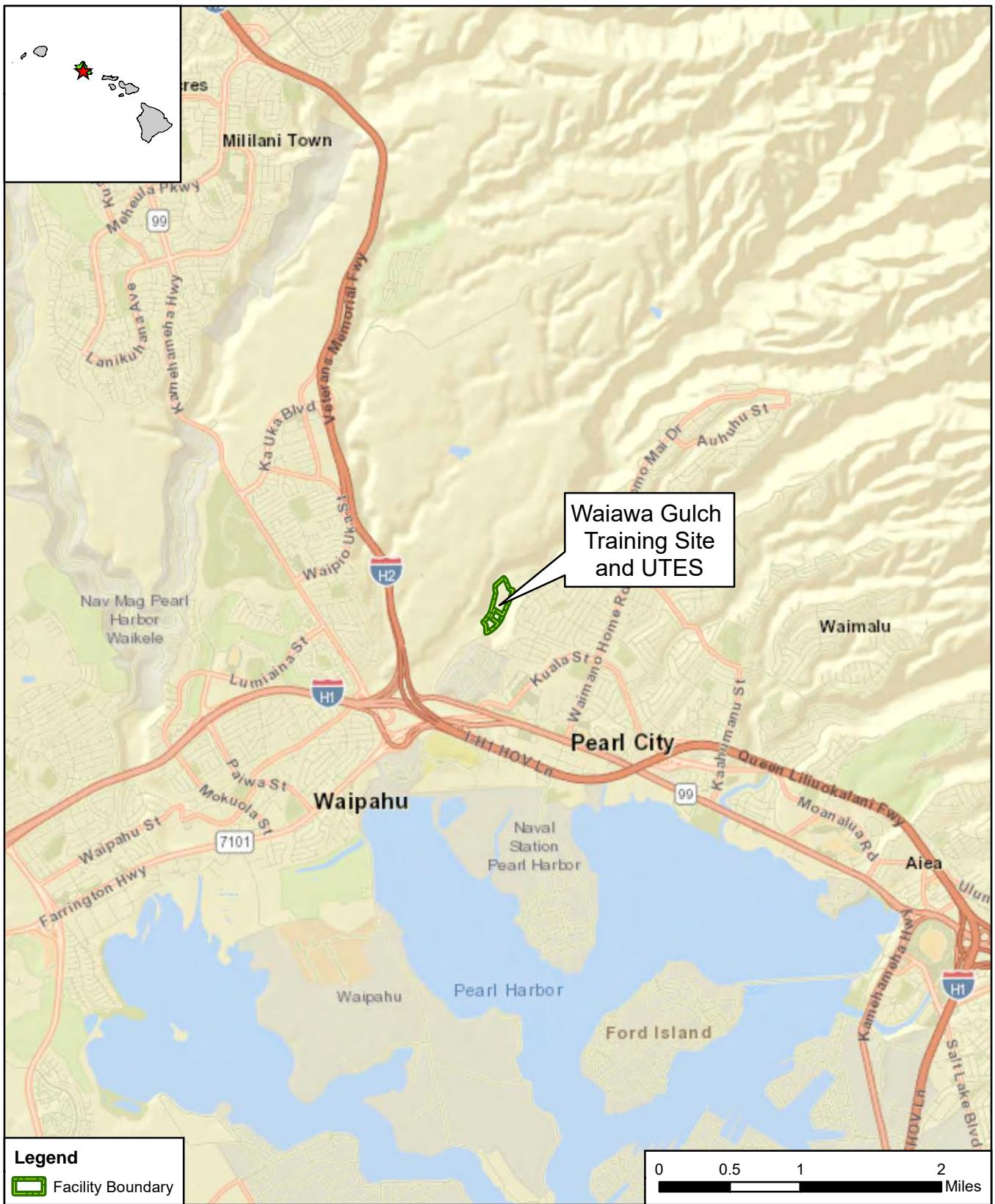
2.2.6 Sensitive Habitat and Threatened/ Endangered Species

The following birds, mammals, and plants are federally endangered, threatened, proposed, and/or are listed as candidate species for the facility area (US Fish and Wildlife Service [USFWS], 2022).

- **Birds:** Band-rumped storm-petrel, *Oceanodroma castro* (endangered); Hawaiian Duck/Koloa, *Anas wyvilliana* (endangered); Hawaiian stilt, *Himantopus mexicanus knudseni* (endangered); Hawaiian coot, *Fulica americana alai* (endangered); Hawai'i 'akepa, *Loxops coccineus* (endangered); Hawaiian common gallinule, *Gallinula galeata sandvicensis* (endangered); Newell's Townsend's shearwater, *Puffinus auricularis newelli* (threatened)
- **Mammals:** Hawaiian hoary bat, *Lasiurus cinereus semotus* (endangered)
- **Flowering plants:** 'aiea, *Nothocestrum latifolium* (endangered); 'akoko, *Euphorbia celastroides* var. *kaenana* (endangered); 'akoko, *Euphorbia kuwaleana* (endangered); 'ena'ana, *Pseudognaphalium sandicensium* var. *molokaiense* (endangered); Carter's Panicgrass, *Panicum fauriei* var. *carteri* (endangered); 'Ihi, *Portulaca villosa* (endangered); 'Ohai, *Sesbania tomentosa* (endangered); Pu'uka'a, *Cyperus trachysanthos* (endangered); *Spermolepsis hawaiiensis* (no common name, endangered); *Vigna o-wahuensis* (no common name, endangered)
- **Ferns and Allies:** Ihi'ihi, *Marsilea villosa* (endangered)

2.3 History of PFAS Use

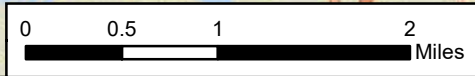
Two potential release areas were identified at the Waiawa Gulch Training Site and UTES during the PA where aqueous film-forming foam (AFFF) may have been used or released historically (AECOM, 2020). The Waiawa Gulch Training Site and UTES includes a Firetruck Pump Test Area as well as a Vehicle Maintenance Area, Firetruck Parking Area, and Storage Buildings potentially impacted by AFFF use or storage. The Firetruck Pump Test Area in the northern portion of the facility is a grassy area used for vehicle storage and for pump testing of a firetruck. Because there is little knowledge regarding historical pump testing activities, AFFF may have been released within the grassy area where testing occurred. The Firetruck Pump Test Area is considered AOI 1. The southern portion of the facility includes the vehicle maintenance area and surrounding areas where AFFF was discharged from the facility firetruck in the early 2000s, the grassy firetruck parking area, and the storage buildings on the edge of the grassy area where AFFF has been stored. These areas comprise AOI 2. Descriptions of AOI 1 and AOI 2 are presented in **Section 3**.



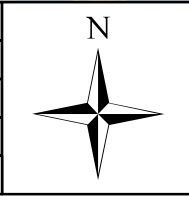
Waiawa Gulch Training Site and UTES

Legend

Facility Boundary



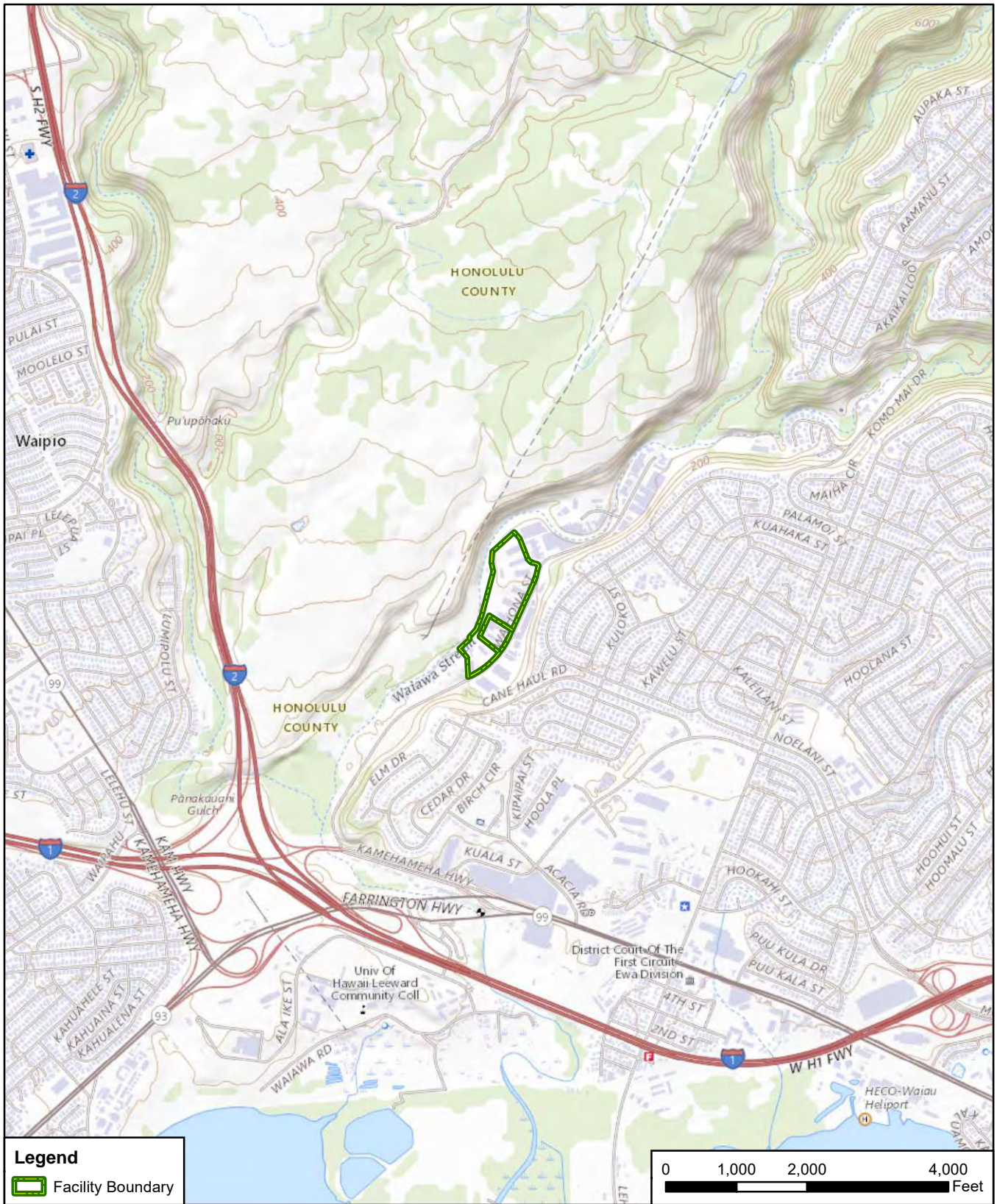
CLIENT	ARNG			
PROJECT	Site Inspection at Waiawa Gulch Training Site and UTES, HI			
REVISED	10/25/2022	GIS BY	MS	10/25/2022
SCALE	1:63,360	CHK BY	JW	10/25/2022
Base Map: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI,		PM	CM	10/25/2022



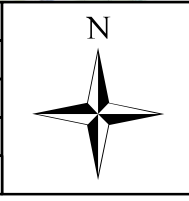
Facility Location

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

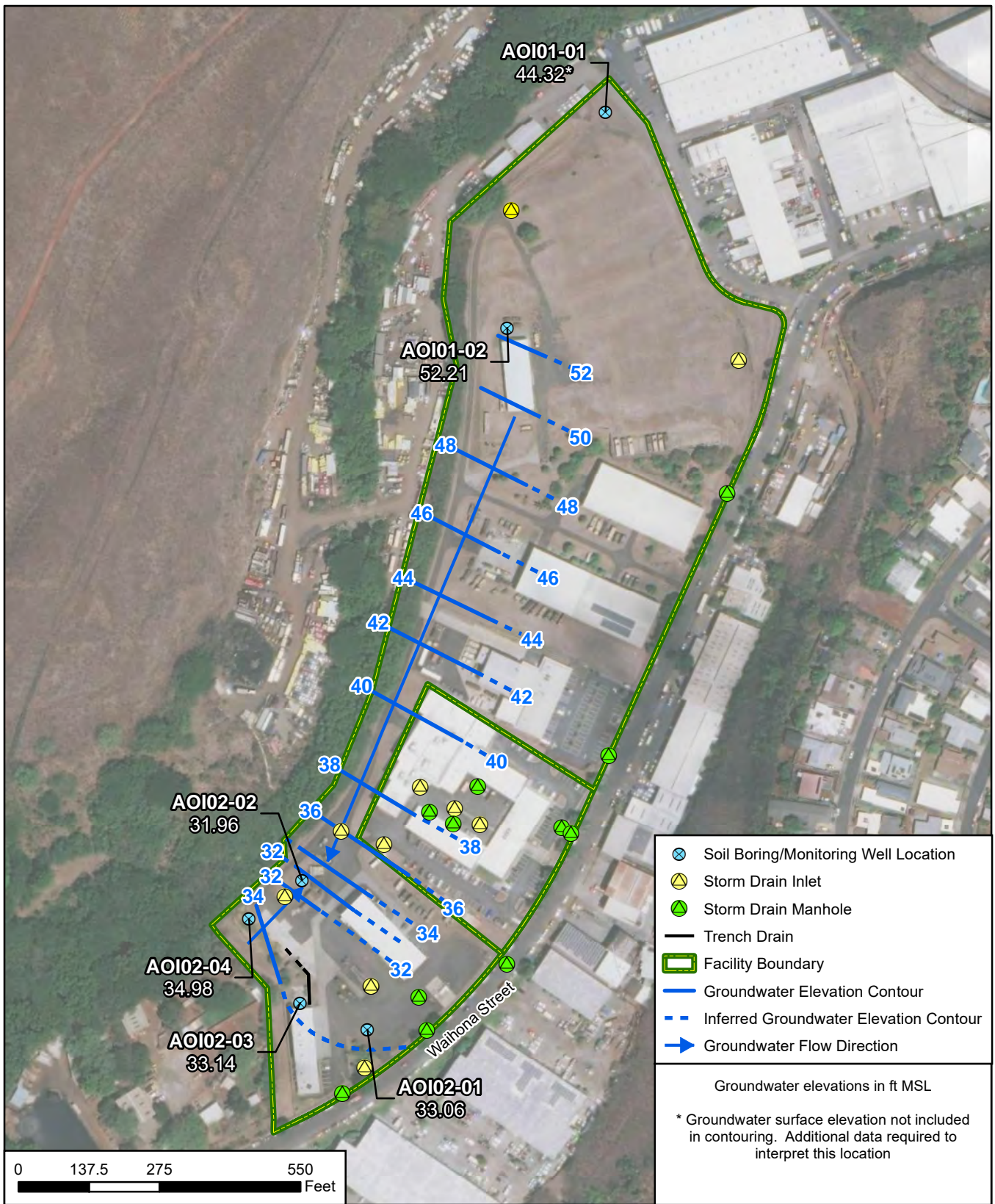
Figure 2-1



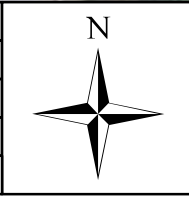
CLIENT	ARNG			
PROJECT	Site Inspection at Waiawa Gulch Training Site and UTES, HI			
REVISED	10/25/2022	GIS BY	MS	10/25/2022
SCALE	1:24,000	CHK BY	ST	10/25/2022
Base Map: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program.		PM	CM	10/25/2022



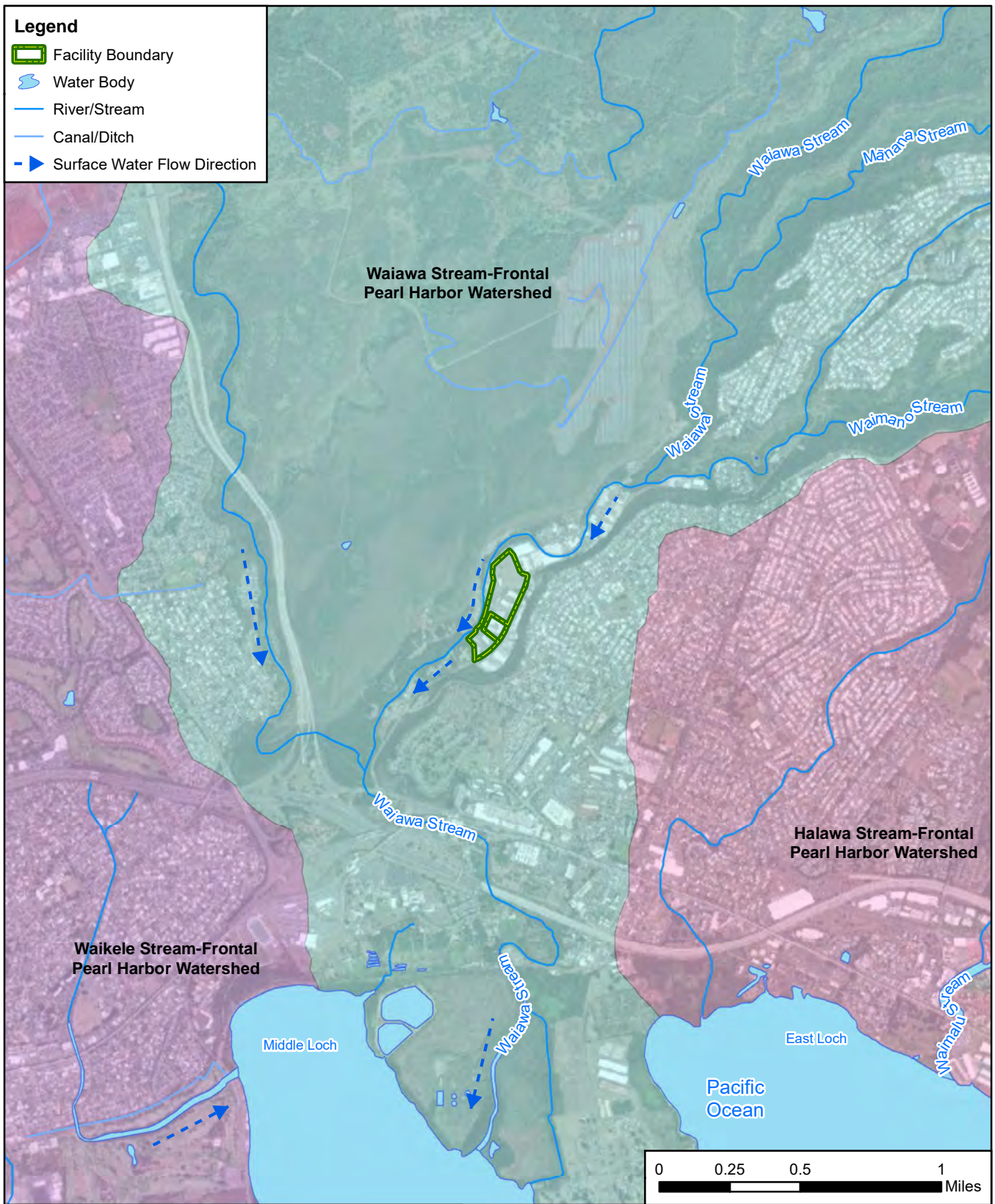
Facility Topography	
AECOM	Figure 2-2
12420 Milestone Center Drive Germantown, MD 20876	



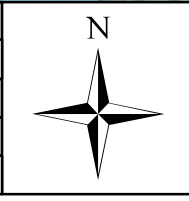
CLIENT	ARNG			
PROJECT	Site Inspection at Waiawa Gulch Training Site and UTES, HI			
REVISED	1/26/2023	GIS BY	MS	1/26/2023
SCALE	1:3,300	CHK BY	JW	1/26/2023
Base Map: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community	PM	CM	1/26/2023	



Groundwater Elevations, April 2022	
AECOM 12420 Milestone Center Drive Germantown, MD 20876	Figure 2-4



CLIENT	ARNG			
PROJECT	Site Inspection at Waiawa Gulch Training Site and UTES, HI			
REVISED	1/26/2023	GIS BY	MS	1/26/2023
SCALE	1:31,680	CHK BY	JW	1/26/2023
Base Map: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community	PM	CM	1/26/2023	



Surface Water Features	
AECOM 12420 Milestone Center Drive Germantown, MD 20876	Figure 2-5

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3. Summary of Areas of Interest

The PA evaluated areas where PFAS-containing materials may have been used, stored, disposed, or released historically. Based on the PA findings, four potential release areas were identified at Waiawa Gulch Training Site and UTES and grouped into two AOIs (AECOM, 2020). The potential release areas are shown on **Figure 3-1**.

3.1 AOI 1 Firetruck Pump Test Area

AOI 1 is in the north portion of the facility. Because there is little knowledge regarding historical pump testing activities, AFFF may have been released within the grassy area where testing occurs. AOI 1 is an open grassy area that is used for vehicle storage and for pump testing of the firetruck. According to interviews, the pumps on the truck were tested once a month by spraying water at a tree located within the northern portion of the facility. During the pump testing, the firetruck parked in the northern portion of the facility. The testing activities may have released AFFF into the grass and migrated via surface runoff to the adjacent Waiawa Stream. Stormwater runoff at AOI 1 is captured by storm drains that ultimately discharge into Waiawa Stream, which is located in the vicinity of the storage buildings. The Waiawa Stream flows south to Middle Loch, within Pearl Harbor, and subsequently the Pacific Ocean.

3.2 AOI 2 Vehicle Maintenance Area, Firetruck Parking Area, and Storage Buildings

AOI 2 is in the southern portion of the facility and includes the vehicle maintenance area and surrounding areas where AFFF was discharged from the facility firetruck in the early 2000s, the grassy firetruck parking area, and the storage buildings where AFFF has been stored. One 55-gallon drum of 3% Ansulite AFFF and one 5-gallon pail of 6% 3M AFFF were originally located in the metal portable storage units located north of the maintenance building. Later, the drum and pail were moved to the right side of a future stone hazardous materials storage building. The drum and pail were transported in September 2020 for disposal at a mainland facility.

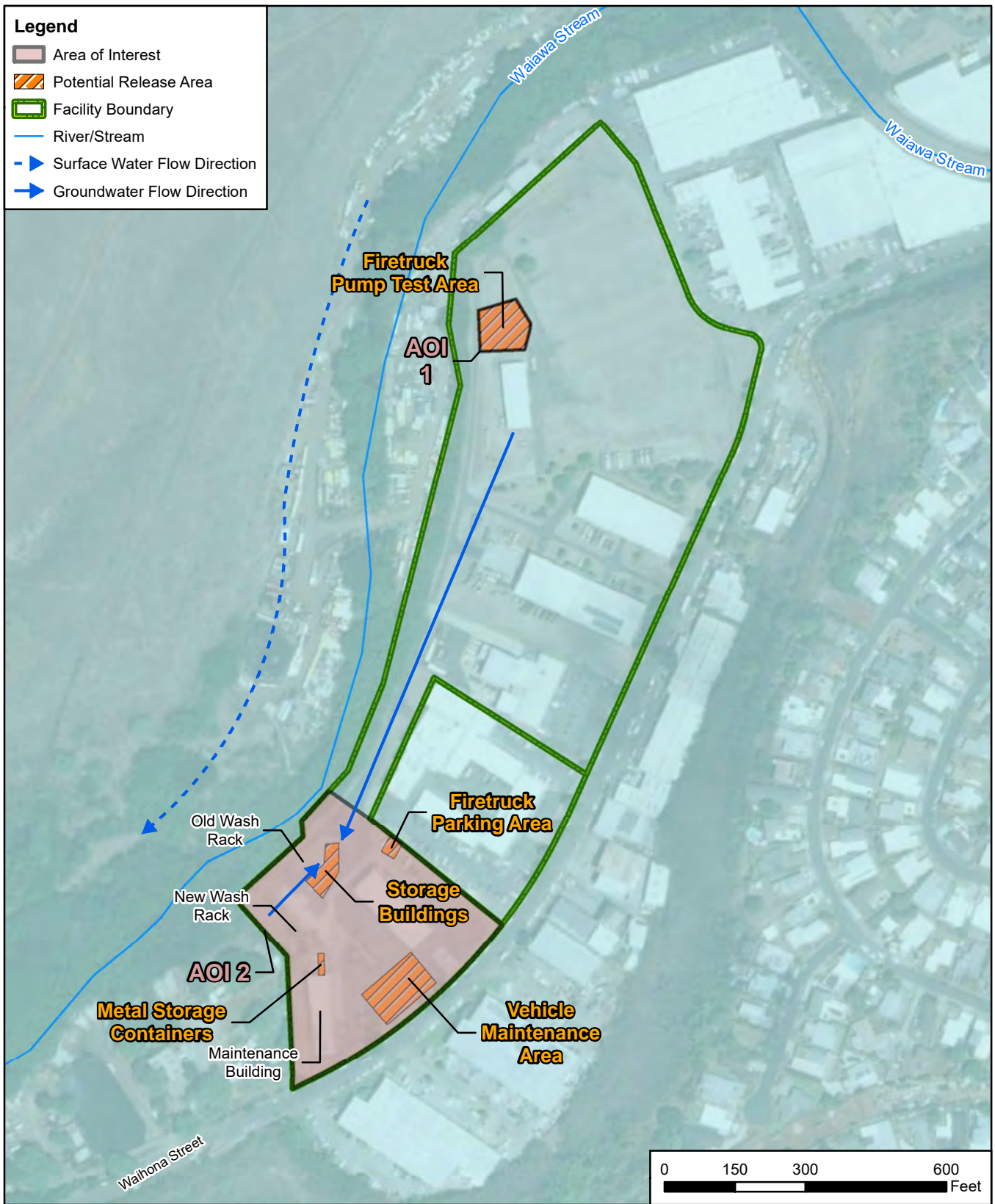
During interviews, it was confirmed that the firetruck was filled with 3% AFFF concentrate in the early 2000s, and an unknown quantity of foam was released in a large open area covered in asphalt between the vehicle maintenance buildings adjacent to Waihona Street. There are two storm drains located within the reported area of release that discharge to Waiawa Stream. One storm drain is located northwest of the release area, and the second is located southeast of the release area. Additionally, Tri-Max™ units may have been serviced at the vehicle maintenance buildings by discharging a volume of foam from the extinguishers into plastic trash bags; however, this is uncertain based on interviews. The disposition of the bagged AFFF is unknown.

AFFF discharge and storage within AOI 2 may have resulted in releases to the paved and grassy areas at the firetruck parking area, vehicle maintenance buildings, and the storage buildings. AFFF released to the pavement may also have drained to storm drains that discharge to an outfall located along Waiawa Stream.

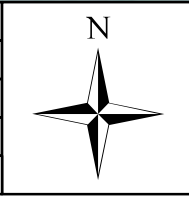
3.3 Adjacent Sources

No potential off-site sources were identified during the PA; however, fires have been documented at the adjacent, privately owned junk yard. Facility staff noted that a large explosion historically occurred in the 1990s at the adjacent junk yard. The explosion caused items from within the junk yard to be projected over onto the Waiawa Gulch Training Site and UTES property.

According to interviewee's knowledge of the associated firefighting efforts, the fires were put out with water.



CLIENT	ARNG			
PROJECT	Site Inspection at Waiawa Gulch Training Site and UTES, HI			
REVISED	1/26/2023	GIS BY	MS	1/26/2023
SCALE	1:3,600	CHK BY	JW	1/26/2023
Base Map: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community	PM	CM	1/26/2023	



Areas of Interest	
AECOM 12420 Milestone Center Drive Germantown, MD 20876	Figure 3-1

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4. Project Data Quality Objectives

As identified during the Data Quality Objective (DQO) process and outlined in the SI Quality Assurance Project Plan (QAPP) Addendum (AECOM, 2021), the objective of the SI is to identify whether there has been a release to the environment at the AOIs identified in the PA. For each AOI, ARNG determines if further investigation is warranted, a removal action is required to address immediate threats, or whether no further action is warranted. This SI evaluated groundwater and soil for presence or absence of relevant compounds at each of the sampled AOIs.

4.1 Problem Statement

ARNG will recommend an AOI for Remedial Investigation (RI) if related soil and/or groundwater samples have concentrations of the relevant compounds above the OSD risk-based SLs. The SLs are presented in **Section 6.1** of this report.

4.2 Information Inputs

Primary information inputs included:

- The PA for Waiawa Gulch Training Site and UTES (AECOM, 2020);
- Analytical data from groundwater and soil samples collected as part of this SI in accordance with the site-specific Uniform Federal Policy (UFP)-QAPP Addendum (AECOM, 2021); and
- Field data collected during the SI, including groundwater elevation and water quality parameters measured at the time of sampling.

4.3 Study Boundaries

The scope of the SI was bounded by the property limits of the facility (**Figure 2-2**) with respect to soil and groundwater sampling. The scope of the SI was vertically bounded by the basal aquifer underlying the facility. All drilling was performed within the surficial unconsolidated aquifer, not the Pearl Harbor Aquifer. There is not much seasonable variability at the facility, thus temporal boundaries did not limit the scope of the SI. SI activities performed at the facility were conducted in March and April, and the results reflect conditions at the facility at that time. There was no severe weather event just before or during field activities. Additionally, off-facility sampling may be performed if drinking water wells are identified within 1.25 miles of the facility boundary in the southern direction. If the wells to the south are identified as drinking water wells, the proper stakeholders will be notified, and necessary rights-of-entry will be obtained by ARNG with property owner(s). The results of the off-facility potable well sampling will be reported in a separate memorandum.

4.4 Analytical Approach

Samples were analyzed by Pace Analytical Gulf Coast, accredited under the Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP; Accreditation Number 74960) and the National Environmental Laboratory Accreditation Program (NELAP; Certificate Number 01955). Data were compared to applicable SLs within this document and decision rules as defined in the SI QAPP Addendum (AECOM, 2021).

Discrete bulk soil samples were collected in the field and sent to the laboratory where they were subsampled and prepared using incremental sample methodology (ISM), per the SI QAPP Addendum. Soil samples were not collected in the field using ISM. A subset of soil samples

collected were also incidentally prepared using standard preparation technique in addition to ISM preparation. When this error was discovered, these samples were reprepared via ISM. For the purpose of this report, the ISM preparation concentration data for those samples are used to evaluate sample locations and are provided on figures and tables. The standard preparation analysis concentration results for those samples is provided in **Appendix F**. Groundwater samples were collected via low-flow sampling at newly installed permanent monitoring wells and submitted to the laboratory for analysis. Groundwater samples were not collected or prepared using ISM.

4.5 Data Usability Assessment

The Data Usability Assessment (DUA), which is provided in **Appendix A**, is an evaluation at the conclusion of data collection activities that uses the results of both data verification and validation in the context of the overall project decisions or objectives. Using both quantitative and qualitative methods, the assessment determines whether project execution and the resulting data have met installation-specific DQOs. Both sampling and analytical activities are considered to assess whether the collected data are of the right type, quality, and quantity to support the decision-making (DoD, 2019a; DoD, 2019b; USEPA, 2017).

Based on the DUA, the environmental data collected during the SI were found to be acceptable and usable for this SI evaluation with the qualifications documented in the DUA and its associated data validation reports. These data are of sufficient quality to meet the objectives and requirements of the SI QAPP Addendum (AECOM, 2021).

5. Site Inspection Activities

This section describes the environmental investigation and sampling activities that occurred as part of the SI. The SI sampling approach was based on the findings of the PA and implemented in accordance with the following approved documents:

- *Final Site Inspection Programmatic Uniform Federal Policy-Quality Assurance Project Plan (PQAPP)* dated March 2018 (AECOM, 2018a);
- *Final Programmatic Accident Prevention Plan* dated July 2018 (AECOM, 2018b);
- *Final Preliminary Assessment Report, Waiawa Gulch Training Site and Unit Training and Equipment Site, O'ahu, Hawai'i* dated September 2020 (AECOM, 2020);
- *Final Site Inspection Uniform Federal Policy-Quality Assurance Project Plan Addendum, Waiawa Gulch Training Site and Unit Training and Equipment Site, O'ahu, Hawai'i* dated November 2021 (AECOM, 2021); and
- *Final Site Safety and Health Plan, Waiawa Gulch Training Site and Unit Training and Equipment Site, O'ahu, Hawai'i* dated March 2022 (AECOM, 2022).

The SI field activities were conducted from 18 March to 11 April 2022 and consisted of utility clearance, direct push boring, soil sample collection, permanent monitoring well installation via solid flight auger drilling, well development, groundwater sample collection, and land surveying. Field activities were conducted in accordance with the SI QAPP Addendum (AECOM, 2021), except as noted in **Section 5.8**.

The following samples were collected during the SI and analyzed for a subset of 18 compounds by liquid chromatography with tandem mass spectrometry (LC/MS/MS) compliant with Quality Systems Manual (QSM) 5.3 Table B-15 to fulfill the project DQOs. Aqueous samples were analyzed via standard preparation; solid samples were analyzed via ISM preparation:

- Fifteen (15) soil samples from nine boring locations;
- Six groundwater samples from six permanent monitoring wells;
- Nineteen (19) quality assurance (QA)/quality control (QC) samples.

Figure 5-1 provides the sample locations for all media across the facility. **Table 5-1** presents the list of samples collected for each media. Field documentation is provided in **Appendix B**. A Log of Daily Notice of Field Activity was completed throughout the SI field activities, which is provided in **Appendix B1**. Sampling forms are provided in **Appendix B2**, Field Change Requests are provided in **Appendix B3**, and land survey data are provided in **Appendix B4**. Additionally, a photographic log of field activities is provided in **Appendix C**.

5.1 Pre-Investigation Activities

In preparation for the SI field activities, project team members participated in Technical Project Planning (TPP) meetings, performed utility clearance, and sampled decontamination source water. Details for each of these activities are presented below.

5.1.1 Technical Project Planning

The US Army Corps of Engineers (USACE) TPP Process, Engineer Manual (EM) 200-1-2 (USACE, 2016) defines four phases to project planning: 1.) defining the project phase; 2.) determining data needs; 3.) developing data collection strategies; and 4.) finalizing the data

collection plan. The process encourages stakeholder involvement in the SI, beginning with defining overall project objectives, including DQOs, and formulating a sampling approach to address the AOIs identified in the PA.

A combined TPP Meeting 1 and 2 was held on 20 July 2021, prior to SI field activities. The combined TPP Meeting 1 and 2 was conducted in general accordance with EM 200-1-2. The stakeholders for this SI include the ARNG, HIARNG, USACE, and HDOH. EA Engineering, Science, and Technology, Inc. (EA) participated in these meetings for informational purposes. Stakeholders were provided the opportunity to make comments on the technical sampling approach and methods at the combined TPP Meeting 1 and 2. The outcome of the combined TPP Meeting 1 and 2 was memorialized in the SI QAPP Addendum (AECOM, 2021).

A TPP Meeting 3 will be held after the field event to discuss the results of the SI. Meeting minutes for TPP 3 will be included in **Appendix D** of this report. Future TPP meetings will provide an opportunity to discuss the results and findings, and future actions, where warranted.

5.1.2 Utility Clearance

AECOM placed a ticket with the AT&T JHITS for cable toning to provide utility clearance and notify them of intrusive work on 15 March 2022. Additionally, AECOM contracted Ground Penetrating Radar Systems (GPRS), a private utility location service, to perform utility clearance. GPRS performed utility clearance of the proposed boring locations on 18 March 2022 with input from the AECOM field team and facility staff. General locating services and ground-penetrating radar were used to complete the clearance. Additionally, the first 5 feet of each boring were pre-cleared using a hand auger to verify utility clearance in shallow subsurface where utilities would typically be encountered.

5.1.3 Source Water and Sampling Equipment Acceptability

Two potable water sources at Waiawa Gulch Training Site and UTES were sampled on 9 August 2021 to assess usability for decontamination of drilling equipment. Results of the samples collected (WU-DECON-01 and WU-DECON-02) confirmed the sources to be acceptable for use in this investigation; therefore, they were used throughout the field activities. A third sample was collected from the drillers tote tank used to contain the potable water from the decontamination water sources (WU-DECON-03). The results of the decontamination water sample collected from the drillers tote tank confirmed the tote water to be acceptable for use in the investigation as well. The samples were analyzed by LC/MS/MS compliant with QSM 5.3 Table B-15. The results of the decontamination water samples used during the SI are provided in **Appendix F**. A discussion of the results is presented in the DUA (**Appendix A**).

Materials that were used within the sampling zone were confirmed as acceptable for use in the sampling environment. The checklist of acceptable materials for use in the sampling environment was provided in the Standard Operating Procedures (SOPs) appendix to the SI QAPP Addendum (AECOM, 2021). Prior to the start of field work each day, a Sampling Checklist was completed as an additional layer of control. The checklist served as a daily reminder to each field team member regarding the allowable materials within the sampling environment.

5.2 Soil Borings and Soil Sampling

Borings were installed by GeoTek Hawai'i, Inc., a Hawai'i-licensed driller, under direction by AECOM. Borings were installed in grass areas where applicable, to avoid disturbing concrete or asphalt surfaces. One boring was installed through an asphalt surface (AOI02-01). Soil samples were collected via direct push technology (DPT), in accordance with the SI QAPP Addendum (AECOM, 2021). A GeoProbe® 7822DT dual-tube sampling system was used to collect continuous

soil cores to the target depth. A hand auger was used to collect soil from the top 5 feet of the boring, in accordance with AECOM utility clearance procedures. The soil boring locations are shown on **Figure 5-1**, and depths are provided **Table 5-1**. Several boring locations were adjusted within a 50-foot offset for reasons including drill rig access and utility avoidance. Soil boring location AOI02-04 was relocated approximately 57 feet to the northwest to avoid subsurface and overhead utilities, as described in **Section 5.8**.

In general, two discrete bulk soil samples (between 1 kilogram [kg] and 1.5 kg) were collected from the vadose zone for chemical analysis from each soil boring where permanent monitoring wells were installed: one bulk surface soil sample (0 to 2 feet bgs), and one bulk subsurface soil sample from approximately 2 feet above the groundwater table extending down to the groundwater interface. Additionally, three locations where permanent monitoring wells were not installed were sampled for only bulk surface soil from 0 to 2 feet bgs. Bulk samples were collected from soil spanning the entire 2-foot interval identified from the hand auger or DPT liner and submitted to the laboratory for incremental subsampling and analysis. Soil samples were not collected via ISM but were prepared at the laboratory via ISM.

The soil cores were continuously logged for lithological descriptions by an AECOM field geologist using the Unified Soil Classification System (USCS). A photoionization detector (PID) was used to screen the breathing zone during boring activities as part of personal safety requirements. Observations and measurements were recorded on sampling forms (**Appendix B2**) and in a non-treated field logbook (i.e., composition notebook). Depth interval, recovery thickness, PID concentrations, moisture, relative density, color (using a Munsell soil color chart), and texture (using the USCS) were recorded. The boring logs are provided in **Appendix E**.

SI soil boring depths ranged from 24.25 to 56 feet bgs. The borings consisted primarily of lean clay and sandy silt with varying concentrations of gravel. Fat clay was reported in one boring (AOI01-02) at 5 to 10 feet bgs. Many of the logs also reported fill (sampled as sandy silt, lean clay, and well graded sand) at the surface. At greater depths, weathered basalt and basalt rock flour were observed interbedded with the unconsolidated alluvial clayey and silty soils.

Each soil sample was collected into laboratory-supplied PFAS-free plastic bags and labeled using a PFAS-free marker or pen. Samples were packaged on ice and transported via Federal Express (FedEx) under standard chain of custody (CoC) procedures to the laboratory and analyzed by LC/MS/MS compliant with QSM 5.3 Table B-15, total organic carbon (TOC) (USEPA Method 9060A), and pH (USEPA Method 9045D) in accordance with the SI QAPP Addendum (AECOM, 2021). Grain size analysis was not performed, in accordance with the SI QAPP Addendum, because discrete horizontal and vertical clay units were not encountered in the field (AECOM, 2021). Clay layers were present across the facility.

Field duplicate samples were collected from the same borings as their parent samples at a rate of 10% and analyzed for the same parameters as the accompanying samples. Matrix spike (MS)/MS duplicates (MSDs) were collected from the same borings as their parent samples at a rate of 5% and analyzed for the same parameters as the accompanying samples. In instances when non-dedicated sampling equipment was used, such as a hand auger for the shallow soil samples, equipment rinsate blanks were collected at a rate of 5% and analyzed for the same parameters as the soil samples. A temperature blank was placed in each cooler to ensure that samples were preserved at or below 6 degrees Celsius (°C) during shipment.

DPT borings were converted to permanent monitoring wells in accordance with the SI QAPP Addendum (AECOM, 2021).

5.3 Permanent Well Installation and Groundwater Sampling

During the SI, six permanent monitoring wells were installed within or downgradient of potential source areas. The locations of the wells are shown on **Figure 5-1**.

A GeoProbe® 7822DT drill rig was used to install six 2-inch diameter monitoring wells into the unconfined alluvium underlying the facility; the wells were not installed into the basal aquifer. The monitoring wells were constructed with Schedule 40 PVC, flush threaded 10-foot sections of riser, 0.010-inch slotted well screen, and a threaded bottom cap. A filter pack of Cemex clean, graded, kiln-dried, Monterey sand was installed in the annulus around the well screen to a minimum of 2 feet above the well screen. A seal was installed above the filter pack using hydrated 3/8 inch bentonite chip pellets, followed by hydrated bentonite installed in lifts to within two feet of the well pad, per the HDOH Hazard Evaluation and Emergency Response Office (HEER) Technical Guidance Manual (TGM) (HDOH, 2021). A Field Change Request describing the use of hydrated bentonite lifts instead of bentonite grout is included in **Appendix B3**. The hydrated bentonite was overlain with 2 feet of neat Portland cement. All monitoring wells were completed with flush mount well vaults and constructed with a concrete well pad. The screen interval of each groundwater monitoring well is provided in **Table 5-2**.

Development and sampling of wells was completed in accordance with the SI QAPP Addendum (AECOM, 2021). The newly installed monitoring wells were developed no sooner than 24 hours following installation by pumping and surging using a variable speed submersible pump. Samples were collected no sooner than 24 hours following development via low-flow sampling methods using a peristaltic pump or a QED Sample Pro® bladder pump with disposable PFAS-free, HDPE tubing. A peristaltic pump was used to sample the shallower wells at AOI 2; a bladder pump was used to sample the deeper wells at AOI 1. New tubing was used at each well, and the pumps were decontaminated between each well. The pump tubing, or pump itself when using a bladder pump, were placed at the center of the well screen during purging. The wells were purged at a rate determined in the field to minimize draw down during pre-sample purging, and during sample collection. Water quality parameters (e.g., temperature, specific conductance, pH, dissolved oxygen [DO], and oxidation-reduction potential [ORP]) were measured using a water quality meter and recorded on the field sampling form (**Appendix B2**). Purging was considered complete when three consecutive field parameter measurements of temperature, pH, specific conductivity, DO and ORP stabilized within approximately 10% and the turbidity was at or below 10 nephelometric turbidity units (NTU) or within $\pm 10\%$ if above 10 NTU. Water levels were measured to the nearest 0.01 inch and recorded. Additionally, a subsample of each groundwater sample was collected in a separate container, and a shaker test was completed to determine the presence or absence of foaming capability in the sample. No foaming was noted in any of the groundwater samples.

Each sample was collected into laboratory-supplied PFAS-free HDPE bottles and labeled using a PFAS-free marker or pen. Samples were packaged on ice and transported via FedEx under standard CoC procedures to the laboratory and analyzed by LC/MS/MS compliant with QSM 5.3 Table B-15 in accordance with the SI QAPP Addendum (AECOM, 2021). **Appendix G** contains the CoCs by sample delivery group within the laboratory reports.

Field duplicate samples were collected at a rate of 10% and analyzed for the same parameters as the accompanying samples. MS/MSDs were collected at a rate of 5% and analyzed for the same parameters as the accompanying samples. One field reagent blank was collected in accordance with the PQAPP (AECOM, 2018a). A temperature blank was placed in each cooler to ensure that samples were preserved at or below 6 °C during shipment.

5.4 Synoptic Water Level Measurements

A synoptic groundwater gauging event was performed on 6 April 2022. Groundwater elevation measurements were collected from the six new permanent monitoring wells. Water level measurements were taken from the northern side of the well casing. A groundwater flow contour map is provided in **Figure 2-4**. Groundwater elevation data are provided in **Table 5-2**.

5.5 Surveying

The northern side of each well casing was surveyed by Hawai'i-licensed land surveyors following guidelines provided in the SI QAPP Addendum SOPs (AECOM, 2021). Survey data from the newly installed wells on the facility were collected on 11 April 2022 in the applicable World Geodetic System 1984 Universal Transverse Mercator Zone 4 datum (horizontal) as well as the North American Datum 1983 State Plane Hawai'i Zone 3 (horizontal), and Hawai'i's Local Mean Sea Level datum (vertical). The surveyed well data are provided in **Appendix B4**.

5.6 Investigation-Derived Waste

As of the date of this report, the disposal of investigation-derived waste (IDW) is not regulated federally. IDW generated during the SI is considered non-hazardous waste and was managed in accordance with the SI QAPP Addendum (AECOM, 2021) and with the DA Guidance for Addressing Releases of PFAS, Q18 (DA, 2018).

All solid (i.e., soil cuttings) and liquid (i.e., purge water, development water, and decontamination fluids) IDW were contained in labeled, 55-gallon steel drums and left onsite in a waste storage area designated by HIARNG. ARNG will manage and dispose of the solid and liquid IDW under a separate contract in accordance with SOP No. 042A for Treating Liquid Investigation-Derived Material (Purge water, drilling water, and decontamination fluids) (EA, 2021). Other solids such as spent personal protective equipment, plastic sheeting, tubing, rope, unused monitoring well construction materials, and other environmental media generated during the field activities were disposed of as non-hazardous solid waste to be transported to a licensed solid waste landfill.

5.7 Laboratory Analytical Methods

Samples were analyzed by LC/MS/MS compliant with QSM 5.3 Table B-15 at Pace Analytical Gulf Coast in Baton Rouge, Louisiana, a DoD ELAP and NELAP certified laboratory. Soil samples were also analyzed for TOC using USEPA Method 9060A and pH by USEPA Method 9045D.

5.8 Deviations from SI QAPP Addendum

Two deviations from the SI QAPP Addendum were identified during SI field work. The deviation is noted below and is documented in Field Change Request Forms (**Appendix B3**):

- During the pre-drilling utility clearance, one boring (AOI02-04) was relocated due to accessibility issues. The original location was within 10 feet of overhead power lines. The proposed drilling location was moved approximately 57 feet to the northwest to allow for safe drilling away from overhead power lines, subsurface utilities, and the newly installed facility wash rack infrastructure. This action was documented in a Field Change Request provided in **Appendix B3**.
- During permanent monitoring well installation, the well construction details were revised. Based on the current HDOH HEER TGM and recommendation from the experienced, Hawai'i-licensed driller, the use of slurry/grout seals is not recommended due to the potential

for infiltration and clogging of the filter pack. The permanent wells were constructed with a seal above the sand filter pack using hydrated 3/8-inch bentonite chip pellets, followed by hydrated bentonite installed in lifts to prevent bridging instead of a bentonite grout, as described in the SI QAPP Addendum (AECOM, 2021). These actions were documented in a nonconformance report dated July 2022 and are provided in **Appendix B3**.

**Table 5-1
Site Inspection Samples by Medium
Site Inspection Report, Waiawa UTES, Hawai'i**

Sample Identification	Sample Collection Date/Time	Sample Depth (feet bgs)	LC/MS/MS compliant with QSM 5.3 Table B-15 (ISM Preparation)	LC/MS/MS compliant with QSM 5.3 Table B-15 (Standard Preparation)	TOC (USEPA Method 9060A)	pH (USEPA Method 9045D)	Comments
Soil Samples							
AOI01-01-SB-0-2	3/21/2022 10:45	0 - 2	x				
AOI01-01-SB-0-2-D	3/21/2022 10:45	0 - 2	x				FD
AOI01-01-SB-0-2-MS	3/21/2022 10:45	0 - 2	x				MS
AOI01-01-SB-0-2-MSD	3/21/2022 10:45	0 - 2	x				MSD
AOI01-01-SB-37-39	3/21/2022 9:45	37 - 39	x				
AOI01-02-SB-0-1	3/28/2022 9:00	0 - 1	x	x	x	x	
AOI01-02-SB-0-1-D	3/28/2022 9:10	0 - 1	x	x			FD
AOI01-02-SB-25.5-27.5	3/28/2022 11:05	25.5 - 27.5	x	x			
AOI02-01-SB-0-2	3/24/2022 13:40	0 - 2	x	x			
AOI02-01-SB-14.5-16.5	3/24/2022 14:10	14.5 - 16.5	x	x	x	x	
AOI02-01-SB-14.5-16.5-D	3/24/2022 14:30	14.5 - 16.5			x	x	FD
AOI02-01-SB-14.5-16.5-MS	3/24/2022 14:25	14.5 - 16.5			x	x	MS
AOI02-01-SB-14.5-16.5-MSD	3/24/2022 14:25	14.5 - 16.5			x	x	MSD
AOI02-02-SB-0-2	3/23/2022 9:40	0 - 2	x				
AOI02-02-SB-14-16	3/23/2022 11:50	14 - 16	x				
AOI02-03-SB-0-2	3/24/2021 9:35	0 - 2	x	x			
AOI02-03-SB-16.5-18.5	3/24/2022 10:05	16.5 - 18.5	x	x			
AOI02-04-SB-0-2	3/23/2022 14:30	0 - 2	x				
AOI02-04-SB-14-16	3/23/2022 15:55	14 - 16	x				
AOI02-05-SB-0-0-0.5	3/29/2022 13:50	0 - 0.5	x	x			
AOI02-06-SB-0-0-0.5	3/29/2022 14:00	0 - 0.5	x	x			
AOI02-07-SB-0-2	3/29/2022 14:10	0 - 2	x	x			
Groundwater Samples							
AOI01-01-GW	4/5/2022 12:30	NA		x			
AOI01-02-GW	4/5/2022 13:35	NA		x			
AOI02-01-GW	4/4/2022 15:45	NA		x			
AOI02-01-GW-D	4/4/2022 15:45	NA		x			FD
AOI02-01-GW-MS	4/4/2022 15:45	NA		x			MS
AOI02-01-GW-MSD	4/4/2022 15:45	NA		x			MSD
AOI02-02-GW	4/5/2022 8:30	NA		x			
AOI02-03-GW	4/5/2022 14:55	NA		x			
AOI02-04-GW	4/5/2022 15:45	NA		x			

**Table 5-1
Site Inspection Samples by Medium
Site Inspection Report, Waiawa UTES, Hawai'i**

Sample Identification	Sample Collection Date/Time	Sample Depth (feet bgs)	LC/MS/MS compliant with QSM 5.3 Table B-15 (ISM Preparation)	LC/MS/MS compliant with QSM 5.3 Table B-15 (Standard Preparation)	TOC (USEPA Method 9060A)	pH (USEPA Method 9045D)	Comments
Quality Control Samples							
WU-ERB-01	3/21/2022 12:00	NA		x			Hand Auger
WU-ERB-03	3/28/2022 11:20	NA		x			Hand Trowel
WU-ERB-04	3/28/2022 15:00	NA		x			Macrocore Shoe
WU-ERB-05	3/28/2022 15:05	NA		x			DT32 Drill Tooling
WU-ERB-06	3/28/2022 15:30	NA		x			Solid Flight Auger Shoe
WU-ERB-07	4/5/2022 17:00	NA		x			Development Pump
WU-ERB-08	4/6/2022 10:00	NA		x			Water Level Meter
WU-Decon-01	8/9/2021 8:55	NA		x			Decontamination Water Source
WU-Decon-02	8/9/2021 9:15	NA		x			Decontamination Water Source
WU-Decon-03	3/29/2022 9:45	NA		x			Driller Water Tank
WU-FRB-01	3/21/2022 13:30	NA	x				Lab-provided Sand
WU-FRB-02	4/1/2022 10:45	NA		x			Lab-provided Water

Notes:

ASTM = American Society for Testing and Materials
bgs = below ground surface
ERB = equipment rinsate blank
FD = field duplicate
FRB = field reagent blank
LC/MS/MS = Liquid Chromatography Mass Spectrometry
MS/MSD = matrix spike/ matrix spike duplicate
QSM = Quality Systems Manual
TOC = total organic carbon
USEPA = United States Environmental Protection Agency

**Table 5-2
Soil Boring Depths, Monitoring Well Screen Intervals, and Groundwater Elevations
Site Inspection Report, Waiawa UTES, Hawai'i**

Area of Interest	Boring Location	Soil Boring Depth (feet bgs)	Monitoring Well Screen Interval (feet bgs) ¹	Top of Casing Elevation (local mean sea level)	Ground Surface Elevation (local mean sea level)	Depth to Water (feet btoc)	Depth to Water (feet bgs)	Groundwater Elevation (local mean sea level)
1	AOI01-01	56	45 - 55	89.40	89.70	45.08	45.39	44.32
	AOI01-02	48	37 - 47	83.13	83.50	30.92	31.28	52.21
2	AOI02-01	25.25	15 - 25	48.86	49.13	15.8	16.08	33.06
	AOI02-02	25.25	15 - 25	49.61	49.98	17.65	18.02	31.96
	AOI02-03	25.25	15 - 25	50.35	50.75	17.21	17.61	33.14
	AOI02-04	24.25	14 - 24	50.40	50.76	15.42	15.78	34.98
	AOI02-05	0.5	NA	NA	48.21	NA	NA	NA
	AOI02-06	0.5	NA	NA	48.67	NA	NA	NA
	AOI02-07	2	NA	NA	48.55	NA	NA	NA

Notes:

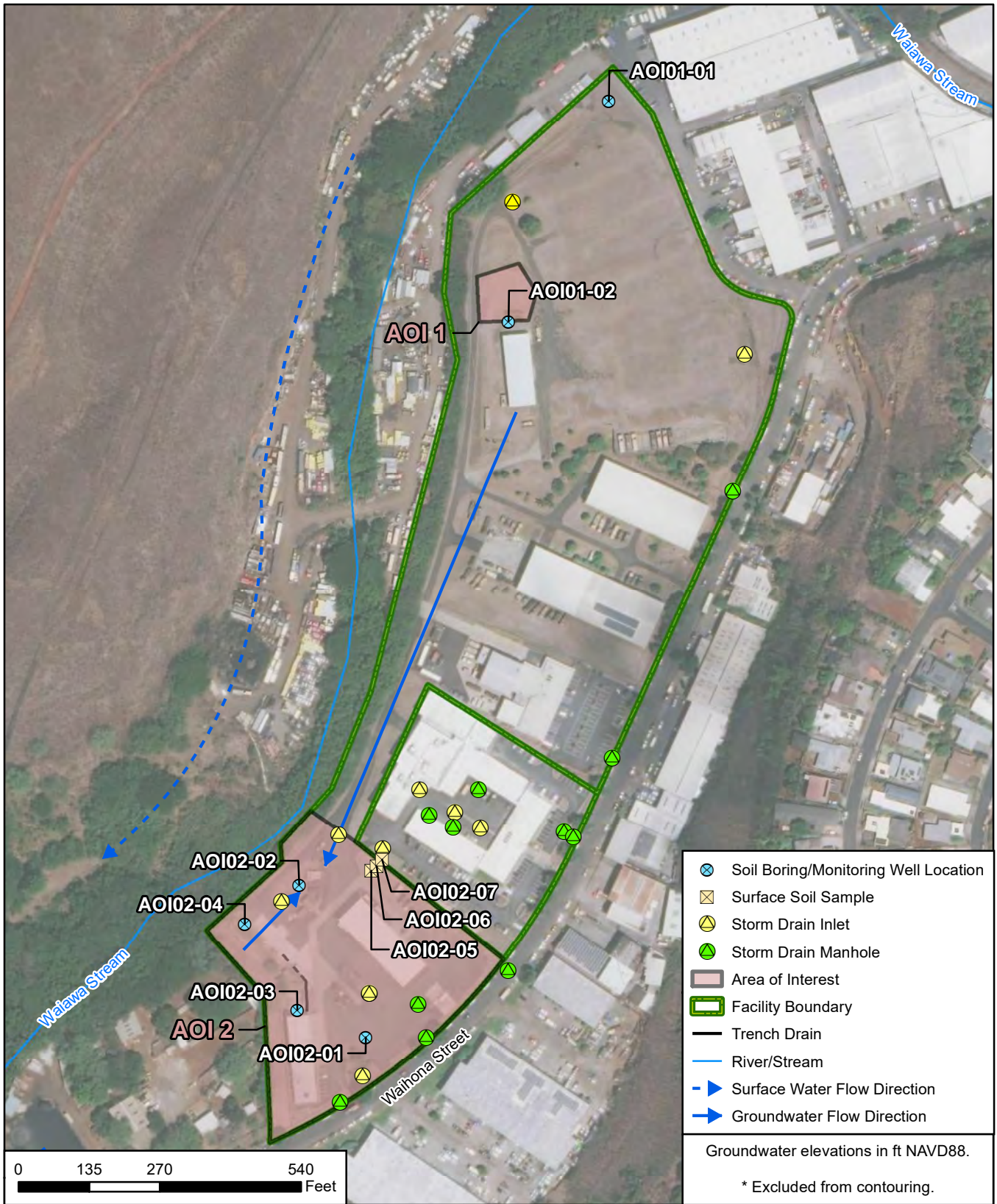
¹ Well screen set above total depth to capture groundwater interface

bgs = below ground surface

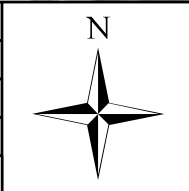
btoc = below top of casing

NA = not applicable

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CLIENT	ARNG			
PROJECT	Site Inspection at Waiawa Gulch Training Site and UTES, HI			
REVISED	1/26/2023	GIS BY	MS	1/26/2023
SCALE	1:3,240	CHK BY	JW	1/26/2023
Base Map: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community	PM	CM	1/26/2023	



Site Inspection Sample Locations

AECOM
 12420 Milestone Center Drive
 Germantown, MD 20876

Figure 5-1

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6. Site Inspection Results

This section presents the analytical results of the SI. The SLs used in this evaluation are presented in **Section 6.1**. A discussion of the results for each AOI is provided in **Section 6.3** and **Section 6.4**. **Table 6-2** through **Table 6-5** present results in soil or groundwater for the relevant compounds. Tables that contain all results are provided in **Appendix F**, and the laboratory reports are provided in **Appendix G**.

6.1 Screening Levels

The DoD has adopted a policy to retain facilities in the CERCLA process based on risk-based SLs for soil and groundwater, as described in a memorandum from the OSD dated 6 July 2022 (Assistant Secretary of Defense, 2022). The ARNG program under which this SI was performed follows this DoD policy. Should the maximum site concentration for sampled media exceed the SLs established in the OSD memorandum, the AOI will proceed to the next phase under CERCLA. The SLs established in the OSD memorandum apply to the five compounds presented on **Table 6-1** below.

Table 6-1: Screening Levels (Soil and Groundwater)

Analyte ^b	Residential (Soil) (µg/kg) ^a 0-2 feet bgs	Industrial/Commercial Composite Worker (Soil) (µg/kg) ^a 2-15 feet bgs	Tap Water (Groundwater) (ng/L) ^a
PFOA	19	250	6
PFOS	13	160	4
PFBS	1,900	25,000	601
PFHxS	130	1,600	39
PFNA	19	250	6

Notes:

bgs = below ground surface; µg/kg = micrograms per kilogram; ng/L = nanograms per liter

- Assistant Secretary of Defense, 2022. Risk Based Screening Levels in Groundwater and Soil using United States Environmental Protection Agency's (USEPA's) Regional Screening Level Calculator. Hazard Quotient (HQ) = 0.1. 6 July 2022.
- Of the six PFAS compounds presented in the 6 July 2022 OSD memorandum, HFPO-DA (commonly referred to as GenX) was not included as an analyte at the time of this SI. Based on the CSM developed during the PA and revised based on SI findings, the presence of HFPO-DA is not anticipated at the facility because HFPO-DA is generally not a component of MIL-SPEC AFFF and based on its history including distribution limitations that restricted use of GenX, it is generally not a component of other products the military used. In addition, it is unlikely that GenX would be an individual chemical of concern in the absence of other PFAS.

The data in the subsequent sections are compared to the SLs presented in **Table 6-1**. The SLs for groundwater are based on direct ingestion. The SLs for soil are based on incidental ingestion and are applied to the depth intervals reasonably anticipated to be encountered by the receptors identified at the facility: the residential scenario is applied to surface soil results (0 to 2 feet bgs) and the industrial/commercial worker scenario is applied to shallow subsurface soil results (2 to 15 feet bgs). The SLs are not applied to deep subsurface soil results (>15 feet bgs) because 15 feet is the anticipated limit of construction activities.

6.2 Soil Physicochemical Analyses

To provide basic soil parameter information, soil samples were analyzed for TOC, and pH, which are important for evaluating transport through the soil medium. **Appendix F** contains the results of the TOC and pH sampling. Grain size analysis was not performed, in accordance with the SI QAPP Addendum, because discrete horizontal and vertical clay units were not encountered in the field (AECOM, 2021).

The data collected in this investigation will be used in subsequent investigations, where appropriate, to assess fate and transport. According to the Interstate Technology Regulatory Council (ITRC), several important partitioning mechanisms include hydrophobic and lipophobic effects, electrostatic interactions, and interfacial behaviors. At relevant environmental pH values, certain PFAS are present as organic anions and are therefore relatively mobile in groundwater (Xiao et al., 2015), but tend to associate with the organic carbon fraction that may be present in soil or sediment (Higgins and Luthy, 2006; Guelfo and Higgins, 2013). When sufficient organic carbon is present, organic carbon normalized distribution coefficients (K_{oc} values) can help in evaluating transport potential, though other geochemical factors (for example, pH and presence of polyvalent cations) may also affect PFAS sorption to solid phases (ITRC, 2018).

6.3 AOI 1

This section presents the analytical results for soil and groundwater in comparison to SLs for AOI 1: Firetruck Pump Test Area. The soil and groundwater results are summarized on **Table 6-2** through **Table 6-5**. Soil and groundwater results are presented on **Figure 6-1** through **Figure 6-7**.

6.3.1 AOI 1 Soil Analytical Results

Figure 6-1 through **Figure 6-5** present the ranges of detections in soil. **Table 6-2** through **Table 6-4** summarize the soil results.

Surface soil was sampled from 0 to 2 feet bgs and deep subsurface soil collected from 25.5 to 39 feet bgs at boring locations AOI01-01 and AOI01-02. PFOS, PFHxS, and PFNA were detected in surface soil samples at concentrations less than 1.73 J (estimated concentration) micrograms per kilogram ($\mu\text{g}/\text{kg}$); all detected concentrations were below the SLs in surface soil. PFOA and PFBS were not detected in surface soil. In the deep subsurface soil, PFOS and PFHxS were detected at one location, AOI01-02 (25.5 to 27.5 feet bgs), with concentrations of 0.524 J $\mu\text{g}/\text{kg}$ and 0.325 J $\mu\text{g}/\text{kg}$, respectively. PFOA, PFBS, and PFNA were not detected in deep subsurface soil.

6.3.2 AOI 1 Groundwater Analytical Results

Figure 6-6 and **Figure 6-7** present the ranges of detections in groundwater. **Table 6-5** summarizes the groundwater results.

Groundwater was sampled from permanent monitoring wells AOI01-01 and AOI01-02. The following exceedances of the SLs were measured:

- PFOA was detected above the SL of 6 nanograms per liter (ng/L) at AOI01-02, with a concentration of 18.0 ng/L.
- PFOS was detected above the SL of 4 ng/L at AOI01-02, with a concentration of 11.1 ng/L.
- PFHxS was detected above the SL of 39 ng/L at AOI01-02, with a concentration of 89.3 ng/L.

PFBS and PFNA were detected below their SLs at AOI01-02. PFOA and PFOS were detected below their SLs at AOI01-01; PFBS, PFHxS, and PFNA were not detected at AOI01-01.

6.3.3 AOI 1 Conclusions

Based on the results of the SI, PFOS, PFHxS, and PFNA were detected in soil below their SLs. PFOA, PFOS, and PFHxS were detected in groundwater at concentrations above their SLs. Based on detections in soil and exceedances of the SLs in groundwater, further evaluation at AOI 1 is warranted.

6.4 AOI 2

This section presents the analytical results for soil and groundwater in comparison to SLs for AOI 2: Vehicle Maintenance Area, Firetruck Parking Area, and Storage Buildings. The results in soil and groundwater are summarized on **Table 6-2** through **Table 6-5**. Soil and groundwater results are presented on **Figure 6-1** through **Figure 6-7**.

6.4.1 AOI 2 Soil Analytical Results

Figure 6-1 through **Figure 6-5** present the ranges of detections in soil. **Table 6-2** through **Table 6-4** summarize the soil results.

Surface soil was sampled from 0 to 2 feet bgs at boring locations AOI02-01 through AOI02-07. Soil was also sampled from the shallow subsurface (14 to 16.5 feet bgs) at boring locations AOI02-01, AOI02-02, and AOI02-04; and deeper subsurface (16.5 to 18.5 feet bgs) from boring location AOI02-03.

PFOA, PFOS, PFBS, PFHxS, and PFNA were detected in soil at concentrations less than 2.50 J+ (estimated concentration, biased high) $\mu\text{g}/\text{kg}$ and below their SLs in surface soil.

PFOS, PFHxS, and PFNA were detected in shallow subsurface soil, at concentrations less than 0.387 J $\mu\text{g}/\text{kg}$; all detected concentrations were below the SLs in shallow subsurface soil. PFOA and PFBS were not detected in shallow subsurface soil.

In deep subsurface soil, PFOS and PFHxS were detected at concentrations of 0.125 J $\mu\text{g}/\text{kg}$ and 0.076 J $\mu\text{g}/\text{kg}$, respectively; PFOA, PFBS, and PFNA were not detected.

6.4.2 AOI 2 Groundwater Analytical Results

Figure 6-6 and **Figure 6-7** present the ranges of detections in groundwater. **Table 6-5** summarizes the groundwater results.

Groundwater was sampled from permanent monitoring wells AOI2-01 through AOI2-04. The following exceedances of the SLs were measured:

- PFOA was detected above the SL of 6 ng/L in all four wells, with concentrations ranging from 13.3 ng/L to 57.0 ng/L.
- PFOS was detected above the SL of 4 ng/L in all four wells, with concentrations ranging from 31.2 ng/L to 271 ng/L.
- PFHxS was detected above the SL of 39 ng/L in all four wells, with concentrations ranging from 39.7 ng/L to 1,110 ng/L.

PFBS and PFNA were detected below their SLs in all four wells.

6.4.3 AOI 2 Conclusions

Based on the results of the SI, PFOA, PFOS, PFBS, PFHxS, and PFNA were detected in soil at concentrations below their respective SLs. PFOA, PFOS, and PFHxS were detected in groundwater at concentrations above their SLs. Based on detections in soil and exceedances of the SLs in groundwater, further evaluation at AOI 2 is warranted.

**Table 6-2
PFOA, PFOS, PFBS, PFNA, and PFHxS ISM Results in Surface Soil
Site Inspection Report, Waiawa Gulch Training Site and UTES**

Area of Interest		AOI01										AOI02									
		AOI01-01-SB-0.0-2.0		AOI01-01-SB-0.0-2.0-D		AOI01-02-SB-0.0-1.0		AOI01-02-SB-0.0-1.0-D		AOI02-01-SB-0.0-2.0		AOI02-02-SB-0.0-2.0		AOI02-03-SB-0.0-2.0		AOI02-04-SB-0.0-2.0		AOI02-05-SB-0.0-0.5		AOI02-06-SB-0.0-0.5	
		03/21/2022		03/21/2022		03/28/2022		03/28/2022		03/24/2022		03/23/2022		03/24/2022		03/23/2022		03/29/2022		03/29/2022	
Analyte	OSD Screening Level ^a	0-2 ft		0-2 ft		0-1 ft		0-1 ft		0-2 ft		0-2 ft		0-2 ft		0-2 ft		0-0.5 ft		0-0.5 ft	
Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Soil, LCMSMS compliant with QSM 5.3 Table B-15 (µg/kg)																					
PFBS	1900	ND	UJ	ND	UJ	ND	UJ	ND	UJ	0.046	J	ND	UJ	ND	UJ	0.023	J	ND	UJ	ND	UJ
PFHxS	130	0.050	J	0.042	J	ND	UJ	0.032	J	1.41	J	ND	UJ	ND	UJ	0.054	J	0.048	J+	0.032	J
PFNA	19	0.053	J	0.056	J	0.081	J	0.100	J	ND	UJ	0.736	J	0.049	J	0.046	J	0.795	J+	0.185	J
PFOA	19	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	0.271	J	ND	UJ	0.127	J	0.347	J+	0.166	J
PFOS	13	1.73	J	1.65	J	0.547	J	0.675	J	2.48	J	0.735	J	0.223	J	0.498	J	2.50	J+	0.944	J

Notes

Grey Fill Detected concentration exceeded OSD Screening Levels

ND = Analyte not detected above the LOD

LOD values are presented in Appendix F.

References

a. Assistant Secretary of Defense, July 2022. Risk Based Screening Levels Calculated for PFOA, PFOS, PFBS, PFHxS, and PFNA in Groundwater or Soil using USEPA's Regional Screening Level Calculator. HQ=0.1, May 2022. Soil screening levels based on residential scenario for incidental ingestion of contaminated soil.

Interpreted Qualifiers

J = Estimated concentration

J+ = Estimated concentration, biased high

UJ = The analyte was not detected at a level greater than or equal to the adjusted DL. However, the reported adjusted DL is approximate and may be inaccurate or imprecise.

Chemical Abbreviations

PFBS perfluorobutanesulfonic acid
 PFHxS perfluorohexanesulfonic acid
 PFNA perfluorononanoic acid
 PFOA perfluorooctanoic acid
 PFOS perfluorooctanesulfonic acid

Acronyms and Abbreviations

AOI Area of Interest
 D duplicate
 DL detection limit
 ft feet
 HQ hazard quotient
 ID identification
 ISM Incremental Sampling Methodology
 LCMSMS liquid chromatography with tandem mass spectrometry
 LOD limit of detection
 ND analyte not detected above the LOD
 OSD Office of the Secretary of Defense
 QSM Quality Systems Manual
 Qual interpreted qualifier
 SB soil boring
 USEPA United States Environmental Protection Agency
 UTES Unit Training and Equipment Site
 µg/kg micrograms per kilogram

**Table 6-2
PFOA, PFOS, PFBS, PFNA, and PFHxS ISM Results in Surface Soil
Site Inspection Report, Waiawa Gulch Training Site and UTES**

Area of Interest		AOI02	
Sample ID		AOI02-07-SB-0.0-2.0	
Sample Date		03/29/2022	
Depth		0-2 ft	
Analyte	OSD Screening Level ^a	Result	Qual
Soil, LCMSMS compliant with QSM 5.3 Table B-15 (µg/kg)			
PFBS	1900	ND	UJ
PFHxS	130	ND	UJ
PFNA	19	0.068	J
PFOA	19	0.099	J
PFOS	13	0.455	J

Notes

Grey Fill Detected concentration exceeded OSD Screening Levels
 ND = Analyte not detected above the LOD
 LOD values are presented in Appendix F.

References

a. Assistant Secretary of Defense, July 2022. Risk Based Screening Levels Calculated for PFOA, PFOS, PFBS, PFHxS, and PFNA in Groundwater or Soil using USEPA's Regional Screening Level Calculator. HQ=0.1, May 2022. Soil screening levels based on residential scenario for incidental ingestion of contaminated soil.

Interpreted Qualifiers

J = Estimated concentration
 J+ = Estimated concentration, biased high
 UJ = The analyte was not detected at a level greater than or equal to the adjusted DL. However, the reported adjusted DL is approximate and may be inaccurate or imprecise.

Chemical Abbreviations

PFBS perfluorobutanesulfonic acid
 PFHxS perfluorohexanesulfonic acid
 PFNA perfluorononanoic acid
 PFOA perfluorooctanoic acid
 PFOS perfluorooctanesulfonic acid

Acronyms and Abbreviations

AOI Area of Interest
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 ID identification
 ISM Incremental Sampling Methodology
 LCMSMS liquid chromatography with tandem mass spectrometry
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 ND analyte not detected above the LOD
 OSD Office of the Secretary of Defense
 QSM Quality Systems Manual
 Qual interpreted qualifier
 SB soil boring
 USEPA United States Environmental Protection Agency
 UTES Unit Training and Equipment Site
 µg/kg micrograms per kilogram

**Table 6-3
PFOA, PFOS, PFBS, PFNA, and PFHxS ISM Results in Shallow Subsurface Soil
Site Inspection Report, Waiawa Gulch Training Site and UTES**

Area of Interest		AOI02					
Sample ID	AOI02-01-SB-14.5-16.5	AOI02-02-SB-14.0-16.0		AOI02-04-SB-14.0-16.0			
Sample Date	03/24/2022	03/23/2022		03/23/2022			
Depth	14.5-16.5 ft	14-16 ft		14-16 ft			
Analyte	OSD Screening Level ^a	Result	Qual	Result	Qual	Result	Qual
Soil, LCMSMS compliant with QSM 5.3 Table B-15 (µg/kg)							
PFBS	25000	ND	UJ	ND	UJ	ND	UJ
PFHxS	1600	ND	UJ	0.065	J	0.387	J
PFNA	250	0.021	J	0.032	J	ND	UJ
PFOA	250	ND	UJ	ND	UJ	ND	UJ
PFOS	160	0.132	J	0.162	J	ND	UJ

Notes

Grey Fill Detected concentration exceeded OSD Screening Levels
 ND = Analyte not detected above the LOD
 LOD values are presented in Appendix F.

References

a. Assistant Secretary of Defense, July 2022. Risk Based Screening Levels Calculated for PFOA, PFOS, PFBS, PFHxS, and PFNA in Groundwater or Soil using USEPA's Regional Screening Level Calculator. HQ=0.1, May 2022. Soil screening levels based on industrial/commercial composite worker scenario for incidental ingestion of contaminated soil.

Interpreted Qualifiers

J = Estimated concentration
 UJ = The analyte was not detected at a level greater than or equal to the adjusted DL. However, the reported adjusted DL is approximate and may be inaccurate or imprecise.

Chemical Abbreviations

PFBS perfluorobutanesulfonic acid
 PFHxS perfluorohexanesulfonic acid
 PFNA perfluorononanoic acid
 PFOA perfluorooctanoic acid
 PFOS perfluorooctanesulfonic acid

Acronyms and Abbreviations

AOI Area of Interest
 DL detection limit
 ft feet
 HQ hazard quotient
 ID identification
 ISM Incremental Sampling Methodology
 LCMSMS liquid chromatography with tandem mass spectrometry
 LOD limit of detection
 ND analyte not detected above the LOD
 OSD Office of the Secretary of Defense
 QSM Quality Systems Manual
 Qual interpreted qualifier
 SB soil boring
 USEPA United States Environmental Protection Agency
 UTES Unit Training and Equipment Site
 µg/kg micrograms per kilogram

**Table 6-4
PFOA, PFOS, PFBS, PFNA, and PFHxS ISM Results in Deep Subsurface Soil
Site Inspection Report, Waiawa Gulch Training Site and UTES**

Area of Interest	AOI01		AOI01		AOI02	
Sample ID	AOI01-01-SB-37.0-39.0		AOI01-02-SB-25.5-27.5		AOI02-03-SB-16.5-18.5	
Sample Date	03/22/2022		03/28/2022		03/24/2022	
Depth	37-39 ft		25.5-27.5 ft		16.5-18.5 ft	
Analyte	Result	Qual	Result	Qual	Result	Qual
Soil, LCMSMS compliant with QSM 5.3 Table B-15 (µg/kg)						
PFBS	ND	UJ	ND	UJ	ND	UJ
PFHxS	ND	UJ	0.325	J	0.076	J
PFNA	ND	UJ	ND	UJ	ND	UJ
PFOA	ND	UJ	ND	UJ	ND	UJ
PFOS	ND	UJ	0.524	J	0.125	J

Notes

ND = Analyte not detected above the LOD
LOD values are presented in Appendix F.

Interpreted Qualifiers

J = Estimated concentration
UJ = The analyte was not detected at a level greater than or equal to the adjusted DL. However, the reported adjusted DL is approximate and may be inaccurate or imprecise.

Chemical Abbreviations

PFBS perfluorobutanesulfonic acid
PFHxS perfluorohexanesulfonic acid
PFNA perfluorononanoic acid
PFOA perfluorooctanoic acid
PFOS perfluorooctanesulfonic acid

Acronyms and Abbreviations

AOI Area of Interest
DL detection limit
ft feet
ID identification
ISM Incremental Sampling Methodology
LCMSMS liquid chromatography with tandem mass spectrometry
LOD limit of detection
ND analyte not detected above the LOD
QSM Quality Systems Manual
Qual interpreted qualifier
SB soil boring
UTES Unit Training and Equipment Site
µg/kg micrograms per kilogram

**Table 6-5
PFOA, PFOS, PFBS, PFNA, and PFHxS Results in Groundwater
Site Inspection Report, Waiawa Gulch Training Site and UTES**

Area of Interest Sample ID Sample Date		AOI01				AOI02									
		AOI01-01-GW		AOI01-02-GW		AOI02-01-GW		AOI02-01-GW-D		AOI02-02-GW		AOI02-03-GW		AOI02-04-GW	
		04/05/2022		04/05/2022		04/04/2022		04/04/2022		04/05/2022		04/05/2022		04/05/2022	
Analyte	OSD Screening Level *	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Water, LCMSMS compliant with QSM 5.3 Table B-15 (ng/l)															
PFBS	601	ND	U	13.7		8.00		8.66		56.2		125		12.5	
PFHxS	39	ND	U	89.3		39.7		40.6		1110		409		459	
PFNA	6	ND	U	1.97	J	2.71	J	2.68	J	5.44		1.32	J	1.01	J
PFOA	6	1.26	J	18.0		13.3		13.7		57.0		27.9		25.3	
PFOS	4	2.64	J	11.1		31.4		31.2		271		212		71.2	

Notes

Grey Fill Detected concentration exceeded OSD Screening Levels

ND = Analyte not detected above the LOD

LOD values are presented in Appendix F.

References

a. Assistant Secretary of Defense, July 2022. Risk Based Screening Levels Calculated for PFOA, PFOS, PFBS, PFHxS, and PFNA in Groundwater or Soil using USEPA's Regional Screening Level Calculator. HQ=0.1. May 2022 Groundwater screening levels based on residential scenario for direct ingestion of groundwater.

Interpreted Qualifiers

J = Estimated concentration

U = The analyte was not detected at a level greater than or equal to the adjusted DL

Chemical Abbreviations

PFBS perfluorobutanesulfonic acid
 PFHxS perfluorohexanesulfonic acid
 PFNA perfluorononanoic acid
 PFOA perfluorooctanoic acid
 PFOS perfluorooctanesulfonic acid

Acronyms and Abbreviations

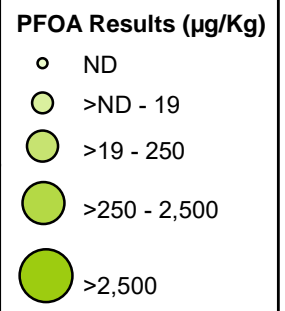
AOI Area of Interest
 D duplicate
 DL detection limit
 GW groundwater
 HQ hazard quotient
 ID identification
 LCMSMS liquid chromatography with tandem mass spectrometry
 LOD limit of detection
 ND analyte not detected above the LOD
 OSD Office of the Secretary of Defense
 QSM Quality Systems Manual
 Qual interpreted qualifier
 USEPA United States Environmental Protection Agency
 UTES Unit Training and Equipment Site
 ng/l nanogram per liter

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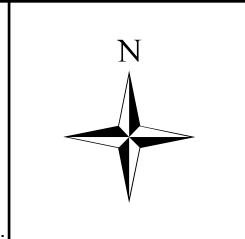


CLIENT	ARNG				
PROJECT	Site Inspection at Waiawa Gulch Training Site and UTES, HI				
REVISED	1/26/2023	GIS BY	MS	1/26/2023	
SCALE	1:3,240	CHK BY	JW	1/26/2023	
Base Map: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community		PM	CM	1/26/2023	

Facility Boundary
— River/Stream
 Trench Drain

0 135 270 540 Feet

Exceedances of the OSD SL are depicted with a yellow halo.
 Depth intervals shown represent respective sampling position within a given soil boring location.

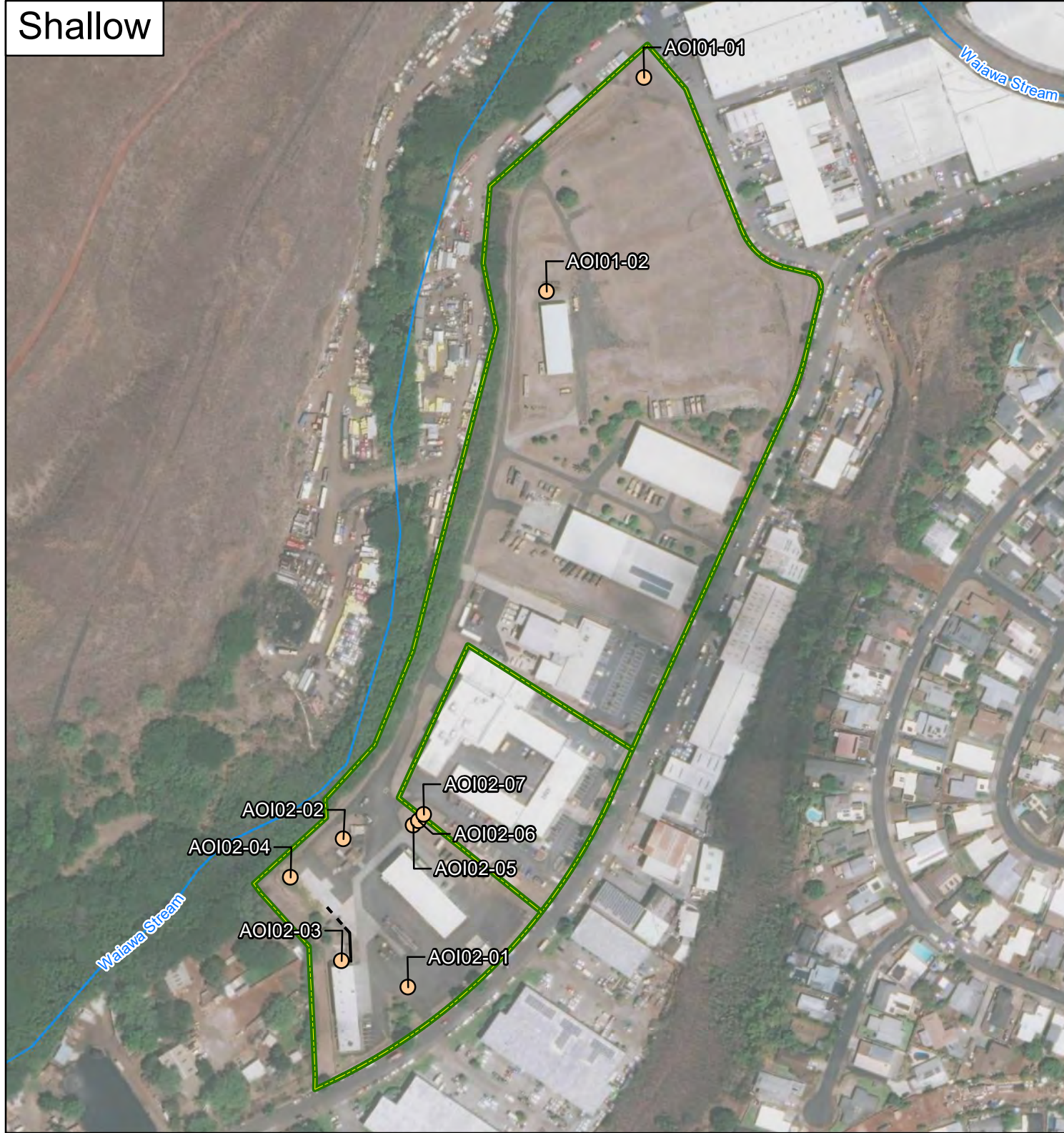


PFOA Detections in Soil

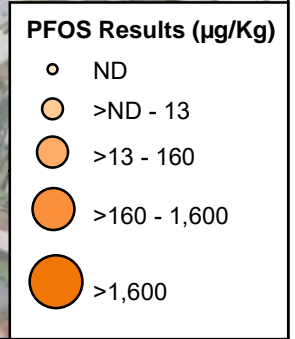
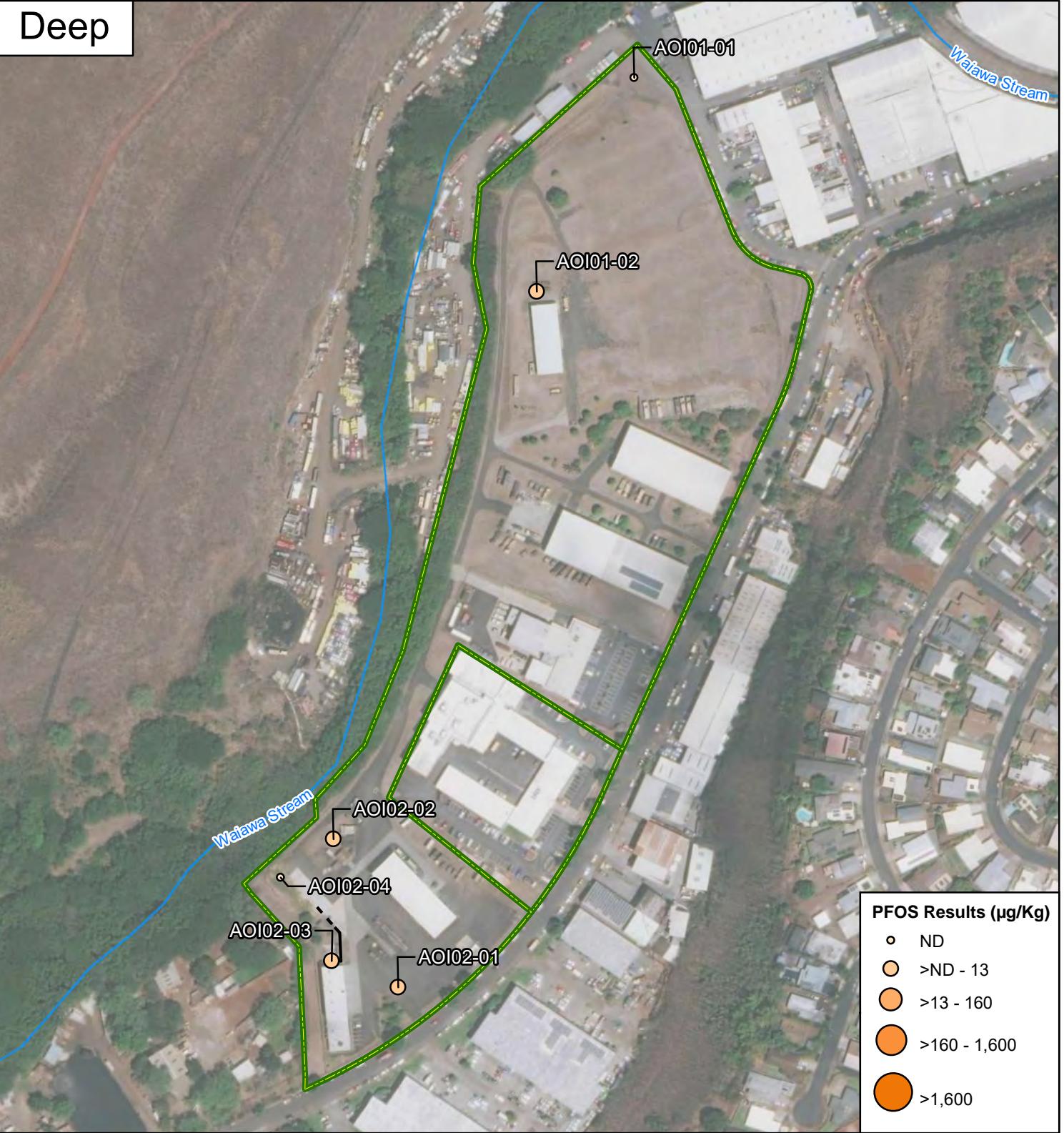
12420 Milestone Center Drive
Germantown, MD 20876

Figure 6-1

Shallow



Deep

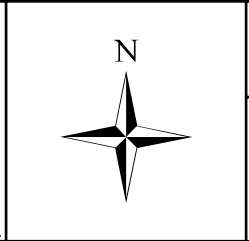


CLIENT	ARNG				
PROJECT	Site Inspection at Waiawa Gulch Training Site and UTES, HI				
REVISED	1/26/2023	GIS BY	MS	1/26/2023	
SCALE	1:3,240	CHK BY	JW	1/26/2023	
Base Map: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community		PM	CM	1/26/2023	

Facility Boundary
— River/Stream
 Trench Drain

0 135 270 540
Feet

Exceedances of the OSD SL are depicted with a yellow halo.
 Depth intervals shown represent respective sampling position within a given soil boring location.



PFOS Detections in Soil

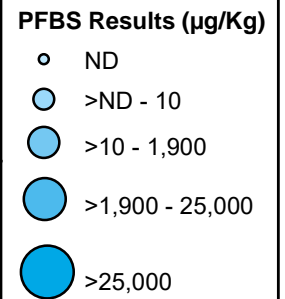
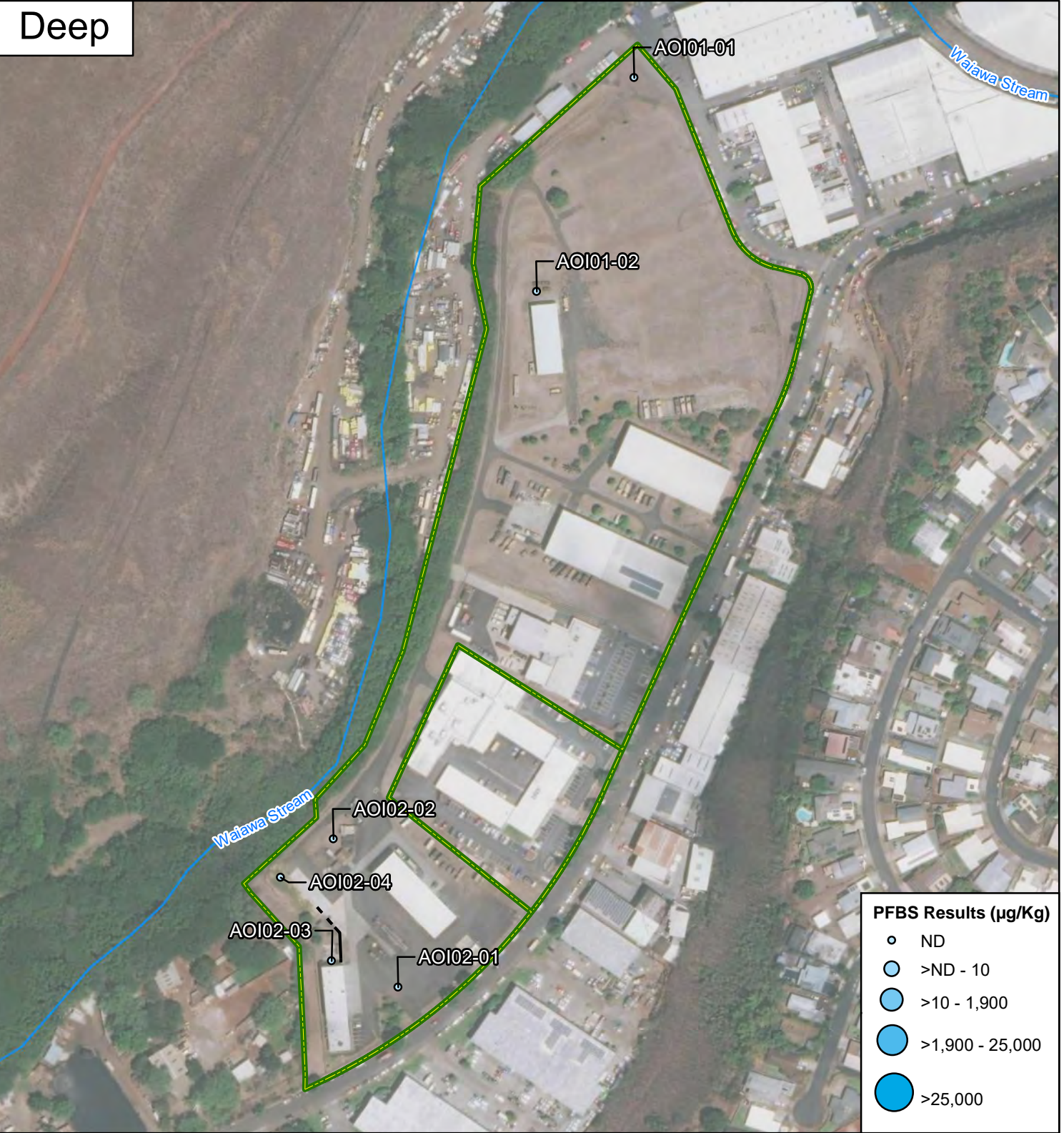
12420 Milestone Center Drive
Germantown, MD 20876

Figure 6-2

Shallow



Deep

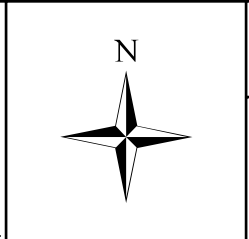


CLIENT	ARNG				
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SCALE	1:3,240	CHK BY	JW	1/26/2023	
Base Map: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community		PM	CM	1/26/2023	

Facility Boundary
— River/Stream
 Trench Drain

0 135 270 540
Feet

Exceedances of the OSD SL are depicted with a yellow halo.
 Depth intervals shown represent respective sampling position within a given soil boring location.



PFBS Detections in Soil

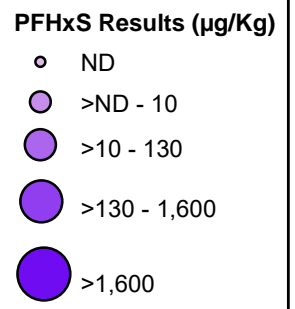
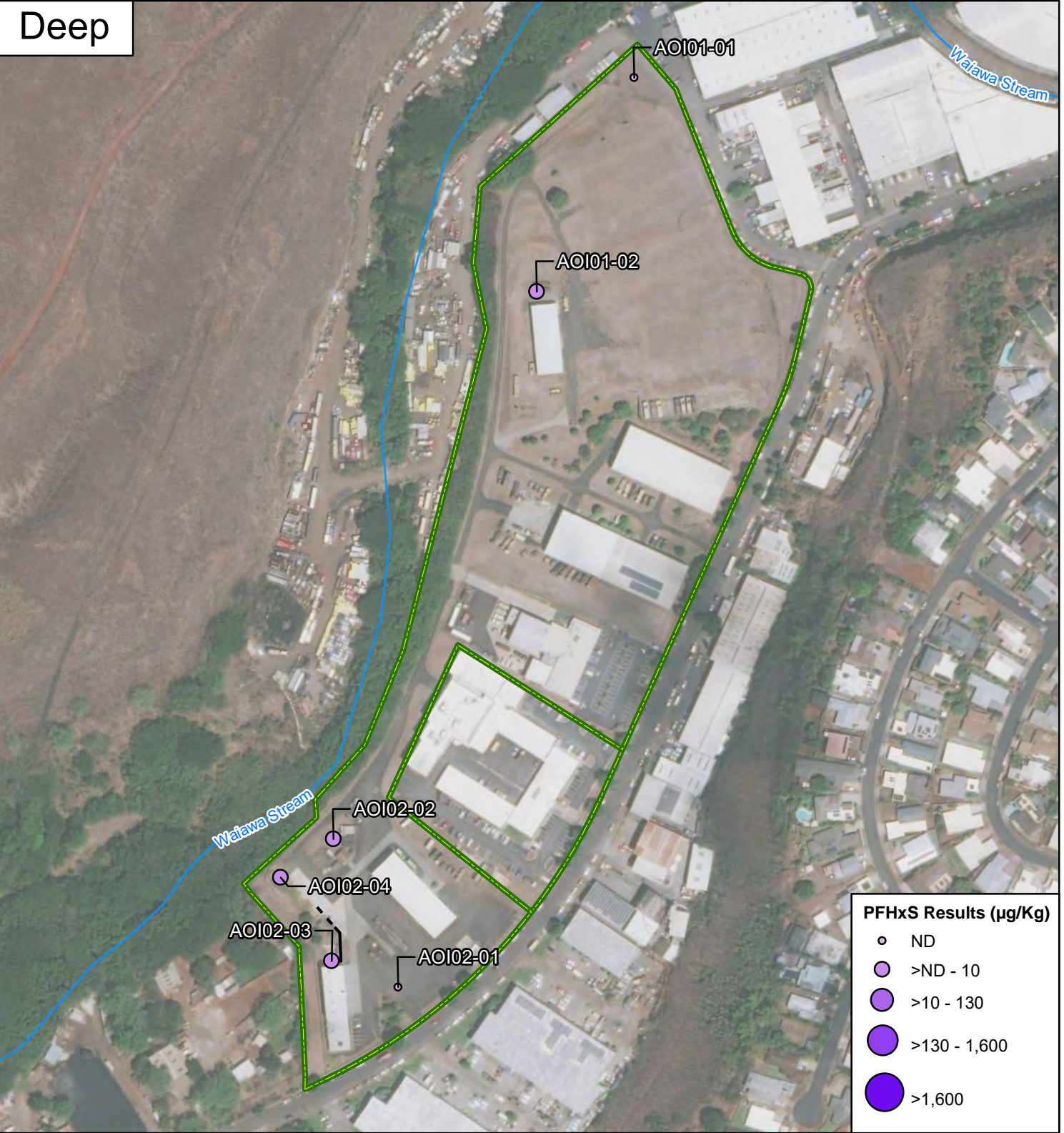
AECOM 12420 Milestone Center Drive
 Germantown, MD 20876

Figure 6-3

Shallow



Deep

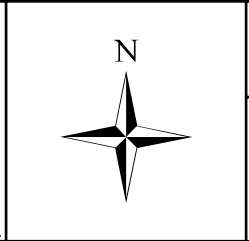


CLIENT	ARNG				
PROJECT	Site Inspection at Waiawa Gulch Training Site and UTES, HI				
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SCALE	1:3,240	CHK BY	JW	1/26/2023	
Base Map: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community		PM	CM	1/26/2023	

Facility Boundary
— River/Stream
 Trench Drain

0 135 270 540
Feet

Exceedances of the OSD SL are depicted with a yellow halo.
 Depth intervals shown represent respective sampling position within a given soil boring location.



PFHxS Detections in Soil

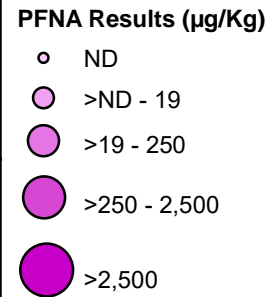
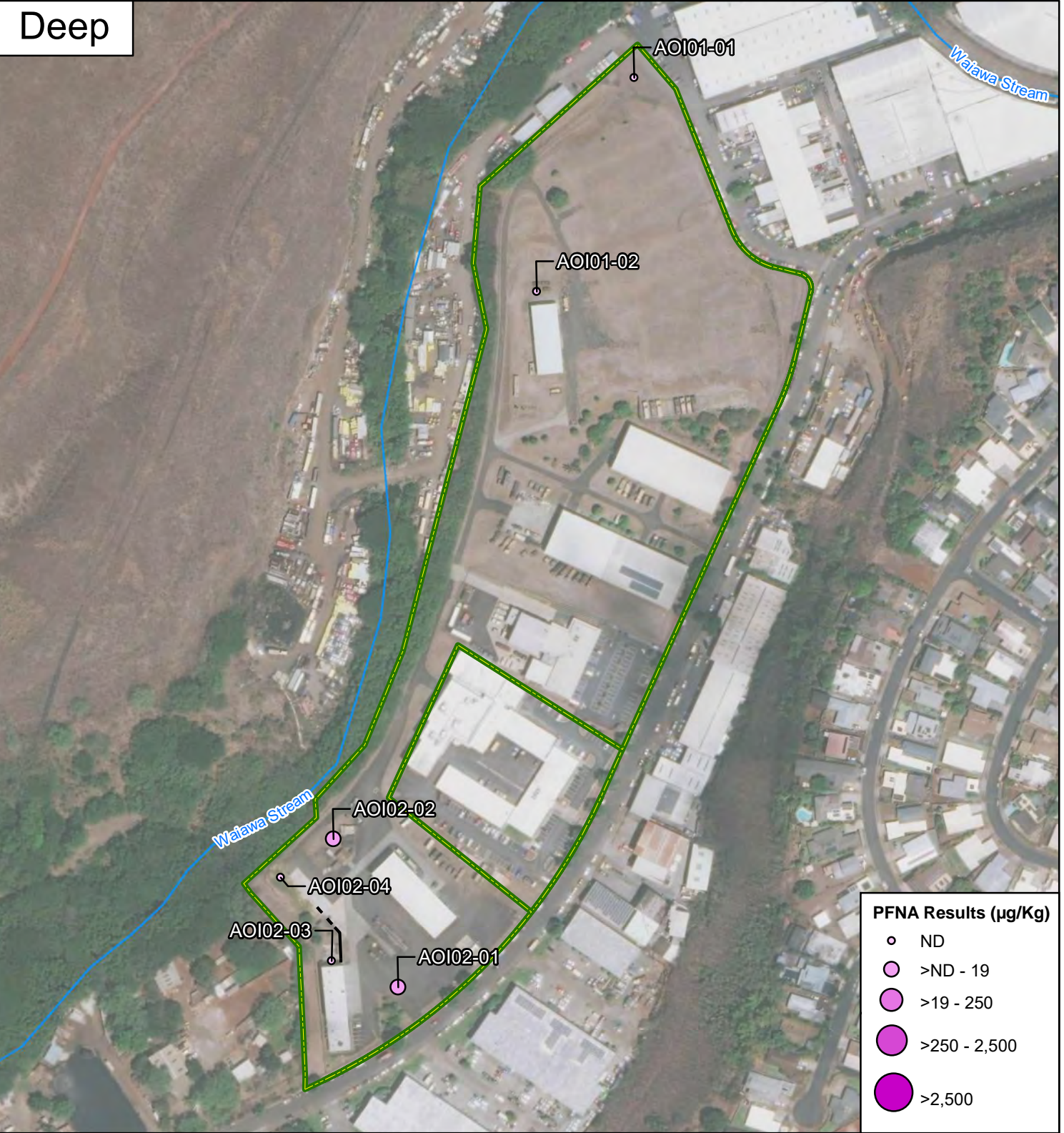
12420 Milestone Center Drive
Germantown, MD 20876

Figure 6-4

Shallow



Deep

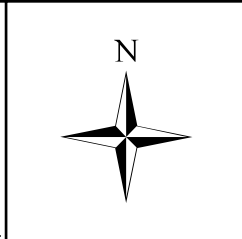


CLIENT	ARNG				
PROJECT	Site Inspection at Waiawa Gulch Training Site and UTES, HI				
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SCALE	1:3,240	CHK BY	JW	1/26/2023	
Base Map: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community		PM	CM	1/26/2023	

▭ Facility Boundary
— River/Stream
— Trench Drain

0 135 270 540
 Feet

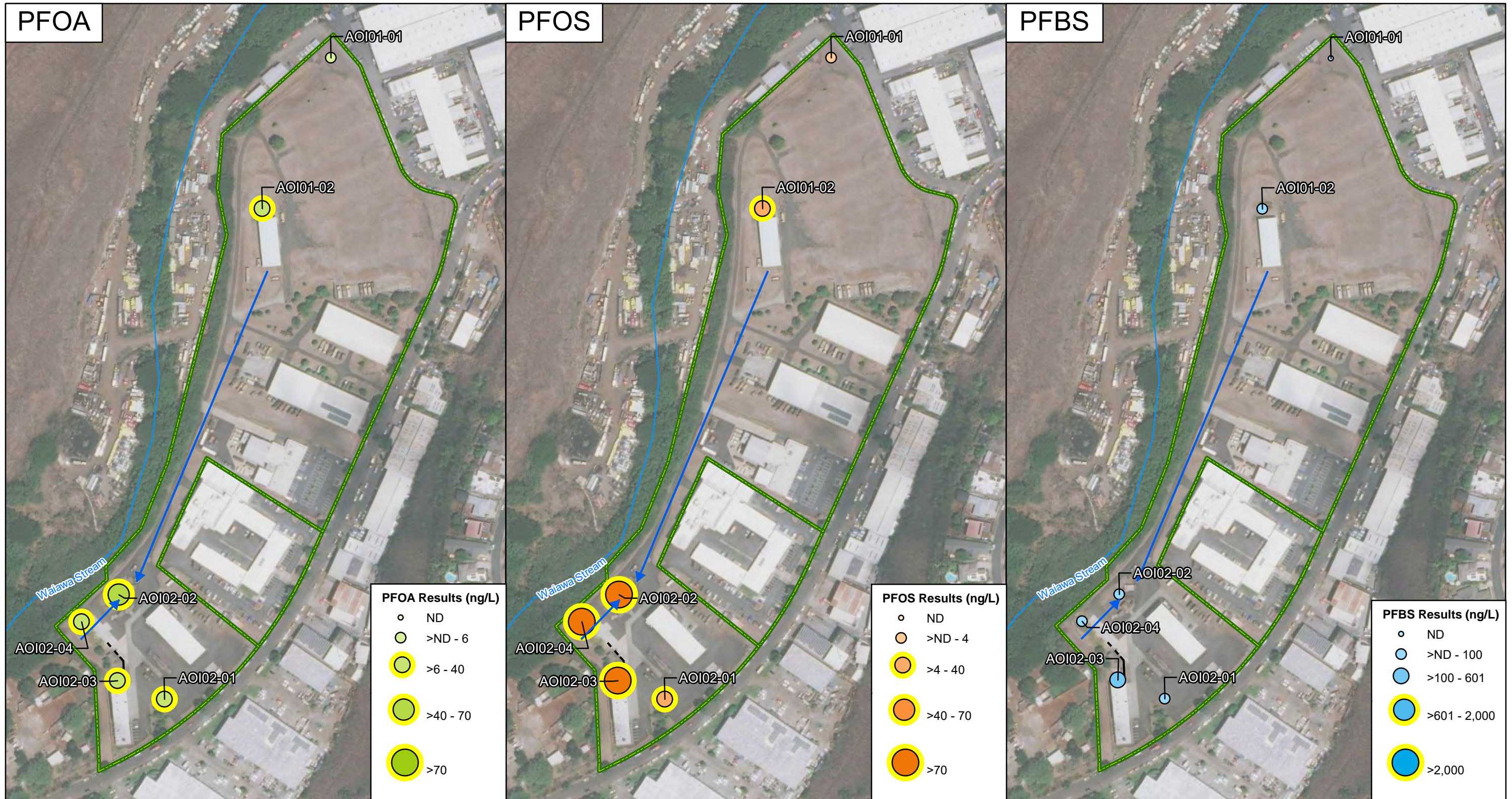
Exceedances of the OSD SL are depicted with a yellow halo.
 Depth intervals shown represent respective sampling position within a given soil boring location.



PFNA Detections in Soil

12420 Milestone Center Drive
 Germantown, MD 20876

Figure 6-5

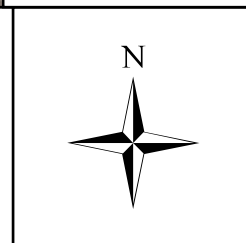


CLIENT	ARNG			
PROJECT	Site Inspection at Waiawa Gulch Training Site and UTES, HI			
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SCALE	1:3,240	CHK BY	JW	1/26/2023
Base Map: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community	PM	CM	1/26/2023	

▭ Facility Boundary
— River/Stream
~ Trench Drain
➔ Groundwater Flow Direction

0 135 270 540 Feet

Exceedances of the OSD SL are depicted with a yellow halo.

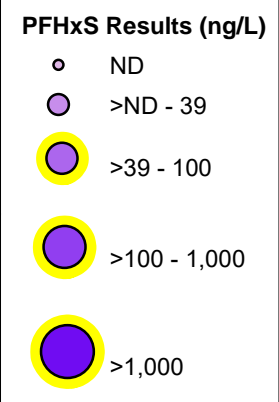
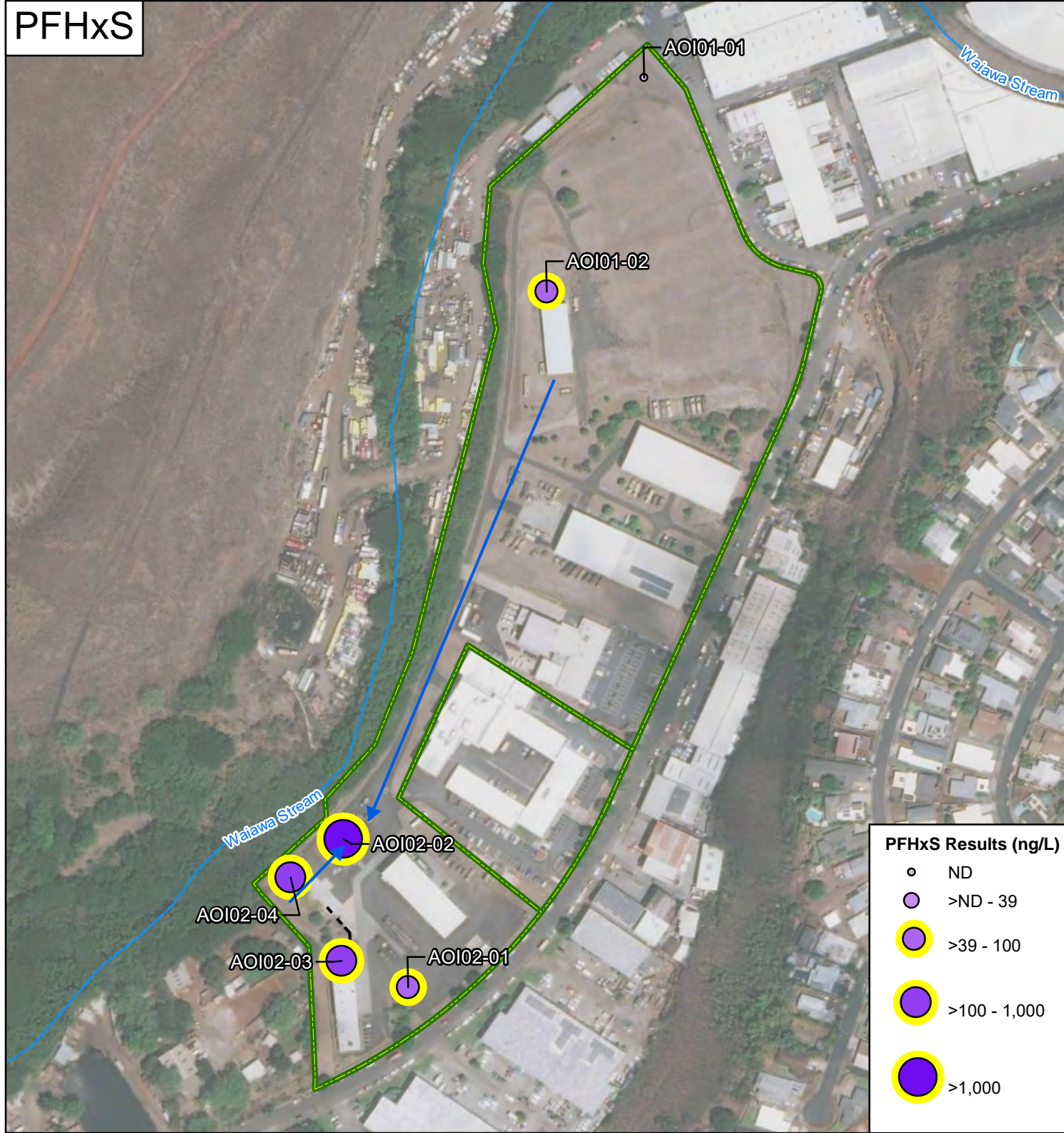


PFOA, PFOS, and PFBS Detections in Groundwater

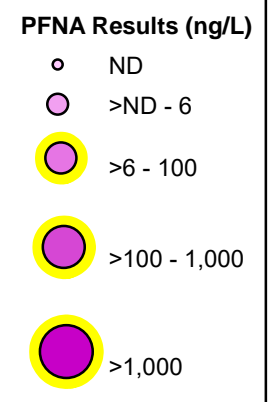
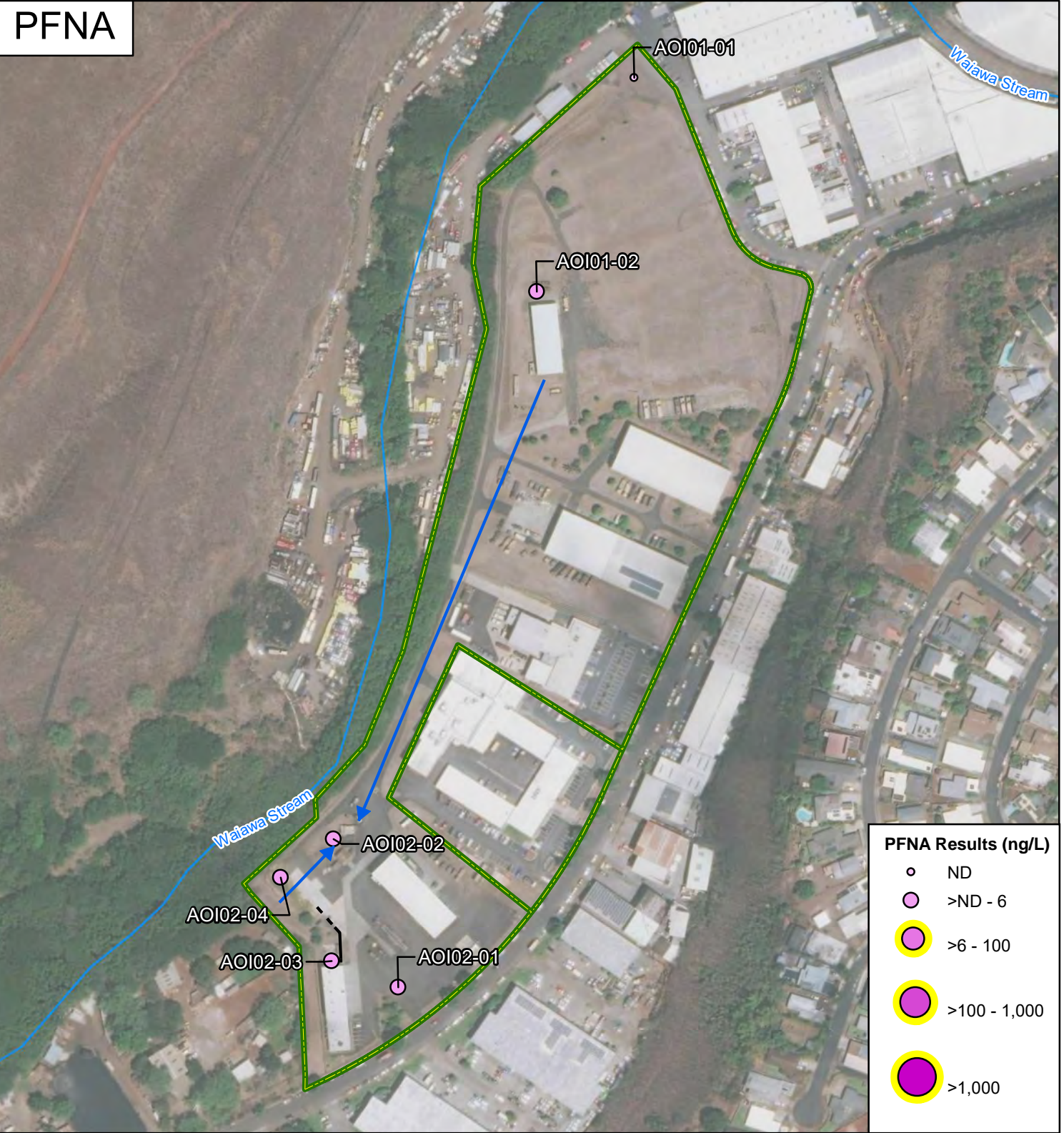
12420 Milestone Center Drive
Germantown, MD 20876

Figure 6-6

PFHxS

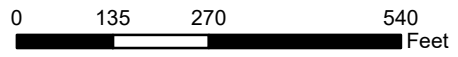


PFNA



CLIENT	ARNG				
PROJECT	Site Inspection at Waiawa Gulch Training Site and UTES, HI				
REVISED	1/26/2023	GIS BY	MS	1/26/2023	
SCALE	1:3,240	CHK BY	JW	1/26/2023	
Base Map: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community		PM	CM	1/26/2023	

- Facility Boundary
- River/Stream
- Trench Drain
- Groundwater Flow Direction



PFHxS and PFNA Detections in Groundwater

AECOM 12420 Milestone Center Drive
Germantown, MD 20876

Figure 6-7

Exceedances of the OSD SL are depicted with a yellow halo.

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7. Exposure Pathways

The conceptual site model (CSM) for the AOIs, revised based on the SI findings, is presented on **Figure 7-1**. Please note that while the CSM discussion assists in determining if a receptor may be impacted, the decision to move from SI to RI or interim action is determined based upon exceedances of the SLs for the relevant compounds and whether the release is more than likely attributable to the DoD. A CSM presents the current understanding of the site conditions with respect to known and suspected sources, potential transport mechanisms and migration pathways, and potentially exposed human receptors. A human exposure pathway is considered potentially complete when the following conditions are present:

1. Contaminant source;
2. Environmental fate and transport;
3. Exposure point;
4. Exposure route; and
5. Potentially exposed populations.

If any of these elements are missing, the pathway is incomplete. The CSM figures use an empty circle symbol to represent an incomplete exposure pathway. Areas with an incomplete pathway generally warrant no further action. However, the pathway is considered potentially complete if the relevant compounds are detected, in which case the CSM figure uses a half-filled circle symbol to represent a potentially complete exposure pathway. Additionally, a completely filled circle symbol is used to indicate when a potentially complete exposure pathway has detections of relevant compounds (PFOA, PFOS, PFBS, PFHxS, and PFNA) above the SLs. Areas with an identified potentially complete pathway that have detections of the relevant compounds above the SLs may warrant further investigation. Although the CSMs indicate whether potentially complete exposure pathways may exist, the recommendation for future study in an RI or no action at this time is based on the comparison of the SI analytical results for the relevant compounds to the SLs.

In general, the potential routes of exposure to the relevant compounds are ingestion and inhalation. Human exposure via the dermal contact pathway may occur, and current risk practice suggests it is an insignificant pathway compared to ingestion; however, exposure data for dermal pathways are sparse and continue to be the subject of toxicological study. The receptors evaluated are consistent with those listed in USEPA guidance for risk screening (USEPA, 2001). Receptors at the facility include site workers (e.g., facility staff and visiting soldiers), construction workers, trespassers (though unlikely due to restricted access), residents outside the facility boundary, and recreational users outside of the facility boundary.

7.1 Soil Exposure Pathway

The SI results in soil were used to determine whether a potentially complete pathway exists between the source and potential receptors at AOI 1 and AOI 2 based on the aforementioned criteria.

7.1.1 AOI 1

AOI 1 is the grassy area in the north portion of the facility, where historical firetruck parking and pump testing activities may have resulted in the release of AFFF.

PFOS, PFHxS, and PFNA were detected below their SLs in surface soil at AOI 1. Site workers, future construction workers, and trespassers could contact constituents in surface soil via

incidental ingestion and inhalation of dust. Therefore, the surface soil exposure pathway for site workers, future construction workers, and trespassers are potentially complete. There was no active construction observed at AOI 1 during SI field work. PFOS and PFHxS were detected in subsurface soil at AOI 1. Construction workers could contact constituents in subsurface soil via incidental ingestion; therefore, the subsurface soil exposure pathway for future construction workers is potentially complete. The CSM for AOI 1 is presented on **Figure 7-1**.

7.1.2 AOI 2

AOI 2 is in the southern portion of the facility and includes the vehicle maintenance area and surrounding areas where AFFF was discharged from the facility firetruck in the early 2000s, the grassy firetruck parking area, and the storage buildings on the edge of the grassy area where AFFF has been stored. AFFF discharge and storage within AOI 2 may have resulted in releases to grassy areas at the firetruck parking area, vehicle maintenance area, and the storage buildings.

PFOA, PFOS, PFBS, PFHxS, and PFNA were detected below their SLs in surface soil at AOI 2. Site workers and construction workers could contact constituents in surface soil via incidental ingestion and inhalation of dust. Therefore, the surface soil exposure pathway for site workers, future construction workers, and trespassers are potentially complete. There was no active construction observed at AOI 2 during SI field work. PFOS, PFHxS, and PFNA were detected in subsurface soil at AOI 2; therefore, the subsurface soil exposure pathway for future construction workers is potentially complete. The CSM for AOI 2 is presented on **Figure 7-1**.

7.2 Groundwater Exposure Pathway

The SI results in groundwater were used to determine whether a potentially complete pathway exists between the source and potential receptors based on the aforementioned criteria.

7.2.1 AOI 1

PFOA, PFOS, and PFHxS were detected above their SLs in groundwater samples collected at AOI 1. Groundwater elevations across the facility indicate groundwater from AOI 1 flows south following the flow of the basal aquifer south towards Pearl Harbor. Domestic, agricultural, and irrigation wells are present in the southern, downgradient direction within 4 miles of the facility; however, most of these wells are set in the basal aquifer at depths greater than 75 feet bgs (State of Hawai'i CWRM, 2022). At least one well is listed as being set in the alluvial aquifer. Although the groundwater samples collected during this SI were collected from shallow wells set in the alluvium, it is conservatively assumed that the pathway for exposure to off-facility residents via ingestion of groundwater is potentially complete. Because the Waiawa Gulch Training Site and UTES facility is provided drinking water from municipal wells that range in depth from 140 to 151 feet bgs and are cross-gradient to the southeast of the facility, the pathway for exposure to site workers via ingestion of groundwater is considered incomplete. Depths to water measured at AOI 1 in April 2022 during the SI ranged from 31.28 to 45.39 feet bgs. Therefore, the ingestion exposure pathway for future construction workers is considered incomplete. The CSM for AOI 1 is presented on **Figure 7-1**.

7.2.2 AOI 2

PFOA, PFOS, and PFHxS were detected above their SLs in groundwater samples collected at AOI 2. Although groundwater elevations at AOI 2 indicate a convergence on AOI02-02, it is presumed that the prevailing flow of groundwater from AOI 2 is to the south. This presumption is based on the groundwater elevations observed at each AOI and the understood flow direction of the regional basal aquifer. For the same reasons described in **Section 7.2.1**, the pathway for exposure to off-facility residents via ingestion of groundwater is considered potentially complete,

and the pathway for exposure to site workers, future construction workers, and trespassers via ingestion of groundwater is considered incomplete. Depths to water measured at AOI 2 in April 2022 during the SI ranged from 15.78 to 18.02 feet bgs. Therefore, the ingestion exposure pathway for future construction workers is considered incomplete. The CSM for AOI 2 is presented on **Figure 7-1**.

7.3 Surface Water and Sediment Exposure Pathway

The SI results in soil and groundwater, in combination with knowledge of the fate and transport properties of PFAS, were used to determine whether a potentially complete pathway exists between the source and potential receptors.

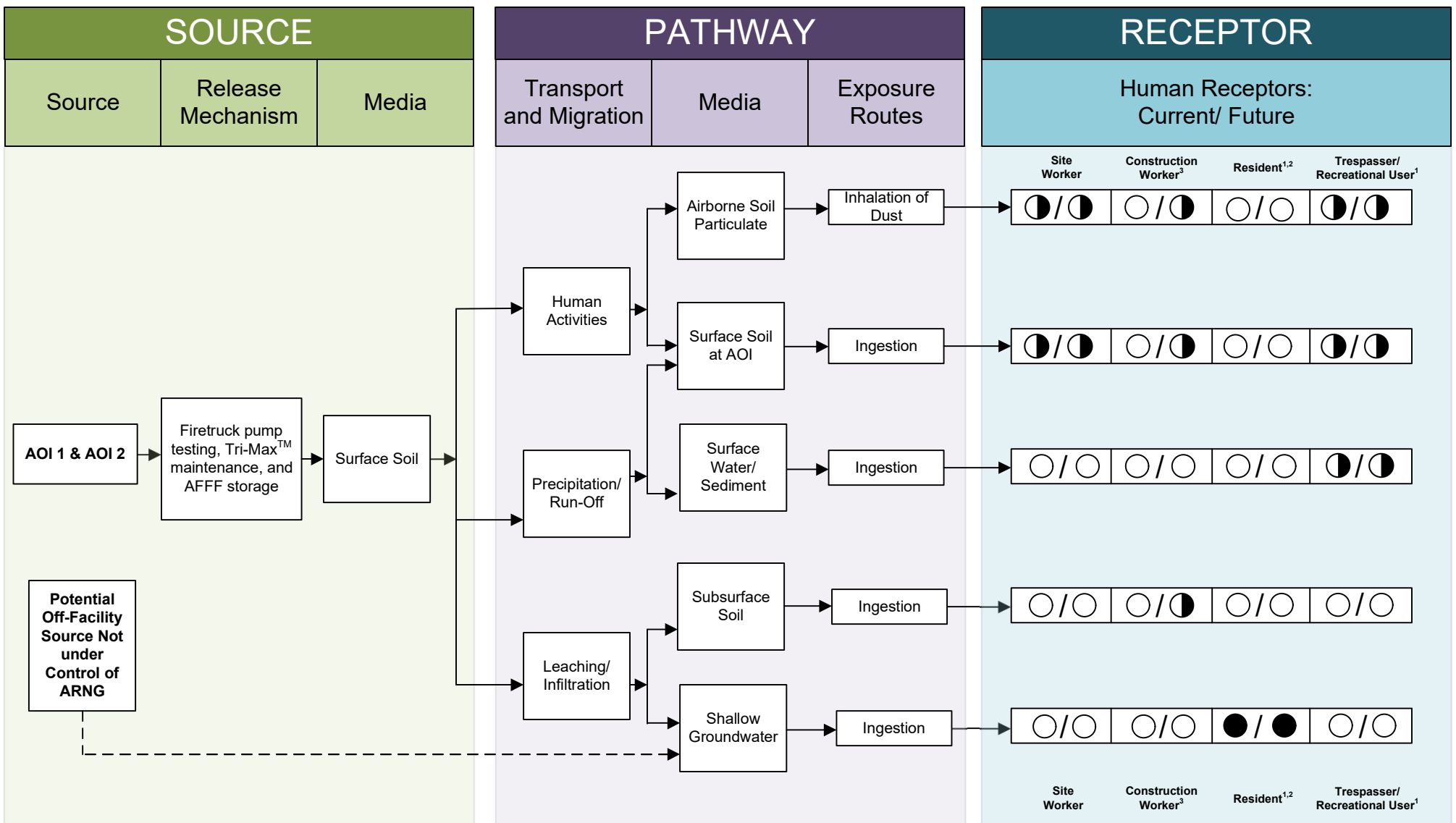
7.3.1 AOI 1

PFAS are water soluble and can migrate readily from soil to surface water via leaching and runoff. Because PFOA, PFOS, PFBS, PFHxS, and PFNA were detected in soil and/or groundwater at AOI 1, it is possible that those compounds may have migrated from soil to storm drains in the area that capture runoff. Stormwater runoff at AOI 1 discharges into Waiawa Stream, which is located in the vicinity of the storage buildings. The Waiawa Stream flows south to Middle Loch, within Pearl Harbor, and subsequently the Pacific Ocean. Therefore, the surface water and sediment ingestion exposure pathway for recreational users of those surface water bodies is considered potentially complete. There is no surface water or sediment on the Waiawa Gulch Training Site and UTES property. As a result, the surface water and sediment ingestion exposure pathway for site workers, construction workers, and trespassers is considered incomplete. Municipal drinking water is not supplied by nearby surface water bodies, such as Waiawa Stream. Consequently, the residential exposure pathway is incomplete for surface water and sediment ingestion. The OSD SLs for soil and groundwater are based on human receptors. Future surface water and sediment sampling may be performed to evaluate potential impacts to ecological receptors.

7.3.2 AOI 2

Because PFOA, PFOS, PFBS, PFHxS, and PFNA were detected in soil and/or groundwater at AOI 2, it is possible that those compounds may have migrated from soil to storm drains in the area that capture runoff. Storm drains discharge to an outfall located along Waiawa Stream. For the same reasons described in **Section 7.3.1**, the surface water and sediment ingestion exposure pathway for recreational users of downgradient surface water bodies is considered potentially complete; and the pathway for exposure pathway for site workers, construction workers, and trespassers is considered incomplete. Municipal drinking water is not supplied by nearby surface water bodies, such as Waiawa Stream. Consequently, the residential exposure pathway is incomplete for surface water and sediment ingestion. The OSD SLs for soil and groundwater are based on human receptors. Future surface water and sediment sampling may be performed to evaluate potential impacts to ecological receptors.

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LEGEND

- Flow-Chart Stops
- ▶— Flow-Chart Continues
- - -▶- Partial / Possible Flow
- Incomplete Pathway
- ◐ Potentially Complete Pathway
- Potentially Complete Pathway with Exceedance of SL for PFOA, PFOS, PFBS, PFHxS, and/or PFNA

Notes:

1. The resident and recreational users refer to off-site receptors.
2. Inhalation of dust for off-site receptors is likely insignificant.
3. No current active construction at the facility.

Figure 7-1
 Conceptual Site Model, AOI 1 and AOI 2
 Waiawa Gulch Training Site and UTES, HI

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8. Summary and Outcome

This section summarizes SI activities and findings. The most significant findings are summarized in this section and are reproduced directly or abstracted from information contained in this report. The outcome provides general and comparative interpretations of the findings relative to the SLs.

8.1 SI Activities

The SI field activities were conducted from 18 March to 11 April 2022 and consisted of utility clearance, direct push boring, soil sample collection, permanent monitoring well installation via solid flight auger drilling, well development, groundwater sample collection, and land surveying. Field activities were conducted in accordance with the SI QAPP Addendum (AECOM, 2021), except as previously noted in **Section 5.8**.

To fulfill the project DQOs set forth in the approved SI QAPP Addendum (AECOM, 2021), samples were collected and analyzed for a subset of 18 compounds by LC/MS/MS compliant with QSM 5.3 Table B-15 as follows.

- Fifteen (15) soil samples from nine boring locations;
- Six groundwater samples from six permanent monitoring wells;
- Nineteen (19) quality assurance QA/QC samples.

An SI is conducted when the PA determines an AOI exists based on probable use, storage, and/or disposal of PFAS-containing materials. The SI includes multi-media sampling at AOIs to determine whether or not a release has occurred. The SI may conclude further investigation is warranted, a removal action is required to address immediate threats, or no further action is required. Additionally, the CSM was refined to assess whether a potentially complete pathway exists between the source and potential receptors for potential exposure at the AOIs, which are described in **Section 7**.

8.2 Outcome

Based on the results of this SI, further evaluation is warranted in an RI for AOI 1: Firetruck Pump Test Area and AOI 2: Vehicle Maintenance Area, Firetruck Parking Area, and Storage Buildings. Based on the CSMs developed and revised in light of the SI findings, there is potential for exposure to drinking water receptors from AOI 1 and AOI 2 from sources on the facility resulting from historical DoD activities. Sample analytical concentrations collected during the SI were compared to the project SLs in soil and groundwater, as described in **Table 6-1**. A summary of the results of the SI data relative to the SLs is as follows:

- At AOI 1:
 - The detected concentrations of PFOS, PFHxS, and PFNA in soil at AOI 1 were below their SLs.
 - PFOA, PFOS, and PFHxS in groundwater exceeded their SLs. PFOA exceeded the SL of 6 ng/L, with a concentration of 18.0 ng/L at location AOI01-02. PFOS exceeded the SL of 4 ng/L, with a concentration of 11.1 ng/L at location AOI01-02. PFHxS exceeded the SL of 39 ng/L, with a concentration of 89.3 ng/L at location AOI01-02. Based on the results of the SI, further evaluation of AOI 1 is warranted in the RI.


- At AOI 2:
 - The detected concentrations of PFOA, PFOS, PFBS, PFHxS, and PFNA in soil at AOI 2 were below their SLs.
 - PFOA, PFOS, and PFHxS in groundwater exceeded their SLs. PFOA exceeded the SL of 6 ng/L at all four locations, with a maximum concentration of 57.0 ng/L at location AOI02-02. PFOS exceeded the SL of 4 ng/L at all four locations, with a maximum concentration of 271 ng/L at location AOI02-02. PFHxS exceeded the SL of 39 ng/L at all four locations, with a maximum concentration of 1,110 ng/L at location AOI02-02. Based on the results of the SI, further evaluation of AOI 2 is warranted in an RI.

Due to the complex hydrogeologic setting encountered at the facility, there is uncertainty regarding local groundwater flow direction at AOI 1 and AOI 2. It is possible that wells within AOI 1 are screened in discontinuous water-bearing units, and the influence of the nearby Waiawa Stream on groundwater flow is unknown. A future RI will provide additional data to clarify the hydrogeology.




Of the six PFAS compounds presented in the 6 July 2022 OSD memorandum, HFPO-DA (commonly referred to as GenX) was not included as an analyte at the time of this SI. Based on the CSM developed during the PA and revised based on SI findings, the presence of HFPO-DA is not anticipated at the facility because HFPO-DA is generally not a component of MIL-SPEC AFFF and based on its history including distribution limitations that restricted use of GenX, it is generally not a component of other products the military used. In addition, it is unlikely that GenX would be an individual chemical of concern in the absence of other PFAS.

Table 8-1 summarizes the SI results for soil and groundwater used to determine if an AOI should be considered for further investigation under CERCLA and undergo an RI.

Table 8-1: Summary of Site Inspection Findings and Recommendations

AOI	Potential Release Area	Soil – Source Area	Groundwater – Source Area	Future Action
1	Firetruck Pump Test Area			Proceed to RI
2	Firetruck Parking Area, Vehicle Maintenance Area, and Storage Buildings			Proceed to RI

Legend:

-  = detected; exceedance of the screening levels
-  = detected; no exceedance of the screening levels
-  = not detected

9. References

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Appendix A

Data Usability Assessment and Validation Reports

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Data Usability Assessment

The Data Usability Assessment (DUA) is an evaluation at the conclusion of data collection activities that uses the results of both data verification and validation in the context of the overall project decisions or objectives. Using both quantitative and qualitative methods, the assessment determines whether project execution and the resulting data have met installation-specific data quality objectives (DQOs). Both sampling and analytical activities are considered to assess whether the collected data are of the right type, quality, and quantity to support the decision-making (Department of Defense [DoD], 2019a; DoD, 2019b; United States Environmental Protection Agency [USEPA], 2017). The references for all sources cited in this DUA are provided in Section 9.0 of the Site Inspection (SI) Report.

Data Quality Indicators (DQIs) (Precision, Accuracy, Representativeness, Comparability, Completeness and Sensitivity) are important components in assessing data usability. These DQIs were evaluated in the subsequent sections and demonstrate that the data presented in this SI report are of high quality. Although the SI data are considered reliable, some degree of uncertainty can be associated with the data collected. Specific factors that may contribute to the uncertainty of the data evaluation are described below. The Data Validation Report (DVR) (**Appendix A**) presents explanations for all qualified data in greater detail.

Precision

Precision is the degree of agreement among repeated measurements of the same characteristic on the same sample or on separate samples collected as close as possible in time and place. Field sampling precision is measured with the field duplicate relative percent differences (RPD); laboratory precision is measured with calibration verification, laboratory control spike (LCS) and matrix spike (MS) duplicate RPD.

Calibration verifications were performed routinely to ensure that instrument responses for all calibrated analytes were within established quality control (QC) criteria. No associated calibration verifications displayed results outside the project established precision limits presented in the SI QAPP Addendum (AECOM, 2021).

LCS/LCS duplicate (LCSD) pairs were prepared by addition of known concentrations of each analyte in a matrix-free media known to be free of target analytes. LCS/LCSD pairs were analyzed for every analytical batch to demonstrate the ability of the laboratory to detect similar concentrations of a known quantity in matrix-free media. The LCS/LCSD samples were within the project established precision limits presented in the SI QAPP Addendum (AECOM, 2021).

MS/matrix spike duplicate (MSD) samples were prepared, analyzed, and reported for all preparation batches. MS/MSD samples demonstrated that the analytical system was in control for the matrix being tested. MS/MSD samples were submitted to the laboratory for analysis at a rate of 5 percent (%). The MS/MSD performed on the field sample AOI01-01-SB-0.0-2.0 displayed RPD exceedances for several target analytes. The associated parent sample results were previously qualified based on the temperature exceedance anomaly; these results should be considered usable as qualified.

Field duplicate samples were collected at a rate of 10% to assess the overall sampling and measurement precision for this sampling effort. The field duplicate samples were analyzed for -per- and polyfluoroalkyl substances (PFAS) and general chemistry parameters. The field duplicate samples were within the project established precision limits presented in the SI QAPP Addendum

(AECOM, 2021) with multiple exceptions. The field duplicate pairs collected at sites AOI01-01-SB-0.0-0.2 and AOI01-02-SB-0.0-1.0 displayed positive results in one sample and non-detect results in the associated duplicate sample for multiple target analytes. The positive parent sample results were qualified "J" while the non-detect field duplicate results were qualified "UJ". The qualified field duplicate pair results should be considered usable as estimated values.

Accuracy

Accuracy is a measure of confidence in a measurement. The smaller the difference between the measurement of a parameter and its "true" or expected value, the more accurate the measurement. The more precise or reproducible the result, the more reliable or accurate the result. Accuracy is measured through percent recoveries in the LCS/LCSD, MS/MSD, internal standard recoveries, and surrogates.

LCS/LCSD samples were prepared by addition of known concentrations of each analyte in a matrix free media known to be free of target analytes. LCS/LCSD samples were analyzed for every analytical batch and demonstrated that the analytical system was in control during sample preparation and analysis. The LCS/LCSD samples were within the project established accuracy limits presented in the SI QAPP Addendum (AECOM, 2021).

MS/MSD samples were prepared, analyzed, and reported at a rate of 5%. MS/MSD samples demonstrated that the analytical system was in control for the matrix being tested. The MS/MSD samples were within the project established control limits presented in the SI QAPP Addendum (AECOM, 2021).

Extraction internal standards (EIS) were added by the laboratory during sample extraction to measure relative responses of target analytes and used to correct for bias associated with matrix interferences and sample preparation efficiencies, injection volume variances, mass spectrometry ionization efficiencies, and other associated preparation and analytical anomalies. Several field samples displayed EIS area counts outside the QC limits for target analytes. The positive field sample results associated with high EIS area counts were qualified as estimate with a negative bias. The field sample results associated with low EIS area counts were non-detect and were qualified as estimate. These results should be considered usable as qualified as estimated values.

Injection internal standards (IIS) were added by the laboratory after sample extraction and prior to analysis as a legacy requirement of DoD Quality Systems Manual (QSM) 5.1 to measure relative responses of target analytes. Even though not required under the current DoD QSM 5.3 analysis, the IIS are still added to the sample after extraction as an additional QC measure. The IIS percent recoveries were within the established laboratory precision limits.

Representativeness

Representativeness qualitatively expresses the degree to which data accurately reflect site conditions. Factors that affect the representativeness of analytical data include appropriate sample population definitions, proper sample collection and preservation techniques, analytical holding times, use of standard analytical methods, and determination of matrix or analyte interferences.

Relating to the use of standard analytical methods, the laboratory followed the method as established in PFAS by liquid chromatography with tandem mass spectrometry (LC/MS/MS) Compliant with QSM Table B-15, including the specific preparation requirements (i.e. ENVI-Carb or equivalent used), mass calibration, spectra, all the ion transitions identified in Table B-15 were

monitored, standards that contained both branched and linear isomers when available were used, and isotopically labeled standards were used for quantitation.

Field QC samples were collected to assess the representativeness of the data collected. Field duplicates were collected at a rate of 10% for all field samples, while MS/MSD samples were collected at a rate of 5%. The laboratory used approved standard methods in accordance with the SI QAPP Addendum (AECOM, 2021) for all analyses. All preservation techniques were followed by the field staff, and the laboratory received all sample coolers within the acceptable temperature range established in the QAPP with one exception. The several samples in the sample delivery group (SDG) 222040507 were received by the laboratory with temperatures exceeding the QC limit of 6°C. The associated field sample results were qualified as estimate and should be considered usable as qualified. Additionally, the laboratory initially prepared a group of samples with their standard preparation technique initially. When this error was discovered, these samples were reprepared via ISM after the holding time expired. The associated field sample results were qualified as estimates based on the holding time exceedance, unless previously qualified due to an EIS or field duplicate sample anomaly. The ISM data was presented within the report and recommended for data use per the project plan while and the extra standard prep analysis results are included within the appendices. Also, the holding time for pH analysis is considered 'immediate', so all pH sample results have been qualified as estimated.

Instrument blanks and method blanks were prepared by the laboratory in each batch as a negative control. Four instrument blanks displayed target analyte concentrations greater than the detection limit (DL). The field sample results were either non-detect or displayed positive results significantly higher than those found in the blanks; no impact on the data is anticipated.

Two field reagent blank (FRB) was collected during the event. Seven equipment rinsate blanks (ERB) were also collected for sample media that required decontamination. No FRB or ERB displayed detections, and these blanks were collected in accordance with the SI QAPP Addendum (AECOM, 2021).

Three samples of water used for decontamination of the drill rig were collected in advance of the field effort. No decontamination blank samples displayed detections, and these blanks were collected in accordance with the SI QAPP Addendum (AECOM, 2021).

Overall, the data are usable for evaluating the presence or absence of PFAS at the facility. Sufficient usable data were obtained to meet the objectives of the SI.

Comparability

Comparability is the extent to which data from one study can be compared directly to either past data from the current project or data from another study. Using standardized sampling and analytical methods, units of reporting, and site selection procedures help ensure comparability. Standard field sampling and typical laboratory protocols were used during the SI and are considered comparable to ongoing investigations.

Completeness

Completeness is a measure of the amount of valid data obtained from a measurement system compared to the amount of data expected under normal conditions. The laboratory provided data that met system QC acceptance criteria for all samples tested. Project completeness was determined by evaluating the planned versus actual quantities of data. Percent completeness per

parameter is as follows and reflects the exclusion of "X/UX" flagged data, although the project team has retained these results in the data set:

- PFAS in groundwater by LC/MS/MS compliant with QSM 5.3 Table B-15 at 100%
- PFAS in soil by LC/MS/MS compliant with QSM 5.3 Table B-15 at 100%
- pH in soil by USEPA Method 9045D at 100%
- Total organic carbon by USEPA Method 9060 at 100%

Sensitivity

Sensitivity is the capability of a test method or instrument to discriminate between measurement responses representing different levels (e.g., concentrations) of a variable of interest. Examples of QC measures for determining sensitivity include laboratory fortified blanks, a method detection limit (MDL) study, and calibration standards at the limit of quantitation (LOQ). In order to meet the needs of the data users, project data must meet the measurement performance criteria for sensitivity and project LOQs specified in the SI QAPP Addendum (AECOM, 2021). The laboratory provided the requested MDL studies and provided applicable calibration standards at the LOQ. In order to achieve the DQOs for sensitivity outlined in the SI QAPP Addendum (AECOM, 2021), the laboratory reported all field sample results at the lowest possible dilution. Additionally, any analytes detected below the LOQ and above the detection limit were reported and qualified.

DATA VALIDATION REPORT - Level III Review

SDG No.:	221081365 + 222040507 + 645 + 903	Analysis:	Per- and Polyfluorinated Alkyl Substances
Laboratory:	Pace Gulf Coast	Project:	Waiawa
Reviewer:	Tyler Bryant	Date:	September 19 th , 2022

This report presents the findings of a review of the referenced data. The report consists of this summary, a listing of the samples included in the review, copies of data reports with data qualifying flags applied, data review worksheets, supporting documentation, and an explanation of the data qualifying flags employed. The review performed is based on the specifics of the analytical method referenced and provisions of the approved project-specific work plan; and, qualified according to the *Contract Laboratory Program National Functional Guidelines (NFG) for Superfund Organic Methods Data Review*, EPA-540-R-20-005, November 2020, and Department of Defense (DoD) Data Validation Guidelines Module 3 QSM Table B-15, May 2020. Modifications reflect the level of review requested, the specifications of the project specific QAPP, and the specifics of the analytical methods employed.

Major

Anomalies: None.

Minor

Anomalies: During the PFAS analysis, the several samples in sample delivery group (SDG) 222040507 were received by the laboratory with temperatures exceeding the quality control (QC) limit of 6°C. The positive associated field sample results were qualified J,t while the non-detect results were qualified UJ,t. The following instrument blanks displayed target analyte concentrations greater than the detection limit:

Blank	Date	Time	Batch	Analyte	Concentration (ng/L)
2220513A_2	5/13/22	1321	740969	PFHxA	0.214
2220413B_1	4/13/22	2016	738448	PFOS	0.828
2220415B_1	4/15/22	2108	738621	PFOS	0.76
2220415C_1	4/16/22	0519	738661	PFOS	0.836

The field sample results associated with the blank contamination were either non-detect or displayed concentrations greater than five times the blank detections; no data qualifying action was required. The extraction internal standards (EIS) performed on the following field samples displayed area counts outside the QC limits of 50%-150%:

Field Sample	EIS	Associated Target Compound(s)	Area Count (%)
AOI01-02-SB-25.5-27.5	M ₂ PFTA	PFTeDA, PFTrDA	49
	M ₈ FOSA	FOSA	16
	d ₃ -NMeFOSAA	NMeFOSAA	47
	d ₅ -NEtFOSAA	NEtFOSAA	48
AOI02-03-SB-16.5-18.5	M ₂ 4:2 FTS	4:2 FTS	47
	M ₂ 6:2 FTS	6:2 FTS	44
	M ₂ PFTA	PFTeDA, PFTrDA	48
	M ₈ FOSA	FOSA	48
	d ₃ -NMeFOSAA	NMeFOSAA	42
	d ₅ -NEtFOSAA	NEtFOSAA	47
AOI02-05-SB-0.0-0.5	M ₂ 4:2 FTS	4:2 FTS	27
	M ₂ 6:2 FTS	6:2 FTS	25

Field Sample	EIS	Associated Target Compound(s)	Area Count (%)
AOI02-05-SB-0.0-0.5	M ₂ 8:2 FTS	8:2 FTS	31
	M ₂ PFTA	PFTeDA, PFTrDA	39
	M ₃ HFPODA	HFPODA	29
	M ₃ PFBS	PFBS	36
	M ₃ PFHxS	PFHxS	37
	M ₄ PFHpA	PFHpA	29
	M ₅ PFHxA	PFHxA	30
	M ₅ PFPeA	PFPeA	29
	M ₆ PFDA	PFDA	35
	M ₇ PfUnA	PfUnA	38
	M ₈ FOSA	FOSA	31
	M ₈ PFOA	PFOA	32
	M ₈ PFOS	PFOS	39
	M ₉ PFNA	PFNA	32
	MPFBA	PFBA	26
	MPFDoA	PFDoA	33
	d ₃ -NMeFOSAA	NMeFOSAA	14
d ₅ -NEtFOSAA	NEtFOSAA	17	
AOI02-07-SB-0.0-2.0	M ₈ FOSA	FOSA	31
AOI01-02-SB-0.0-1.0-DRE	d ₃ -NMeFOSAA	NMeFOSAA	32
	d ₅ -NEtFOSAA	NEtFOSAA	40
AOI01-02-SB-0.0-1.0	M ₈ FOSA	FOSA	29
	d ₃ -NMeFOSAA	NMeFOSAA	37
	d ₅ -NEtFOSAA	NEtFOSAA	41
AOI02-01-SB-0.0-2.0	M ₈ FOSA	FOSA	11
	d ₃ -NMeFOSAA	NMeFOSAA	42
	d ₅ -NEtFOSAA	NEtFOSAA	44
AOI02-01-SB-14.5-16.5	M ₈ FOSA	FOSA	45
	d ₃ -NMeFOSAA	NMeFOSAA	44
AOI02-06-SB-0.0-0.5	M ₈ FOSA	FOSA	28
	MPFBA	PFBA	49
	d ₃ -NMeFOSAA	NMeFOSAA	31
	d ₅ -NEtFOSAA	NEtFOSAA	35
LCS2343357	M ₈ FOSA	FOSA	25
AOI01-01-SB-0.0-2.0-MSD	M ₂ 4:2 FTS	4:2 FTS	32
	M ₂ 6:2 FTS	6:2 FTS	36
	M ₂ 8:2 FTS	8:2 FTS	42
	M ₃ PFBS	PFBS	44
	M ₃ PFHxS	PFHxS	48
	M ₄ PFHpA	PFHpA	40
	M ₅ PFHxA	PFHxA	39
	M ₅ PFPeA	PFPeA	37
	M ₆ PFDA	PFDA	46
	M ₇ PfUnA	PfUnA	49
	M ₈ FOSA	FOSA	41
	M ₈ PFOA	PFOA	43
	M ₉ PFNA	PFNA	44
	MPFBA	PFBA	34
	MPFDoA	PFDoA	49
	d ₃ -NMeFOSAA	NMeFOSAA	18
	d ₅ -NEtFOSAA	NEtFOSAA	23

Field Sample	EIS	Associated Target Compound(s)	Area Count (%)
MB2331063	M ₂ 8:2 FTS	8:2 FTS	165
AOI01-01-SB-0.0-2.0	d3-NMeFOSAA	NMeFOSAA	46
AOI01-01-SB-0.0-2.0-MS	d3-NMeFOSAA	NMeFOSAA	44
	d5-NEtFOSAA	NEtFOSAA	47

The positive field sample results associated with low EIS area counts were qualified J+,i, while remaining field sample results were non-detect and were qualified UJ,i. Field sample results are not qualified based on QC sample EIS anomalies. The matrix spike pair (MS/MSD) performed on parent sample AOI01-01-SB-0.0-2.0 displayed relative percent differences (RPD) greater than the QC limit of 30% for the following analytes:

QC Batch	Analyte	MS Recovery (%)	MSD Recovery (%)	QC Limits (%)	RPD (%)
738621	6:2 FTS	95	68	64-140	35
	NEtFOSAA	90	65	61-139	34
	PFHpA	99	74	71-131	31

The associated field sample results were previously qualified based on the temperature exceedance anomalies; no further data qualifying action was required. The field duplicate pairs collected at the following sites displayed positive results in one sample and non-detect results in the associated duplicate sample:

Parent Sample ID	Analyte	Sample Conc. (µg/Kg)		Duplicate Conc. (µg/Kg)	
AOI01-01-SB-0.0-2.0	PFHxA	0.023	J	0.054	U
	PFPeA	0.028	J	0.054	U
AOI01-02-SB-0.0-1.0	PFOA	0.222	U	0.092	J
	PFTTrDA	0.111	U	0.040	J
	PFHxS	0.091	U	0.032	J

The positive field duplicate sample results were qualified J,fd, while non-detect results were qualified UJ,fd, unless qualified by a previously mentioned anomaly.

The technical holding time for the pH analysis is “immediate.” The associated field sample results were qualified J,h.

Correctable Anomalies:

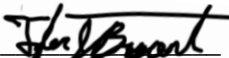
The following field samples were initially prepared via the laboratory’s standard preparation before being reprepared after the holding time expired via ISM:

Field Sample	Field Sample
AOI02-07-SB-0.0-2.0	22204064507
AOI02-03-SB-0.0-2.0	22204064508
AOI01-02-SB-0.0-1.0-D	22204064509
AOI01-02-SB-0.0-1.0	22204064510
AOI02-01-SB-0.0-2.0	22204064511
AOI02-01-SB-14.5-16.5	22204064512
AOI01-02-SB-25.5-27.5	22204064513
AOI02-03-SB-16.5-18.5	22204064514
AOI02-06-SB-0.0-0.5	22204064515
AOI02-05-SB-0.0-0.5	22204064516

The positive field sample results were qualified J,h while non-detects were qualified UJ,h, unless previously qualified due to an internal standard or field duplicate anomaly. The ISM sample results were recommended for data use per the project plan.

Comments: On the basis of this evaluation, the laboratory appears to have followed the specified method, with the exception of anomalies discussed previously. If a given fraction was not discussed, all quality control criteria reviewed were within acceptable limits. All data are usable, as qualified, for their intended purposed based on the quality control data reviewed.

Signed:


Tyler Bryant

Waiawa

Laboratory: Pace Gulf Coast

Job: 60552172

SDG#: 221081365 + 40507 + 645 + 903

Sample ID	Client ID	Sample Type	Sample Date	Matrix	PFAS - QSM B-15	TOC + pH
22108136501	WU-DECON-01	Decon Water	8/9/2021	Aqueous	X	
22108136502	WU-DECON-02	Decon Water	8/9/2021	Aqueous	X	
22204050701	AOI01-01-SB-0.0-2.0	Field Sample	3/21/2022	Soil	X	
22204050702	WU-ERB-01	Equipment Blank	3/21/2022	Aqueous	X	
22204050703	WU-ERB-03	Equipment Blank	3/28/2022	Aqueous	X	
22204050704	WU-ERB-04	Equipment Blank	3/28/2022	Aqueous	X	
22204050705	WU-ERB-05	Equipment Blank	3/28/2022	Aqueous	X	
22204050706	WU-ERB-06	Equipment Blank	3/28/2022	Aqueous	X	
22204050707	WU-DECON-03	Decon Water	3/29/2022	Aqueous	X	
22204050710	AOI02-02-SB-0.0-2.0	Field Sample	3/23/2022	Soil	X	
22204050711	AOI01-01-SB-37.0-39.0	Field Sample	3/22/2022	Soil	X	
22204050712	AOI01-01-SB-0.0-2.0-D	Field Duplicate	3/21/2022	Soil	X	
22204050713	AOI02-02-SB-14.0-16.0	Field Sample	3/23/2022	Soil	X	
22204050714	WU-FRB-01	Field Rinsate Blank	3/21/2022	Aqueous	X	
22204050715	AOI02-04-SB-0.0-2.0	Field Sample	3/23/2022	Soil	X	
22204050716	AOI02-04-SB-14.0-16.0	Field Sample	3/23/2022	Soil	X	
22204064501	AOI01-02-SB-0.0-1.0	Field Sample	3/28/2022	Soil		X
22204064502	AOI02-01-SB-14.5-16.5	Field Sample	3/24/2022	Soil		X
22204064505	AOI02-01-SB-14.5-16.5-D	Field Duplicate	3/24/2022	Soil		X
22204064506	WV-FRB-02	Field Rinsate Blank	4/1/2022	Aqueous	X	
22204064507	AOI02-07-SB-0.0-2.0	Field Sample	3/29/2022	Soil	X	
22204064508	AOI02-03-SB-0.0-2.0	Field Sample	3/24/2022	Soil	X	
22204064509	AOI01-02-SB-0.0-1.0-D	Field Duplicate	3/28/2022	Soil	X	
22204064510	AOI01-02-SB-0.0-1.0	Field Sample	3/28/2022	Soil	X	
22204064511	AOI02-01-SB-0.0-2.0	Field Sample	3/24/2022	Soil	X	
22204064512	AOI02-01-SB-14.5-16.5	Field Sample	3/24/2022	Soil	X	
22204064513	AOI01-02-SB-25.5-27.5	Field Sample	3/28/2022	Soil	X	
22204064514	AOI02-03-SB-16.5-18.5	Field Sample	3/24/2022	Soil	X	
22204064515	AOI02-06-SB-0.0-0.5	Field Sample	3/29/2022	Soil	X	
22204064516	AOI02-05-SB-0.0-0.5	Field Sample	3/29/2022	Soil	X	
22204090301	AOI01-01-GW	Field Sample	4/5/2022	Water	X	
22204090302	AOI01-02-GW	Field Sample	4/5/2022	Water	X	
22204090303	AOI02-01-GW	Field Sample	4/4/2022	Water	X	
22204090306	AOI02-01-GW-D	Field Duplicate	4/4/2022	Water	X	
22204090307	AOI02-02-GW	Field Sample	4/5/2022	Water	X	
22204090308	AOI02-03-GW	Field Sample	4/5/2022	Water	X	
22204090309	AOI02-04-GW	Field Sample	4/5/2022	Water	X	
22204090310	WU-ERB-07	Equipment Blank	4/5/2022	Aqueous	X	
22204090311	WU-ERB-08	Equipment Blank	4/6/2022	Aqueous	X	

Waiwa Field Duplicates

Client Sample ID: AOI01-01-SB- AOI01-01-SB-
0.0-2.0 0.0-2.0-D

Date Sampled: 3/21/22 3/21/22

	Units	LOQ	5x LOQ	Sample Conc		Duplicate Conc		% RPD	Delta	2x LOQ	Pass/ Fail
Perfluorinated Alkyl Substances											
6:2 FTS	µg/Kg	1.09	5.45	0.218	UJ	0.215	U	1.4%	0.003	2.18	Pass
8:2 FTS	µg/Kg	1.09	5.45	0.109	U	0.107	U	1.9%	0.002	2.18	Pass
NEtFOSAA	µg/Kg	1.09	5.45	0.109	UJ	0.107	U	1.9%	0.002	2.18	Pass
NMeFOSAA	µg/Kg	1.09	5.45	0.054	U	0.054	U	0.0%	0.0	2.18	Pass
PFBS	µg/Kg	1.09	5.45	0.054	U	0.054	U	0.0%	0.0	2.18	Pass
PFBA	µg/Kg	1.09	5.45	0.109	U	0.107	U	1.9%	0.002	2.18	Pass
PFDA	µg/Kg	1.09	5.45	0.200	J	0.185	J	7.8%	0.015	2.18	Pass
PFDOA	µg/Kg	1.09	5.45	0.058	J	0.079	J	30.7%	0.021	2.18	Pass
PFHpA	µg/Kg	1.09	5.45	0.054	UJ	0.054	U	0.0%	0.0	2.18	Pass
PFHxS	µg/Kg	1.09	5.45	0.050	J	0.042	J	17.4%	0.008	2.18	Pass
PFHxA	µg/Kg	1.09	5.45	0.023	J	0.054	U	80.5%	0.031	2.18	Fail
PFNA	µg/Kg	1.09	5.45	0.053	J	0.056	J	5.5%	0.003	2.18	Pass
PFOS	µg/Kg	1.09	5.45	1.73		1.65		4.7%	0.080	2.18	Pass
PFOA	µg/Kg	1.09	5.45	0.218	U	0.215	U	1.4%	0.003	2.18	Pass
PFPeA	µg/Kg	1.09	5.45	0.028	J	0.054	U	63.4%	0.026	2.18	Fail
PFTeDA	µg/Kg	1.09	5.45	0.023	J	0.032	J	32.7%	0.009	2.18	Pass
PFTTrDA	µg/Kg	1.09	5.45	0.109	U	0.107	U	1.9%	0.002	2.18	Pass
PFUnDA	µg/Kg	1.09	5.45	0.047	J	0.058	J	21.0%	0.011	2.18	Pass

Control limit [sample]>5xLOQ use 30%
[sample]<5xLOQ use Delta<2xLOQ

Waiwa Field Duplicates

Client Sample ID: AOI02-01-SB- AOI02-01-SB-
 14.5-16.5 14.5-16.5-D
 Date Sampled: 3/24/22 3/24/22

	Units	LOQ	5x LOQ	Sample Conc		Duplicate Conc		% RPD	Delta	2x LOQ	Pass/ Fail
General Chemistry											
TOC	mg/Kg	500	2500	176	J	346	J	65.1%	170	1000	Pass

Control limit [sample]>5xLOQ use 30%
 [sample]<5xLOQ use Delta<2xLOQ

Waiwa Field Duplicates

Client Sample ID: AOI01-02-SB- AOI01-02-SB-
 0.0-1.0 0.0-1.0-D
Date Sampled: 3/28/22 3/28/22

	Units	LOQ	5x LOQ	Sample Conc		Duplicate Conc	% RPD	Delta	2x LOQ	Pass/ Fail	
Perfluorinated Alkyl Substances											
6:2 FTS	µg/Kg	1.11	5.55	0.222	U	0.221	U	0.5%	0.001	2.22	Pass
8:2 FTS	µg/Kg	1.11	5.55	0.111	U	0.111	U	0.0%	0.0	2.22	Pass
NEtFOSAA	µg/Kg	1.11	5.55	0.111	U	0.111	U	0.0%	0.0	2.22	Pass
NMeFOSAA	µg/Kg	1.11	5.55	0.055	U	0.055	U	0.0%	0.0	2.22	Pass
PFBA	µg/Kg	1.11	5.55	0.181	J	0.189	J	4.3%	0.008	2.22	Pass
PFDA	µg/Kg	1.11	5.55	0.195	J	0.281	J	36.1%	0.086	2.22	Pass
PFDOA	µg/Kg	1.11	5.55	0.093	J	0.137	J	38.3%	0.044	2.22	Pass
PFHpA	µg/Kg	1.11	5.55	0.084	J	0.094	J	11.2%	0.010	2.22	Pass
PFHxS	µg/Kg	1.11	5.55	0.054	J	0.058	J	7.1%	0.004	2.22	Pass
PFHxA	µg/Kg	1.11	5.55	0.112	J	0.118	J	5.2%	0.006	2.22	Pass
PFNA	µg/Kg	1.11	5.55	0.135	J	0.134	J	0.7%	0.001	2.22	Pass
PFOS	µg/Kg	1.11	5.55	1.05	J	1.49		34.6%	0.440	2.22	Pass
PFOA	µg/Kg	1.11	5.55	0.222	U	0.092	J	82.8%	0.130	2.22	Fail
PFPeA	µg/Kg	1.11	5.55	0.321	J	0.316	J	1.6%	0.005	2.22	Pass
PFTeDA	µg/Kg	1.11	5.55	0.037	J	0.052	J	33.7%	0.015	2.22	Pass
PFTrDA	µg/Kg	1.11	5.55	0.111	U	0.040	J	94.0%	0.071	2.22	Fail
PFUnDA	µg/Kg	1.11	5.55	0.080	J	0.120	J	40.0%	0.040	2.22	Pass

Control limit [sample]>5xLOQ use 30%
 [sample]<5xLOQ use Delta<2xLOQ

Waiwa Field Duplicates

Client Sample ID: AOI01-02-SB- AOI01-02-SB-
 0.0-1.0 0.0-1.0-D
Date Sampled: 3/28/22 3/28/22

	Units	LOQ	5x LOQ	Sample Conc		Duplicate Conc		% RPD	Delta	2x LOQ	Pass/ Fail
Perfluorinated Alkyl Substances											
6:2 FTS	µg/Kg	0.911	4.56	0.182	U	0.186	U	2.2%	0.004	1.82	Pass
8:2 FTS	µg/Kg	0.911	4.56	0.091	U	0.094	U	3.2%	0.003	1.82	Pass
NEtFOSAA	µg/Kg	0.911	4.56	0.091	U	0.094	U	3.2%	0.003	1.82	Pass
NMeFOSAA	µg/Kg	0.911	4.56	0.046	U	0.047	U	2.2%	0.001	1.82	Pass
PFBA	µg/Kg	0.911	4.56	0.104	J	0.147	J	34.3%	0.043	1.82	Pass
PFDA	µg/Kg	0.911	4.56	0.090	J	0.123	J	31.0%	0.033	1.82	Pass
PFDoA	µg/Kg	0.911	4.56	0.036	J	0.052	J	36.4%	0.016	1.82	Pass
PFHpA	µg/Kg	0.911	4.56	0.051	J	0.069	J	30.0%	0.018	1.82	Pass
PFHxS	µg/Kg	0.911	4.56	0.091	U	0.032	J	95.9%	0.059	1.82	Fail
PFHxA	µg/Kg	0.911	4.56	0.063	J	0.086	J	30.9%	0.023	1.82	Pass
PFNA	µg/Kg	0.911	4.56	0.081	J	0.100	J	21.0%	0.019	1.82	Pass
PFOS	µg/Kg	0.911	4.56	0.547	J	0.675	J	20.9%	0.128	1.82	Pass
PFOA	µg/Kg	0.911	4.56	0.182	U	0.188	U	3.2%	0.006	1.82	Pass
PFPeA	µg/Kg	0.911	4.56	0.172	J	0.219	J	24.0%	0.047	1.82	Pass
PFTeDA	µg/Kg	0.911	4.56	0.018	J	0.027	J	40.0%	0.009	1.82	Pass
PFTTrDA	µg/Kg	0.911	4.56	0.091	U	0.094	U	3.2%	0.003	1.82	Pass
PFUnDA	µg/Kg	0.911	4.56	0.033	J	0.041	J	21.6%	0.008	1.82	Pass

Control limit [sample]>5xLOQ use 30%
 [sample]<5xLOQ use Delta<2xLOQ

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>221081365</u>	Client Sample ID:	<u>WU-DECON-01</u>
Collect Date:	<u>08/09/21</u> Time: <u>0855</u>	GCAL Sample ID:	<u>22108136501</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ3</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2210816B_9.d</u>
Injection Vol.:	<u>1.0</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>ADA</u>
Prep Date:	<u>08/16/21</u>	Analysis Date:	<u>08/17/21</u> Time: <u>0101</u>
Prep Batch:	<u>718820</u>	Analytical Batch:	<u>718930</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.00	U	1.50	3.00	4.00
39108-34-4	8:2 Fluorotelomersulfonic acid	3.00	U	1.06	3.00	4.00
2991-50-6	NEtFOSAA	4.00	U	1.58	4.00	8.00
2355-31-9	NMeFOSAA	4.00	U	0.900	4.00	8.00
375-73-5	Perfluorobutanesulfonic acid	2.00	U	0.620	2.00	4.00
375-22-4	Perfluorobutanoic acid	3.50	U	1.52	3.50	4.00
335-76-2	Perfluorodecanoic acid	3.00	U	1.44	3.00	4.00
307-55-1	Perfluorododecanoic acid	3.00	U	1.30	3.00	4.00
375-85-9	Perfluoroheptanoic acid	3.00	U	1.16	3.00	4.00
355-46-4	Perfluorohexanesulfonic acid	3.00	U	1.24	3.00	4.00
307-24-4	Perfluorohexanoic acid	2.00	U	0.940	2.00	4.00
375-95-1	Perfluorononanoic acid	2.00	U	0.980	2.00	4.00
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	0.760	2.00	4.00
335-67-1	Perfluorooctanoic acid	2.00	U	0.840	2.00	4.00
2706-90-3	Perfluoropentanoic acid	2.00	U	0.880	2.00	4.00
376-06-7	Perfluorotetradecanoic acid	3.00	U	1.14	3.00	4.00
72629-94-8	Perfluorotridecanoic acid	3.00	U	1.23	3.00	4.00
2058-94-8	Perfluoroundecanoic acid	3.00	U	1.24	3.00	4.00

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>221081365</u>	Client Sample ID:	<u>WU-DECON-02</u>
Collect Date:	<u>08/09/21</u> Time: <u>0915</u>	GCAL Sample ID:	<u>22108136502</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ3</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2210816B_10.d</u>
Injection Vol.:	<u>1.0</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>ADA</u>
Prep Date:	<u>08/16/21</u>	Analysis Date:	<u>08/17/21</u> Time: <u>0116</u>
Prep Batch:	<u>718820</u>	Analytical Batch:	<u>718930</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.00	U	1.50	3.00	4.00
39108-34-4	8:2 Fluorotelomersulfonic acid	3.00	U	1.06	3.00	4.00
2991-50-6	NEtFOSAA	4.00	U	1.58	4.00	8.00
2355-31-9	NMeFOSAA	4.00	U	0.900	4.00	8.00
375-73-5	Perfluorobutanesulfonic acid	2.00	U	0.620	2.00	4.00
375-22-4	Perfluorobutanoic acid	3.50	U	1.52	3.50	4.00
335-76-2	Perfluorodecanoic acid	3.00	U	1.44	3.00	4.00
307-55-1	Perfluorododecanoic acid	3.00	U	1.30	3.00	4.00
375-85-9	Perfluoroheptanoic acid	3.00	U	1.16	3.00	4.00
355-46-4	Perfluorohexanesulfonic acid	3.00	U	1.24	3.00	4.00
307-24-4	Perfluorohexanoic acid	2.00	U	0.940	2.00	4.00
375-95-1	Perfluorononanoic acid	2.00	U	0.980	2.00	4.00
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	0.760	2.00	4.00
335-67-1	Perfluorooctanoic acid	2.00	U	0.840	2.00	4.00
2706-90-3	Perfluoropentanoic acid	2.00	U	0.880	2.00	4.00
376-06-7	Perfluorotetradecanoic acid	3.00	U	1.14	3.00	4.00
72629-94-8	Perfluorotridecanoic acid	3.00	U	1.23	3.00	4.00
2058-94-8	Perfluoroundecanoic acid	3.00	U	1.24	3.00	4.00

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040903</u>	Client Sample ID:	<u>AOI01-01-GW</u>
Collect Date:	<u>04/05/22</u> Time: <u>1230</u>	GCAL Sample ID:	<u>22204090301</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2220423A_18.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/22/22</u>	Analysis Date:	<u>04/23/22</u> Time: <u>2030</u>
Prep Batch:	<u>739042</u>	Analytical Batch:	<u>739271</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	5.38		1.50	3.00	4.00
39108-34-4	8:2 Fluorotelomersulfonic acid	3.00	U	1.06	3.00	4.00
2991-50-6	NEtFOSAA	4.00	U	1.58	4.00	8.00
2355-31-9	NMeFOSAA	4.00	U	0.900	4.00	8.00
375-73-5	Perfluorobutanesulfonic acid	2.00	U	0.620	2.00	4.00
375-22-4	Perfluorobutanoic acid	3.50	U	1.52	3.50	4.00
335-76-2	Perfluorodecanoic acid	3.00	U	1.44	3.00	4.00
307-55-1	Perfluorododecanoic acid	3.00	U	1.30	3.00	4.00
375-85-9	Perfluoroheptanoic acid	3.00	U	1.16	3.00	4.00
355-46-4	Perfluorohexanesulfonic acid	3.00	U	1.24	3.00	4.00
307-24-4	Perfluorohexanoic acid	1.49	J	0.940	2.00	4.00
375-95-1	Perfluorononanoic acid	2.00	U	0.980	2.00	4.00
1763-23-1	Perfluorooctanesulfonic acid	2.64	J	0.760	2.00	4.00
335-67-1	Perfluorooctanoic acid	1.26	J	0.840	2.00	4.00
2706-90-3	Perfluoropentanoic acid	2.00	U	0.880	2.00	4.00
376-06-7	Perfluorotetradecanoic acid	3.00	U	1.14	3.00	4.00
72629-94-8	Perfluorotridecanoic acid	3.00	U	1.23	3.00	4.00
2058-94-8	Perfluoroundecanoic acid	3.00	U	1.24	3.00	4.00

FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040903</u>	Client Sample ID:	<u>AOI01-02-GW</u>
Collect Date:	<u>04/05/22</u> Time: <u>1335</u>	GCAL Sample ID:	<u>22204090302</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>123</u> mL	Lab File ID:	<u>2220423A_19.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/22/22</u>	Analysis Date:	<u>04/23/22</u> Time: <u>2045</u>
Prep Batch:	<u>739042</u>	Analytical Batch:	<u>739271</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	6.87		1.52	3.05	4.07
39108-34-4	8:2 Fluorotelomersulfonic acid	3.05	U	1.08	3.05	4.07
2991-50-6	NEtFOSAA	4.07	U	1.61	4.07	8.13
2355-31-9	NMeFOSAA	4.07	U	0.915	4.07	8.13
375-73-5	Perfluorobutanesulfonic acid	13.7		0.630	2.03	4.07
375-22-4	Perfluorobutanoic acid	113		1.54	3.56	4.07
335-76-2	Perfluorodecanoic acid	3.05	U	1.46	3.05	4.07
307-55-1	Perfluorododecanoic acid	3.05	U	1.32	3.05	4.07
375-85-9	Perfluoroheptanoic acid	80.9		1.18	3.05	4.07
355-46-4	Perfluorohexanesulfonic acid	89.3		1.26	3.05	4.07
307-24-4	Perfluorohexanoic acid	174		0.955	2.03	4.07
375-95-1	Perfluorononanoic acid	1.97	J	0.996	2.03	4.07
1763-23-1	Perfluorooctanesulfonic acid	11.1		0.772	2.03	4.07
335-67-1	Perfluorooctanoic acid	18.0		0.854	2.03	4.07
2706-90-3	Perfluoropentanoic acid	264		0.894	2.03	4.07
376-06-7	Perfluorotetradecanoic acid	3.05	U	1.16	3.05	4.07
72629-94-8	Perfluorotridecanoic acid	3.05	U	1.25	3.05	4.07
2058-94-8	Perfluoroundecanoic acid	3.05	U	1.26	3.05	4.07

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040903</u>	Client Sample ID:	<u>AOI02-01-GW</u>
Collect Date:	<u>04/04/22</u> Time: <u>1545</u>	GCAL Sample ID:	<u>22204090303</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2220423A_20.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/22/22</u>	Analysis Date:	<u>04/23/22</u> Time: <u>2100</u>
Prep Batch:	<u>739042</u>	Analytical Batch:	<u>739271</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.00	U	1.50	3.00	4.00
39108-34-4	8:2 Fluorotelomersulfonic acid	3.00	U	1.06	3.00	4.00
2991-50-6	NEtFOSAA	4.00	U	1.58	4.00	8.00
2355-31-9	NMeFOSAA	4.00	U	0.900	4.00	8.00
375-73-5	Perfluorobutanesulfonic acid	8.00		0.620	2.00	4.00
375-22-4	Perfluorobutanoic acid	22.5		1.52	3.50	4.00
335-76-2	Perfluorodecanoic acid	3.00	U	1.44	3.00	4.00
307-55-1	Perfluorododecanoic acid	3.00	U	1.30	3.00	4.00
375-85-9	Perfluoroheptanoic acid	13.3		1.16	3.00	4.00
355-46-4	Perfluorohexanesulfonic acid	39.7		1.24	3.00	4.00
307-24-4	Perfluorohexanoic acid	27.2		0.940	2.00	4.00
375-95-1	Perfluorononanoic acid	2.71	J	0.980	2.00	4.00
1763-23-1	Perfluorooctanesulfonic acid	31.4		0.760	2.00	4.00
335-67-1	Perfluorooctanoic acid	13.3		0.840	2.00	4.00
2706-90-3	Perfluoropentanoic acid	35.5		0.880	2.00	4.00
376-06-7	Perfluorotetradecanoic acid	3.00	U	1.14	3.00	4.00
72629-94-8	Perfluorotridecanoic acid	3.00	U	1.23	3.00	4.00
2058-94-8	Perfluoroundecanoic acid	3.00	U	1.24	3.00	4.00

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040903</u>	Client Sample ID:	<u>AOI02-01-GW-D</u>
Collect Date:	<u>04/04/22</u> Time: <u>1545</u>	GCAL Sample ID:	<u>22204090306</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ3</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2220425B_16.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/25/22</u>	Analysis Date:	<u>04/25/22</u> Time: <u>2354</u>
Prep Batch:	<u>739295</u>	Analytical Batch:	<u>739406</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.00	U	1.50	3.00	4.00
39108-34-4	8:2 Fluorotelomersulfonic acid	3.00	U	1.06	3.00	4.00
2991-50-6	NEtFOSAA	4.00	U	1.58	4.00	8.00
2355-31-9	NMeFOSAA	4.00	U	0.900	4.00	8.00
375-73-5	Perfluorobutanesulfonic acid	8.66		0.620	2.00	4.00
375-22-4	Perfluorobutanoic acid	22.8		1.52	3.50	4.00
335-76-2	Perfluorodecanoic acid	3.00	U	1.44	3.00	4.00
307-55-1	Perfluorododecanoic acid	3.00	U	1.30	3.00	4.00
375-85-9	Perfluoroheptanoic acid	13.6		1.16	3.00	4.00
355-46-4	Perfluorohexanesulfonic acid	40.6		1.24	3.00	4.00
307-24-4	Perfluorohexanoic acid	27.2		0.940	2.00	4.00
375-95-1	Perfluorononanoic acid	2.68	J	0.980	2.00	4.00
1763-23-1	Perfluorooctanesulfonic acid	31.2		0.760	2.00	4.00
335-67-1	Perfluorooctanoic acid	13.7		0.840	2.00	4.00
2706-90-3	Perfluoropentanoic acid	36.5		0.880	2.00	4.00
376-06-7	Perfluorotetradecanoic acid	3.00	U	1.14	3.00	4.00
72629-94-8	Perfluorotridecanoic acid	3.00	U	1.23	3.00	4.00
2058-94-8	Perfluoroundecanoic acid	3.00	U	1.24	3.00	4.00

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040903</u>	Client Sample ID:	<u>AOI02-02-GW</u>
Collect Date:	<u>04/05/22</u> Time: <u>0830</u>	GCAL Sample ID:	<u>22204090307</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>127</u> mL	Lab File ID:	<u>2220423A_21.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/22/22</u>	Analysis Date:	<u>04/23/22</u> Time: <u>2115</u>
Prep Batch:	<u>739042</u>	Analytical Batch:	<u>739271</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	24.0		1.48	2.95	3.94
39108-34-4	8:2 Fluorotelomersulfonic acid	2.95	U	1.04	2.95	3.94
2991-50-6	NEtFOSAA	3.94	U	1.56	3.94	7.87
2355-31-9	NMeFOSAA	3.94	U	0.886	3.94	7.87
375-73-5	Perfluorobutanesulfonic acid	56.2		0.610	1.97	3.94
375-22-4	Perfluorobutanoic acid	101		1.50	3.44	3.94
335-76-2	Perfluorodecanoic acid	1.65	J	1.42	2.95	3.94
307-55-1	Perfluorododecanoic acid	2.95	U	1.28	2.95	3.94
375-85-9	Perfluoroheptanoic acid	102		1.14	2.95	3.94
355-46-4	Perfluorohexanesulfonic acid	1110		1.22	2.95	3.94
307-24-4	Perfluorohexanoic acid	236		0.925	1.97	3.94
375-95-1	Perfluorononanoic acid	5.44		0.965	1.97	3.94
1763-23-1	Perfluorooctanesulfonic acid	271		0.748	1.97	3.94
335-67-1	Perfluorooctanoic acid	57.0		0.827	1.97	3.94
2706-90-3	Perfluoropentanoic acid	297		0.866	1.97	3.94
376-06-7	Perfluorotetradecanoic acid	2.95	U	1.12	2.95	3.94
72629-94-8	Perfluorotridecanoic acid	2.95	U	1.21	2.95	3.94
2058-94-8	Perfluoroundecanoic acid	2.95	U	1.22	2.95	3.94

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040903</u>	Client Sample ID:	<u>AOI02-03-GW</u>
Collect Date:	<u>04/05/22</u> Time: <u>1455</u>	GCAL Sample ID:	<u>22204090308</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2220423A_22.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/22/22</u>	Analysis Date:	<u>04/23/22</u> Time: <u>2129</u>
Prep Batch:	<u>739042</u>	Analytical Batch:	<u>739271</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.00	U	1.50	3.00	4.00
39108-34-4	8:2 Fluorotelomersulfonic acid	3.00	U	1.06	3.00	4.00
2991-50-6	NEtFOSAA	4.00	U	1.58	4.00	8.00
2355-31-9	NMeFOSAA	4.00	U	0.900	4.00	8.00
375-73-5	Perfluorobutanesulfonic acid	125		0.620	2.00	4.00
375-22-4	Perfluorobutanoic acid	37.6		1.52	3.50	4.00
335-76-2	Perfluorodecanoic acid	3.00	U	1.44	3.00	4.00
307-55-1	Perfluorododecanoic acid	3.00	U	1.30	3.00	4.00
375-85-9	Perfluoroheptanoic acid	27.1		1.16	3.00	4.00
355-46-4	Perfluorohexanesulfonic acid	409		1.24	3.00	4.00
307-24-4	Perfluorohexanoic acid	112		0.940	2.00	4.00
375-95-1	Perfluorononanoic acid	1.32	J	0.980	2.00	4.00
1763-23-1	Perfluorooctanesulfonic acid	212		0.760	2.00	4.00
335-67-1	Perfluorooctanoic acid	27.9		0.840	2.00	4.00
2706-90-3	Perfluoropentanoic acid	100.0		0.880	2.00	4.00
376-06-7	Perfluorotetradecanoic acid	3.00	U	1.14	3.00	4.00
72629-94-8	Perfluorotridecanoic acid	3.00	U	1.23	3.00	4.00
2058-94-8	Perfluoroundecanoic acid	3.00	U	1.24	3.00	4.00

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040903</u>	Client Sample ID:	<u>AOI02-04-GW</u>
Collect Date:	<u>04/05/22</u> Time: <u>1545</u>	GCAL Sample ID:	<u>22204090309</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>250</u> mL	Lab File ID:	<u>2220423A_23.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/22/22</u>	Analysis Date:	<u>04/23/22</u> Time: <u>2144</u>
Prep Batch:	<u>739042</u>	Analytical Batch:	<u>739271</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	4.51		0.750	1.50	2.00
39108-34-4	8:2 Fluorotelomersulfonic acid	1.50	U	0.530	1.50	2.00
2991-50-6	NEtFOSAA	2.00	U	0.790	2.00	4.00
2355-31-9	NMeFOSAA	2.00	U	0.450	2.00	4.00
375-73-5	Perfluorobutanesulfonic acid	12.5		0.310	1.00	2.00
375-22-4	Perfluorobutanoic acid	13.8		0.760	1.75	2.00
335-76-2	Perfluorodecanoic acid	1.50	U	0.720	1.50	2.00
307-55-1	Perfluorododecanoic acid	1.50	U	0.650	1.50	2.00
375-85-9	Perfluoroheptanoic acid	11.5		0.580	1.50	2.00
355-46-4	Perfluorohexanesulfonic acid	459		0.620	1.50	2.00
307-24-4	Perfluorohexanoic acid	49.7		0.470	1.00	2.00
375-95-1	Perfluorononanoic acid	1.01	J	0.490	1.00	2.00
1763-23-1	Perfluorooctanesulfonic acid	71.2		0.380	1.00	2.00
335-67-1	Perfluorooctanoic acid	25.3		0.420	1.00	2.00
2706-90-3	Perfluoropentanoic acid	22.0		0.440	1.00	2.00
376-06-7	Perfluorotetradecanoic acid	1.50	U	0.570	1.50	2.00
72629-94-8	Perfluorotridecanoic acid	1.50	U	0.615	1.50	2.00
2058-94-8	Perfluoroundecanoic acid	1.50	U	0.620	1.50	2.00

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040903</u>	Client Sample ID:	<u>WU-ERB-07</u>
Collect Date:	<u>04/05/22</u> Time: <u>1700</u>	GCAL Sample ID:	<u>22204090310</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ3</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2220425B_17.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/25/22</u>	Analysis Date:	<u>04/26/22</u> Time: <u>0009</u>
Prep Batch:	<u>739295</u>	Analytical Batch:	<u>739406</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.00	U	1.50	3.00	4.00
39108-34-4	8:2 Fluorotelomersulfonic acid	3.00	U	1.06	3.00	4.00
2991-50-6	NEtFOSAA	4.00	U	1.58	4.00	8.00
2355-31-9	NMeFOSAA	4.00	U	0.900	4.00	8.00
375-73-5	Perfluorobutanesulfonic acid	2.00	U	0.620	2.00	4.00
375-22-4	Perfluorobutanoic acid	3.50	U	1.52	3.50	4.00
335-76-2	Perfluorodecanoic acid	3.00	U	1.44	3.00	4.00
307-55-1	Perfluorododecanoic acid	3.00	U	1.30	3.00	4.00
375-85-9	Perfluoroheptanoic acid	3.00	U	1.16	3.00	4.00
355-46-4	Perfluorohexanesulfonic acid	3.00	U	1.24	3.00	4.00
307-24-4	Perfluorohexanoic acid	2.00	U	0.940	2.00	4.00
375-95-1	Perfluorononanoic acid	2.00	U	0.980	2.00	4.00
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	0.760	2.00	4.00
335-67-1	Perfluorooctanoic acid	2.00	U	0.840	2.00	4.00
2706-90-3	Perfluoropentanoic acid	2.00	U	0.880	2.00	4.00
376-06-7	Perfluorotetradecanoic acid	3.00	U	1.14	3.00	4.00
72629-94-8	Perfluorotridecanoic acid	3.00	U	1.23	3.00	4.00
2058-94-8	Perfluoroundecanoic acid	3.00	U	1.24	3.00	4.00

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040903</u>	Client Sample ID:	<u>WU-ERB-08</u>
Collect Date:	<u>04/06/22</u> Time: <u>1000</u>	GCAL Sample ID:	<u>22204090311</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2220423A_25.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/22/22</u>	Analysis Date:	<u>04/23/22</u> Time: <u>2214</u>
Prep Batch:	<u>739042</u>	Analytical Batch:	<u>739271</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.00	U	1.50	3.00	4.00
39108-34-4	8:2 Fluorotelomersulfonic acid	3.00	U	1.06	3.00	4.00
2991-50-6	NEtFOSAA	4.00	U	1.58	4.00	8.00
2355-31-9	NMeFOSAA	4.00	U	0.900	4.00	8.00
375-73-5	Perfluorobutanesulfonic acid	2.00	U	0.620	2.00	4.00
375-22-4	Perfluorobutanoic acid	3.50	U	1.52	3.50	4.00
335-76-2	Perfluorodecanoic acid	3.00	U	1.44	3.00	4.00
307-55-1	Perfluorododecanoic acid	3.00	U	1.30	3.00	4.00
375-85-9	Perfluoroheptanoic acid	3.00	U	1.16	3.00	4.00
355-46-4	Perfluorohexanesulfonic acid	3.00	U	1.24	3.00	4.00
307-24-4	Perfluorohexanoic acid	2.00	U	0.940	2.00	4.00
375-95-1	Perfluorononanoic acid	2.00	U	0.980	2.00	4.00
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	0.760	2.00	4.00
335-67-1	Perfluorooctanoic acid	2.00	U	0.840	2.00	4.00
2706-90-3	Perfluoropentanoic acid	2.00	U	0.880	2.00	4.00
376-06-7	Perfluorotetradecanoic acid	3.00	U	1.14	3.00	4.00
72629-94-8	Perfluorotridecanoic acid	3.00	U	1.23	3.00	4.00
2058-94-8	Perfluoroundecanoic acid	3.00	U	1.24	3.00	4.00

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040507</u>	Client Sample ID:	<u>AOI01-01-SB-0.0-2.0</u>
Collect Date:	<u>03/21/22</u> Time: <u>1045</u>	GCAL Sample ID:	<u>22204050701</u>
Matrix:	<u>Solid</u> % Moisture: <u>15.8</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5.45</u> g	Lab File ID:	<u>2220415B_3.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/12/22</u>	Analysis Date:	<u>04/15/22</u> Time: <u>2138</u>
Prep Batch:	<u>738250</u>	Analytical Batch:	<u>738621</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.218	UJ	0.065	0.218	1.09
39108-34-4	8:2 Fluorotelomersulfonic acid	0.109	U	0.033	0.109	1.09
2991-50-6	NEtFOSAA	0.109	UJ	0.033	0.109	1.09
2355-31-9	NMeFOSAA	0.054	U	0.022	0.054	1.09
375-73-5	Perfluorobutanesulfonic acid	0.054	U	0.022	0.054	1.09
375-22-4	Perfluorobutanoic acid	0.109	U	0.044	0.109	1.09
335-76-2	Perfluorodecanoic acid	0.200	J	0.044	0.109	1.09
307-55-1	Perfluorododecanoic acid	0.058	J	0.022	0.054	1.09
375-85-9	Perfluoroheptanoic acid	0.054	UJ	0.022	0.054	1.09
355-46-4	Perfluorohexanesulfonic acid	0.050	J	0.033	0.109	1.09
307-24-4	Perfluorohexanoic acid	0.023	J	0.022	0.054	1.09
375-95-1	Perfluorononanoic acid	0.053	J	0.022	0.054	1.09
1763-23-1	Perfluorooctanesulfonic acid	1.73		0.054	0.218	1.09
335-67-1	Perfluorooctanoic acid	0.218	U	0.087	0.218	1.09
2706-90-3	Perfluoropentanoic acid	0.028	J	0.022	0.054	1.09
376-06-7	Perfluorotetradecanoic acid	0.023	J	0.022	0.054	1.09
72629-94-8	Perfluorotridecanoic acid	0.109	U	0.033	0.109	1.09
2058-94-8	Perfluoroundecanoic acid	0.047	J	0.022	0.054	1.09

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No: <u>222040507</u>	Client Sample ID: <u>WU-ERB-01</u>
Collect Date: <u>03/21/22</u> Time: <u>1200</u>	GCAL Sample ID: <u>22204050702</u>
Matrix: <u>Water</u> % Moisture: <u>NA</u>	Instrument ID: <u>QQQ4</u>
Sample Amt: <u>120</u> mL	Lab File ID: <u>2220421A_15.d</u>
Injection Vol.: <u>2</u> (µL)	GC Column: <u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>SXA</u>
Prep Date: <u>04/18/22</u>	Analysis Date: <u>04/21/22</u> Time: <u>1205</u>
Prep Batch: <u>738671</u>	Analytical Batch: <u>739037</u>
Prep Method: <u>PFAS ID QSM B15 Prep</u>	Analytical Method: <u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.13	U	1.56	3.13	4.17
39108-34-4	8:2 Fluorotelomersulfonic acid	3.13	U	1.10	3.13	4.17
2991-50-6	NEtFOSAA	4.17	U	1.65	4.17	8.33
2355-31-9	NMeFOSAA	4.17	U	0.938	4.17	8.33
375-73-5	Perfluorobutanesulfonic acid	2.08	U	0.646	2.08	4.17
375-22-4	Perfluorobutanoic acid	3.65	U	1.58	3.65	4.17
335-76-2	Perfluorodecanoic acid	3.13	U	1.50	3.13	4.17
307-55-1	Perfluorododecanoic acid	3.13	U	1.35	3.13	4.17
375-85-9	Perfluoroheptanoic acid	3.13	U	1.21	3.13	4.17
355-46-4	Perfluorohexanesulfonic acid	3.13	U	1.29	3.13	4.17
307-24-4	Perfluorohexanoic acid	2.08	U	0.979	2.08	4.17
375-95-1	Perfluorononanoic acid	2.08	U	1.02	2.08	4.17
1763-23-1	Perfluorooctanesulfonic acid	2.08	U	0.792	2.08	4.17
335-67-1	Perfluorooctanoic acid	2.08	U	0.875	2.08	4.17
2706-90-3	Perfluoropentanoic acid	2.08	U	0.917	2.08	4.17
376-06-7	Perfluorotetradecanoic acid	3.13	U	1.19	3.13	4.17
72629-94-8	Perfluorotridecanoic acid	3.13	U	1.28	3.13	4.17
2058-94-8	Perfluoroundecanoic acid	3.13	U	1.29	3.13	4.17

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040507</u>	Client Sample ID:	<u>WU-ERB-03</u>
Collect Date:	<u>03/28/22</u> Time: <u>1120</u>	GCAL Sample ID:	<u>22204050703</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>126</u> mL	Lab File ID:	<u>2220421A_16.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/18/22</u>	Analysis Date:	<u>04/21/22</u> Time: <u>1220</u>
Prep Batch:	<u>738671</u>	Analytical Batch:	<u>739037</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	2.98	U	1.49	2.98	3.97
39108-34-4	8:2 Fluorotelomersulfonic acid	2.98	U	1.05	2.98	3.97
2991-50-6	NEtFOSAA	3.97	U	1.57	3.97	7.94
2355-31-9	NMeFOSAA	3.97	U	0.893	3.97	7.94
375-73-5	Perfluorobutanesulfonic acid	1.98	U	0.615	1.98	3.97
375-22-4	Perfluorobutanoic acid	3.47	U	1.51	3.47	3.97
335-76-2	Perfluorodecanoic acid	2.98	U	1.43	2.98	3.97
307-55-1	Perfluorododecanoic acid	2.98	U	1.29	2.98	3.97
375-85-9	Perfluoroheptanoic acid	2.98	U	1.15	2.98	3.97
355-46-4	Perfluorohexanesulfonic acid	2.98	U	1.23	2.98	3.97
307-24-4	Perfluorohexanoic acid	1.98	U	0.933	1.98	3.97
375-95-1	Perfluorononanoic acid	1.98	U	0.972	1.98	3.97
1763-23-1	Perfluorooctanesulfonic acid	1.98	U	0.754	1.98	3.97
335-67-1	Perfluorooctanoic acid	1.98	U	0.833	1.98	3.97
2706-90-3	Perfluoropentanoic acid	1.98	U	0.873	1.98	3.97
376-06-7	Perfluorotetradecanoic acid	2.98	U	1.13	2.98	3.97
72629-94-8	Perfluorotridecanoic acid	2.98	U	1.22	2.98	3.97
2058-94-8	Perfluoroundecanoic acid	2.98	U	1.23	2.98	3.97

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040507</u>	Client Sample ID:	<u>WU-ERB-04</u>
Collect Date:	<u>03/28/22</u> Time: <u>1500</u>	GCAL Sample ID:	<u>22204050704</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>123</u> mL	Lab File ID:	<u>2220424B_8.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/23/22</u>	Analysis Date:	<u>04/24/22</u> Time: <u>2306</u>
Prep Batch:	<u>739244</u>	Analytical Batch:	<u>739285</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.05	U	1.52	3.05	4.07
39108-34-4	8:2 Fluorotelomersulfonic acid	3.05	U	1.08	3.05	4.07
2991-50-6	NEtFOSAA	4.07	U	1.61	4.07	8.13
2355-31-9	NMeFOSAA	4.07	U	0.915	4.07	8.13
375-73-5	Perfluorobutanesulfonic acid	2.03	U	0.630	2.03	4.07
375-22-4	Perfluorobutanoic acid	3.56	U	1.54	3.56	4.07
335-76-2	Perfluorodecanoic acid	3.05	U	1.46	3.05	4.07
307-55-1	Perfluorododecanoic acid	3.05	U	1.32	3.05	4.07
375-85-9	Perfluoroheptanoic acid	3.05	U	1.18	3.05	4.07
355-46-4	Perfluorohexanesulfonic acid	3.05	U	1.26	3.05	4.07
307-24-4	Perfluorohexanoic acid	2.03	U	0.955	2.03	4.07
375-95-1	Perfluorononanoic acid	2.03	U	0.996	2.03	4.07
1763-23-1	Perfluorooctanesulfonic acid	2.03	U	0.772	2.03	4.07
335-67-1	Perfluorooctanoic acid	2.03	U	0.854	2.03	4.07
2706-90-3	Perfluoropentanoic acid	2.03	U	0.894	2.03	4.07
376-06-7	Perfluorotetradecanoic acid	3.05	U	1.16	3.05	4.07
72629-94-8	Perfluorotridecanoic acid	3.05	U	1.25	3.05	4.07
2058-94-8	Perfluoroundecanoic acid	3.05	U	1.26	3.05	4.07

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040507</u>	Client Sample ID:	<u>WU-ERB-05</u>
Collect Date:	<u>03/28/22</u> Time: <u>1505</u>	GCAL Sample ID:	<u>22204050705</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>126</u> mL	Lab File ID:	<u>2220421A_18.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/18/22</u>	Analysis Date:	<u>04/21/22</u> Time: <u>1250</u>
Prep Batch:	<u>738671</u>	Analytical Batch:	<u>739037</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	2.98	U	1.49	2.98	3.97
39108-34-4	8:2 Fluorotelomersulfonic acid	2.98	U	1.05	2.98	3.97
2991-50-6	NEtFOSAA	3.97	U	1.57	3.97	7.94
2355-31-9	NMeFOSAA	3.97	U	0.893	3.97	7.94
375-73-5	Perfluorobutanesulfonic acid	1.98	U	0.615	1.98	3.97
375-22-4	Perfluorobutanoic acid	3.47	U	1.51	3.47	3.97
335-76-2	Perfluorodecanoic acid	2.98	U	1.43	2.98	3.97
307-55-1	Perfluorododecanoic acid	2.98	U	1.29	2.98	3.97
375-85-9	Perfluoroheptanoic acid	2.98	U	1.15	2.98	3.97
355-46-4	Perfluorohexanesulfonic acid	2.98	U	1.23	2.98	3.97
307-24-4	Perfluorohexanoic acid	1.98	U	0.933	1.98	3.97
375-95-1	Perfluorononanoic acid	1.98	U	0.972	1.98	3.97
1763-23-1	Perfluorooctanesulfonic acid	1.98	U	0.754	1.98	3.97
335-67-1	Perfluorooctanoic acid	1.98	U	0.833	1.98	3.97
2706-90-3	Perfluoropentanoic acid	1.98	U	0.873	1.98	3.97
376-06-7	Perfluorotetradecanoic acid	2.98	U	1.13	2.98	3.97
72629-94-8	Perfluorotridecanoic acid	2.98	U	1.22	2.98	3.97
2058-94-8	Perfluoroundecanoic acid	2.98	U	1.23	2.98	3.97

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040507</u>	Client Sample ID:	<u>WU-ERB-06</u>
Collect Date:	<u>03/28/22</u> Time: <u>1530</u>	GCAL Sample ID:	<u>22204050706</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2220421A_20.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/18/22</u>	Analysis Date:	<u>04/21/22</u> Time: <u>1320</u>
Prep Batch:	<u>738671</u>	Analytical Batch:	<u>739037</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.00	U	1.50	3.00	4.00
39108-34-4	8:2 Fluorotelomersulfonic acid	3.00	U	1.06	3.00	4.00
2991-50-6	NEtFOSAA	4.00	U	1.58	4.00	8.00
2355-31-9	NMeFOSAA	4.00	U	0.900	4.00	8.00
375-73-5	Perfluorobutanesulfonic acid	2.00	U	0.620	2.00	4.00
375-22-4	Perfluorobutanoic acid	3.50	U	1.52	3.50	4.00
335-76-2	Perfluorodecanoic acid	3.00	U	1.44	3.00	4.00
307-55-1	Perfluorododecanoic acid	3.00	U	1.30	3.00	4.00
375-85-9	Perfluoroheptanoic acid	3.00	U	1.16	3.00	4.00
355-46-4	Perfluorohexanesulfonic acid	3.00	U	1.24	3.00	4.00
307-24-4	Perfluorohexanoic acid	2.00	U	0.940	2.00	4.00
375-95-1	Perfluorononanoic acid	2.00	U	0.980	2.00	4.00
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	0.760	2.00	4.00
335-67-1	Perfluorooctanoic acid	2.00	U	0.840	2.00	4.00
2706-90-3	Perfluoropentanoic acid	2.00	U	0.880	2.00	4.00
376-06-7	Perfluorotetradecanoic acid	3.00	U	1.14	3.00	4.00
72629-94-8	Perfluorotridecanoic acid	3.00	U	1.23	3.00	4.00
2058-94-8	Perfluoroundecanoic acid	3.00	U	1.24	3.00	4.00

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040507</u>	Client Sample ID:	<u>WU-DECON-03</u>
Collect Date:	<u>03/29/22</u> Time: <u>0945</u>	GCAL Sample ID:	<u>22204050707</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>123</u> mL	Lab File ID:	<u>2220421A_21.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/18/22</u>	Analysis Date:	<u>04/21/22</u> Time: <u>1335</u>
Prep Batch:	<u>738671</u>	Analytical Batch:	<u>739037</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.05	U	1.52	3.05	4.07
39108-34-4	8:2 Fluorotelomersulfonic acid	3.05	U	1.08	3.05	4.07
2991-50-6	NEtFOSAA	4.07	U	1.61	4.07	8.13
2355-31-9	NMeFOSAA	4.07	U	0.915	4.07	8.13
375-73-5	Perfluorobutanesulfonic acid	2.03	U	0.630	2.03	4.07
375-22-4	Perfluorobutanoic acid	3.56	U	1.54	3.56	4.07
335-76-2	Perfluorodecanoic acid	3.05	U	1.46	3.05	4.07
307-55-1	Perfluorododecanoic acid	3.05	U	1.32	3.05	4.07
375-85-9	Perfluoroheptanoic acid	3.05	U	1.18	3.05	4.07
355-46-4	Perfluorohexanesulfonic acid	3.05	U	1.26	3.05	4.07
307-24-4	Perfluorohexanoic acid	2.03	U	0.955	2.03	4.07
375-95-1	Perfluorononanoic acid	2.03	U	0.996	2.03	4.07
1763-23-1	Perfluorooctanesulfonic acid	2.03	U	0.772	2.03	4.07
335-67-1	Perfluorooctanoic acid	2.03	U	0.854	2.03	4.07
2706-90-3	Perfluoropentanoic acid	2.03	U	0.894	2.03	4.07
376-06-7	Perfluorotetradecanoic acid	3.05	U	1.16	3.05	4.07
72629-94-8	Perfluorotridecanoic acid	3.05	U	1.25	3.05	4.07
2058-94-8	Perfluoroundecanoic acid	3.05	U	1.26	3.05	4.07

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040507</u>	Client Sample ID:	<u>AOI02-02-SB-0.0-2.0</u>
Collect Date:	<u>03/23/22</u> Time: <u>0940</u>	GCAL Sample ID:	<u>22204050710</u>
Matrix:	<u>Solid</u> % Moisture: <u>21.6</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5.3</u> g	Lab File ID:	<u>2220415C_7.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/13/22</u>	Analysis Date:	<u>04/16/22</u> Time: <u>0648</u>
Prep Batch:	<u>738397</u>	Analytical Batch:	<u>738661</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.165	J	0.072	0.241	1.20
39108-34-4	8:2 Fluorotelomersulfonic acid	0.097	J	0.036	0.120	1.20
2991-50-6	NEtFOSAA	0.120	U	0.036	0.120	1.20
2355-31-9	NMeFOSAA	0.060	U	0.024	0.060	1.20
375-73-5	Perfluorobutanesulfonic acid	0.060	U	0.024	0.060	1.20
375-22-4	Perfluorobutanoic acid	0.078	J	0.048	0.120	1.20
335-76-2	Perfluorodecanoic acid	2.12		0.048	0.120	1.20
307-55-1	Perfluorododecanoic acid	0.608	J	0.024	0.060	1.20
375-85-9	Perfluoroheptanoic acid	0.122	J	0.024	0.060	1.20
355-46-4	Perfluorohexanesulfonic acid	0.120	U	0.036	0.120	1.20
307-24-4	Perfluorohexanoic acid	0.136	J	0.024	0.060	1.20
375-95-1	Perfluorononanoic acid	0.736	J	0.024	0.060	1.20
1763-23-1	Perfluorooctanesulfonic acid	0.735	J	0.060	0.241	1.20
335-67-1	Perfluorooctanoic acid	0.271	J	0.096	0.241	1.20
2706-90-3	Perfluoropentanoic acid	0.158	J	0.024	0.060	1.20
376-06-7	Perfluorotetradecanoic acid	0.167	J	0.024	0.060	1.20
72629-94-8	Perfluorotridecanoic acid	0.122	J	0.036	0.120	1.20
2058-94-8	Perfluoroundecanoic acid	0.515	J	0.024	0.060	1.20

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040507</u>	Client Sample ID:	<u>AOI01-01-SB-37.0-39.0</u>
Collect Date:	<u>03/22/22</u> Time: <u>0945</u>	GCAL Sample ID:	<u>22204050711</u>
Matrix:	<u>Solid</u> % Moisture: <u>32.9</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5.31</u> g	Lab File ID:	<u>2220415C_8.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/13/22</u>	Analysis Date:	<u>04/16/22</u> Time: <u>0703</u>
Prep Batch:	<u>738397</u>	Analytical Batch:	<u>738661</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.281	U	0.084	0.281	1.40
39108-34-4	8:2 Fluorotelomersulfonic acid	0.140	U	0.042	0.140	1.40
2991-50-6	NEtFOSAA	0.140	U	0.042	0.140	1.40
2355-31-9	NMeFOSAA	0.070	U	0.028	0.070	1.40
375-73-5	Perfluorobutanesulfonic acid	0.070	U	0.028	0.070	1.40
375-22-4	Perfluorobutanoic acid	0.140	U	0.056	0.140	1.40
335-76-2	Perfluorodecanoic acid	0.140	U	0.056	0.140	1.40
307-55-1	Perfluorododecanoic acid	0.070	U	0.028	0.070	1.40
375-85-9	Perfluoroheptanoic acid	0.070	U	0.028	0.070	1.40
355-46-4	Perfluorohexanesulfonic acid	0.140	U	0.042	0.140	1.40
307-24-4	Perfluorohexanoic acid	0.070	U	0.028	0.070	1.40
375-95-1	Perfluorononanoic acid	0.070	U	0.028	0.070	1.40
1763-23-1	Perfluorooctanesulfonic acid	0.281	U	0.070	0.281	1.40
335-67-1	Perfluorooctanoic acid	0.281	U	0.112	0.281	1.40
2706-90-3	Perfluoropentanoic acid	0.070	U	0.028	0.070	1.40
376-06-7	Perfluorotetradecanoic acid	0.070	U	0.028	0.070	1.40
72629-94-8	Perfluorotridecanoic acid	0.140	U	0.042	0.140	1.40
2058-94-8	Perfluoroundecanoic acid	0.070	U	0.028	0.070	1.40

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040507</u>	Client Sample ID:	<u>AOI01-01-SB-0.0-2.0-D</u>
Collect Date:	<u>03/21/22</u> Time: <u>1045</u>	GCAL Sample ID:	<u>22204050712</u>
Matrix:	<u>Solid</u> % Moisture: <u>13.6</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5.39</u> g	Lab File ID:	<u>2220415C_9.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/13/22</u>	Analysis Date:	<u>04/16/22</u> Time: <u>0718</u>
Prep Batch:	<u>738397</u>	Analytical Batch:	<u>738661</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.215	U	0.064	0.215	1.07
39108-34-4	8:2 Fluorotelomersulfonic acid	0.107	U	0.032	0.107	1.07
2991-50-6	NEtFOSAA	0.107	U	0.032	0.107	1.07
2355-31-9	NMeFOSAA	0.054	U	0.021	0.054	1.07
375-73-5	Perfluorobutanesulfonic acid	0.054	U	0.021	0.054	1.07
375-22-4	Perfluorobutanoic acid	0.107	U	0.043	0.107	1.07
335-76-2	Perfluorodecanoic acid	0.185	J	0.043	0.107	1.07
307-55-1	Perfluorododecanoic acid	0.079	J	0.021	0.054	1.07
375-85-9	Perfluoroheptanoic acid	0.054	U	0.021	0.054	1.07
355-46-4	Perfluorohexanesulfonic acid	0.042	J	0.032	0.107	1.07
307-24-4	Perfluorohexanoic acid	0.054	U	0.021	0.054	1.07
375-95-1	Perfluorononanoic acid	0.056	J	0.021	0.054	1.07
1763-23-1	Perfluorooctanesulfonic acid	1.65		0.054	0.215	1.07
335-67-1	Perfluorooctanoic acid	0.215	U	0.086	0.215	1.07
2706-90-3	Perfluoropentanoic acid	0.054	U	0.021	0.054	1.07
376-06-7	Perfluorotetradecanoic acid	0.032	J	0.021	0.054	1.07
72629-94-8	Perfluorotridecanoic acid	0.107	U	0.032	0.107	1.07
2058-94-8	Perfluoroundecanoic acid	0.058	J	0.021	0.054	1.07

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040507</u>	Client Sample ID:	<u>AOI02-02-SB-14.0-16.0</u>
Collect Date:	<u>03/23/22</u> Time: <u>1150</u>	GCAL Sample ID:	<u>22204050713</u>
Matrix:	<u>Solid</u> % Moisture: <u>26.4</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5.28</u> g	Lab File ID:	<u>2220415C_10.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/13/22</u>	Analysis Date:	<u>04/16/22</u> Time: <u>0733</u>
Prep Batch:	<u>738397</u>	Analytical Batch:	<u>738661</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.257	U	0.077	0.257	1.29
39108-34-4	8:2 Fluorotelomersulfonic acid	0.129	U	0.039	0.129	1.29
2991-50-6	NEtFOSAA	0.129	U	0.039	0.129	1.29
2355-31-9	NMeFOSAA	0.064	U	0.026	0.064	1.29
375-73-5	Perfluorobutanesulfonic acid	0.064	U	0.026	0.064	1.29
375-22-4	Perfluorobutanoic acid	0.087	J	0.051	0.129	1.29
335-76-2	Perfluorodecanoic acid	0.129	U	0.051	0.129	1.29
307-55-1	Perfluorododecanoic acid	0.064	U	0.026	0.064	1.29
375-85-9	Perfluoroheptanoic acid	0.130	J	0.026	0.064	1.29
355-46-4	Perfluorohexanesulfonic acid	0.065	J	0.039	0.129	1.29
307-24-4	Perfluorohexanoic acid	0.177	J	0.026	0.064	1.29
375-95-1	Perfluorononanoic acid	0.032	J	0.026	0.064	1.29
1763-23-1	Perfluorooctanesulfonic acid	0.162	J	0.064	0.257	1.29
335-67-1	Perfluorooctanoic acid	0.257	U	0.103	0.257	1.29
2706-90-3	Perfluoropentanoic acid	0.146	J	0.026	0.064	1.29
376-06-7	Perfluorotetradecanoic acid	0.064	U	0.026	0.064	1.29
72629-94-8	Perfluorotridecanoic acid	0.129	U	0.039	0.129	1.29
2058-94-8	Perfluoroundecanoic acid	0.064	U	0.026	0.064	1.29

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No: <u>222040507</u>	Client Sample ID: <u>WU-FRB-01</u>
Collect Date: <u>03/21/22</u> Time: <u>1330</u>	GCAL Sample ID: <u>22204050714</u>
Matrix: <u>Solid</u> % Moisture: <u>0.0</u>	Instrument ID: <u>QQQ4</u>
Sample Amt: <u>5.28</u> g	Lab File ID: <u>2220415C_11.d</u>
Injection Vol.: <u>2</u> (µL)	GC Column: <u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>SXA</u>
Prep Date: <u>04/13/22</u>	Analysis Date: <u>04/16/22</u> Time: <u>0748</u>
Prep Batch: <u>738397</u>	Analytical Batch: <u>738661</u>
Prep Method: <u>PFAS ID QSM B15 Prep</u>	Analytical Method: <u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.189	U	0.057	0.189	0.947
39108-34-4	8:2 Fluorotelomersulfonic acid	0.095	U	0.028	0.095	0.947
2991-50-6	NEtFOSAA	0.095	U	0.028	0.095	0.947
2355-31-9	NMeFOSAA	0.047	U	0.019	0.047	0.947
375-73-5	Perfluorobutanesulfonic acid	0.047	U	0.019	0.047	0.947
375-22-4	Perfluorobutanoic acid	0.095	U	0.038	0.095	0.947
335-76-2	Perfluorodecanoic acid	0.095	U	0.038	0.095	0.947
307-55-1	Perfluorododecanoic acid	0.047	U	0.019	0.047	0.947
375-85-9	Perfluoroheptanoic acid	0.047	U	0.019	0.047	0.947
355-46-4	Perfluorohexanesulfonic acid	0.095	U	0.028	0.095	0.947
307-24-4	Perfluorohexanoic acid	0.047	U	0.019	0.047	0.947
375-95-1	Perfluorononanoic acid	0.047	U	0.019	0.047	0.947
1763-23-1	Perfluorooctanesulfonic acid	0.189	U	0.047	0.189	0.947
335-67-1	Perfluorooctanoic acid	0.189	U	0.076	0.189	0.947
2706-90-3	Perfluoropentanoic acid	0.047	U	0.019	0.047	0.947
376-06-7	Perfluorotetradecanoic acid	0.047	U	0.019	0.047	0.947
72629-94-8	Perfluorotridecanoic acid	0.095	U	0.028	0.095	0.947
2058-94-8	Perfluoroundecanoic acid	0.047	U	0.019	0.047	0.947

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040507</u>	Client Sample ID:	<u>AOI02-04-SB-0.0-2.0</u>
Collect Date:	<u>03/23/22</u> Time: <u>1430</u>	GCAL Sample ID:	<u>22204050715</u>
Matrix:	<u>Solid</u> % Moisture: <u>10.2</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5.42</u> g	Lab File ID:	<u>2220415C_12.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/13/22</u>	Analysis Date:	<u>04/16/22</u> Time: <u>0803</u>
Prep Batch:	<u>738397</u>	Analytical Batch:	<u>738661</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.206	U	0.062	0.206	1.03
39108-34-4	8:2 Fluorotelomersulfonic acid	0.103	U	0.031	0.103	1.03
2991-50-6	NEtFOSAA	0.103	U	0.031	0.103	1.03
2355-31-9	NMeFOSAA	0.051	U	0.021	0.051	1.03
375-73-5	Perfluorobutanesulfonic acid	0.023	J	0.021	0.051	1.03
375-22-4	Perfluorobutanoic acid	0.043	J	0.041	0.103	1.03
335-76-2	Perfluorodecanoic acid	0.133	J	0.041	0.103	1.03
307-55-1	Perfluorododecanoic acid	0.075	J	0.021	0.051	1.03
375-85-9	Perfluoroheptanoic acid	0.045	J	0.021	0.051	1.03
355-46-4	Perfluorohexanesulfonic acid	0.054	J	0.031	0.103	1.03
307-24-4	Perfluorohexanoic acid	0.138	J	0.021	0.051	1.03
375-95-1	Perfluorononanoic acid	0.046	J	0.021	0.051	1.03
1763-23-1	Perfluorooctanesulfonic acid	0.498	J	0.051	0.206	1.03
335-67-1	Perfluorooctanoic acid	0.127	J	0.082	0.206	1.03
2706-90-3	Perfluoropentanoic acid	0.076	J	0.021	0.051	1.03
376-06-7	Perfluorotetradecanoic acid	0.045	J	0.021	0.051	1.03
72629-94-8	Perfluorotridecanoic acid	0.103	U	0.031	0.103	1.03
2058-94-8	Perfluoroundecanoic acid	0.033	J	0.021	0.051	1.03

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No: <u>222040507</u>	Client Sample ID: <u>AOI02-04-SB-14.0-16.0</u>
Collect Date: <u>03/23/22</u> Time: <u>1555</u>	GCAL Sample ID: <u>22204050716</u>
Matrix: <u>Solid</u> % Moisture: <u>22.0</u>	Instrument ID: <u>QQQ4</u>
Sample Amt: <u>5.46</u> g	Lab File ID: <u>2220415C_13.d</u>
Injection Vol.: <u>2</u> (µL)	GC Column: <u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>SXA</u>
Prep Date: <u>04/13/22</u>	Analysis Date: <u>04/16/22</u> Time: <u>0817</u>
Prep Batch: <u>738397</u>	Analytical Batch: <u>738661</u>
Prep Method: <u>PFAS ID QSM B15 Prep</u>	Analytical Method: <u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.235	U	0.070	0.235	1.17
39108-34-4	8:2 Fluorotelomersulfonic acid	0.117	U	0.035	0.117	1.17
2991-50-6	NEtFOSAA	0.117	U	0.035	0.117	1.17
2355-31-9	NMeFOSAA	0.059	U	0.023	0.059	1.17
375-73-5	Perfluorobutanesulfonic acid	0.059	U	0.023	0.059	1.17
375-22-4	Perfluorobutanoic acid	0.117	U	0.047	0.117	1.17
335-76-2	Perfluorodecanoic acid	0.117	U	0.047	0.117	1.17
307-55-1	Perfluorododecanoic acid	0.059	U	0.023	0.059	1.17
375-85-9	Perfluoroheptanoic acid	0.059	U	0.023	0.059	1.17
355-46-4	Perfluorohexanesulfonic acid	0.387	J	0.035	0.117	1.17
307-24-4	Perfluorohexanoic acid	0.032	J	0.023	0.059	1.17
375-95-1	Perfluorononanoic acid	0.059	U	0.023	0.059	1.17
1763-23-1	Perfluorooctanesulfonic acid	0.235	U	0.059	0.235	1.17
335-67-1	Perfluorooctanoic acid	0.235	U	0.094	0.235	1.17
2706-90-3	Perfluoropentanoic acid	0.059	U	0.023	0.059	1.17
376-06-7	Perfluorotetradecanoic acid	0.059	U	0.023	0.059	1.17
72629-94-8	Perfluorotridecanoic acid	0.117	U	0.035	0.117	1.17
2058-94-8	Perfluoroundecanoic acid	0.059	U	0.023	0.059	1.17

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI02-07-SB-0.0-2.0</u>
Collect Date:	<u>03/29/22</u> Time: <u>1410</u>	GCAL Sample ID:	<u>22204064507</u>
Matrix:	<u>Solid</u> % Moisture: <u>11.3</u>	Instrument ID:	<u>QQQ5</u>
Sample Amt:	<u>5.45</u> g	Lab File ID:	<u>2220508A_7.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>05/06/22</u>	Analysis Date:	<u>05/08/22</u> Time: <u>1232</u>
Prep Batch:	<u>740299</u>	Analytical Batch:	<u>740431</u>
Prep Method:	<u>DOD QSM Table B-15 Prep</u>	Analytical Method:	<u>DOD QSM Table B-15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
763051-92-9	11CI-PF3OUdS	0.046	U	0.018	0.046	0.917
757124-72-4	4:2 Fluorotelomersulfonic acid	0.183	U	0.046	0.183	0.917
27619-97-2	6:2 Fluorotelomersulfonic acid	0.183	U	0.055	0.183	0.917
39108-34-4	8:2 Fluorotelomersulfonic acid	0.092	U	0.028	0.092	0.917
756426-58-1	9CI-PF3ONS	0.092	U	0.028	0.092	0.917
919005-14-4	ADONA	0.046	U	0.00917	0.046	0.917
13252-13-6	HFPO-DA	0.459	U	0.128	0.459	1.83
2991-50-6	NETFOSAA	0.092	U	0.028	0.092	0.917
2355-31-9	NMeFOSAA	0.046	U	0.018	0.046	0.917
375-73-5	Perfluorobutanesulfonic acid	0.046	U	0.018	0.046	0.917
375-22-4	Perfluorobutanoic acid	0.042	J	0.037	0.092	0.917
335-77-3	Perfluorodecane sulfonic acid	0.092	U	0.028	0.092	0.917
335-76-2	Perfluorodecanoic acid	0.081	J	0.037	0.092	0.917
307-55-1	Perfluorododecanoic acid	0.030	J	0.018	0.046	0.917
375-92-8	Perfluoroheptanesulfonic acid	0.046	U	0.018	0.046	0.917
375-85-9	Perfluoroheptanoic acid	0.051	J	0.018	0.046	0.917
355-46-4	Perfluorohexanesulfonic acid	0.092	U	0.028	0.092	0.917
307-24-4	Perfluorohexanoic acid	0.042	J	0.018	0.046	0.917
68259-12-1	Perfluorononanesulfonic acid	0.092	U	0.028	0.092	0.917
375-95-1	Perfluorononanoic acid	0.068	J	0.018	0.046	0.917
754-91-6	Perfluorooctane Sulfonylamide	0.046	U	0.018	0.046	0.917
1763-23-1	Perfluorooctanesulfonic acid	0.455	J	0.046	0.183	0.917
335-67-1	Perfluorooctanoic acid	0.099	J	0.073	0.183	0.917
2706-91-4	Perfluoropentanesulfonic acid	0.046	U	0.018	0.046	0.917
2706-90-3	Perfluoropentanoic acid	0.044	J	0.018	0.046	0.917
376-06-7	Perfluorotetradecanoic acid	0.046	U	0.018	0.046	0.917
72629-94-8	Perfluorotridecanoic acid	0.092	U	0.028	0.092	0.917
2058-94-8	Perfluoroundecanoic acid	0.031	J	0.018	0.046	0.917

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No: <u>222040645</u>	Client Sample ID: <u>AOI02-03-SB-0.0-2.0</u>
Collect Date: <u>03/24/22</u> Time: <u>0935</u>	GCAL Sample ID: <u>22204064508</u>
Matrix: <u>Solid</u> % Moisture: <u>20.2</u>	Instrument ID: <u>QQQ5</u>
Sample Amt: <u>5.29</u> g	Lab File ID: <u>2220508A_8.d</u>
Injection Vol.: <u>2</u> (µL)	GC Column: <u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>SXA</u>
Prep Date: <u>05/06/22</u>	Analysis Date: <u>05/08/22</u> Time: <u>1246</u>
Prep Batch: <u>740299</u>	Analytical Batch: <u>740431</u>
Prep Method: <u>DOD QSM Table B-15 Prep</u>	Analytical Method: <u>DOD QSM Table B-15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
763051-92-9	11CI-PF3OUdS	0.047	U	0.019	0.047	0.945
757124-72-4	4:2 Fluorotelomersulfonic acid	0.189	U	0.047	0.189	0.945
27619-97-2	6:2 Fluorotelomersulfonic acid	0.189	U	0.057	0.189	0.945
39108-34-4	8:2 Fluorotelomersulfonic acid	0.095	U	0.028	0.095	0.945
756426-58-1	9CI-PF3ONS	0.095	U	0.028	0.095	0.945
919005-14-4	ADONA	0.047	U	0.00945	0.047	0.945
13252-13-6	HFPO-DA	0.473	U	0.132	0.473	1.89
2991-50-6	NETFOSAA	0.095	U	0.028	0.095	0.945
2355-31-9	NMeFOSAA	0.047	U	0.019	0.047	0.945
375-73-5	Perfluorobutanesulfonic acid	0.047	U	0.019	0.047	0.945
375-22-4	Perfluorobutanoic acid	0.095	U	0.038	0.095	0.945
335-77-3	Perfluorodecane sulfonic acid	0.095	U	0.028	0.095	0.945
335-76-2	Perfluorodecanoic acid	0.077	J	0.038	0.095	0.945
307-55-1	Perfluorododecanoic acid	0.047	U	0.019	0.047	0.945
375-92-8	Perfluoroheptanesulfonic acid	0.047	U	0.019	0.047	0.945
375-85-9	Perfluoroheptanoic acid	0.034	J	0.019	0.047	0.945
355-46-4	Perfluorohexanesulfonic acid	0.095	U	0.028	0.095	0.945
307-24-4	Perfluorohexanoic acid	0.069	J	0.019	0.047	0.945
68259-12-1	Perfluorononanesulfonic acid	0.095	U	0.028	0.095	0.945
375-95-1	Perfluorononanoic acid	0.049	J	0.019	0.047	0.945
754-91-6	Perfluorooctane Sulfonylamide	0.047	U	0.019	0.047	0.945
1763-23-1	Perfluorooctanesulfonic acid	0.223	J	0.047	0.189	0.945
335-67-1	Perfluorooctanoic acid	0.189	U	0.076	0.189	0.945
2706-91-4	Perfluoropentanesulfonic acid	0.047	U	0.019	0.047	0.945
2706-90-3	Perfluoropentanoic acid	0.089	J	0.019	0.047	0.945
376-06-7	Perfluorotetradecanoic acid	0.047	U	0.019	0.047	0.945
72629-94-8	Perfluorotridecanoic acid	0.095	U	0.028	0.095	0.945
2058-94-8	Perfluoroundecanoic acid	0.047	U	0.019	0.047	0.945

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No: <u>222040645</u>	Client Sample ID: <u>AOI01-02-SB-0.0-1.0-DRE</u>
Collect Date: <u>03/28/22</u> Time: <u>0910</u>	GCAL Sample ID: <u>22204064509RE</u>
Matrix: <u>Solid</u> % Moisture: <u>14.5</u>	Instrument ID: <u>QQQ3</u>
Sample Amt: <u>5.33</u> g	Lab File ID: <u>2220513A_8.d</u>
Injection Vol.: <u>2</u> (µL)	GC Column: <u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>RXJ</u>
Prep Date: <u>05/11/22</u>	Analysis Date: <u>05/13/22</u> Time: <u>1502</u>
Prep Batch: <u>740685</u>	Analytical Batch: <u>740969</u>
Prep Method: <u>DOD QSM Table B-15 Prep</u>	Analytical Method: <u>DOD QSM Table B-15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
763051-92-9	11Cl-PF3OUdS	0.047	U	0.019	0.047	0.938
757124-72-4	4:2 Fluorotelomersulfonic acid	0.188	U	0.047	0.188	0.938
39108-34-4	8:2 Fluorotelomersulfonic acid	0.094	U	0.028	0.094	0.938
756426-58-1	9Cl-PF3ONS	0.094	U	0.028	0.094	0.938
919005-14-4	ADONA	0.047	U	0.00938	0.047	0.938
13252-13-6	HFPO-DA	0.469	U	0.131	0.469	1.88
2991-50-6	NEtFOSAA	0.094	U	0.028	0.094	0.938
2355-31-9	NMeFOSAA	0.047	U	0.019	0.047	0.938
375-73-5	Perfluorobutanesulfonic acid	0.047	U	0.019	0.047	0.938
375-22-4	Perfluorobutanoic acid	0.147	J	0.038	0.094	0.938
335-77-3	Perfluorodecane sulfonic acid	0.094	U	0.028	0.094	0.938
335-76-2	Perfluorodecanoic acid	0.123	J	0.038	0.094	0.938
307-55-1	Perfluorododecanoic acid	0.052	J	0.019	0.047	0.938
375-92-8	Perfluoroheptanesulfonic acid	0.047	U	0.019	0.047	0.938
375-85-9	Perfluoroheptanoic acid	0.069	J	0.019	0.047	0.938
355-46-4	Perfluorohexanesulfonic acid	0.032	J	0.028	0.094	0.938
307-24-4	Perfluorohexanoic acid	0.086	J	0.019	0.047	0.938
68259-12-1	Perfluorononanesulfonic acid	0.094	U	0.028	0.094	0.938
375-95-1	Perfluorononanoic acid	0.100	J	0.019	0.047	0.938
754-91-6	Perfluorooctane Sulfonylamide	0.047	U	0.019	0.047	0.938
1763-23-1	Perfluorooctanesulfonic acid	0.675	J	0.047	0.188	0.938
335-67-1	Perfluorooctanoic acid	0.188	U	0.075	0.188	0.938
2706-91-4	Perfluoropentanesulfonic acid	0.047	U	0.019	0.047	0.938
2706-90-3	Perfluoropentanoic acid	0.219	J	0.019	0.047	0.938
376-06-7	Perfluorotetradecanoic acid	0.027	J	0.019	0.047	0.938
72629-94-8	Perfluorotridecanoic acid	0.094	U	0.028	0.094	0.938
2058-94-8	Perfluoroundecanoic acid	0.041	J	0.019	0.047	0.938

FORM I SV-1

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No: <u>222040645</u>	Client Sample ID: <u>AOI01-02-SB-0.0-1.0-D</u>
Collect Date: <u>03/28/22</u> Time: <u>0910</u>	GCAL Sample ID: <u>22204064509</u>
Matrix: <u>Solid</u> % Moisture: <u>14.5</u>	Instrument ID: <u>QQQ5</u>
Sample Amt: <u>5.39</u> g	Lab File ID: <u>2220508A_9.d</u>
Injection Vol.: <u>2</u> (µL)	GC Column: <u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>SXA</u>
Prep Date: <u>05/06/22</u>	Analysis Date: <u>05/08/22</u> Time: <u>1301</u>
Prep Batch: <u>740299</u>	Analytical Batch: <u>740431</u>
Prep Method: <u>DOD QSM Table B-15 Prep</u>	Analytical Method: <u>DOD QSM Table B-15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.186	U	0.056	0.186	0.928

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No: <u>222040645</u>	Client Sample ID: <u>AOI01-02-SB-0.0-1.0</u>
Collect Date: <u>03/28/22</u> Time: <u>0910</u>	GCAL Sample ID: <u>22204064510</u>
Matrix: <u>Solid</u> % Moisture: <u>17.4</u>	Instrument ID: <u>QQQ5</u>
Sample Amt: <u>5.49</u> g	Lab File ID: <u>2220508A_10.d</u>
Injection Vol.: <u>2</u> (µL)	GC Column: <u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>SXA</u>
Prep Date: <u>05/06/22</u>	Analysis Date: <u>05/08/22</u> Time: <u>1316</u>
Prep Batch: <u>740299</u>	Analytical Batch: <u>740431</u>
Prep Method: <u>DOD QSM Table B-15 Prep</u>	Analytical Method: <u>DOD QSM Table B-15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
763051-92-9	11CI-PF3OUdS	0.046	U	0.018	0.046	0.911
757124-72-4	4:2 Fluorotelomersulfonic acid	0.182	U	0.046	0.182	0.911
27619-97-2	6:2 Fluorotelomersulfonic acid	0.182	U	0.055	0.182	0.911
39108-34-4	8:2 Fluorotelomersulfonic acid	0.091	U	0.027	0.091	0.911
756426-58-1	9CI-PF3ONS	0.091	U	0.027	0.091	0.911
919005-14-4	ADONA	0.046	U	0.00911	0.046	0.911
13252-13-6	HFPO-DA	0.455	U	0.128	0.455	1.82
2991-50-6	NETFOSAA	0.091	U	0.027	0.091	0.911
2355-31-9	NMeFOSAA	0.046	U	0.018	0.046	0.911
375-73-5	Perfluorobutanesulfonic acid	0.046	U	0.018	0.046	0.911
375-22-4	Perfluorobutanoic acid	0.104	J	0.036	0.091	0.911
335-77-3	Perfluorodecane sulfonic acid	0.091	U	0.027	0.091	0.911
335-76-2	Perfluorodecanoic acid	0.090	J	0.036	0.091	0.911
307-55-1	Perfluorododecanoic acid	0.036	J	0.018	0.046	0.911
375-92-8	Perfluoroheptanesulfonic acid	0.046	U	0.018	0.046	0.911
375-85-9	Perfluoroheptanoic acid	0.051	J	0.018	0.046	0.911
355-46-4	Perfluorohexanesulfonic acid	0.091	U	0.027	0.091	0.911
307-24-4	Perfluorohexanoic acid	0.063	J	0.018	0.046	0.911
68259-12-1	Perfluorononanesulfonic acid	0.091	U	0.027	0.091	0.911
375-95-1	Perfluorononanoic acid	0.081	J	0.018	0.046	0.911
754-91-6	Perfluorooctane Sulfonylamide	0.046	U	0.018	0.046	0.911
1763-23-1	Perfluorooctanesulfonic acid	0.547	J	0.046	0.182	0.911
335-67-1	Perfluorooctanoic acid	0.182	U	0.073	0.182	0.911
2706-91-4	Perfluoropentanesulfonic acid	0.046	U	0.018	0.046	0.911
2706-90-3	Perfluoropentanoic acid	0.172	J	0.018	0.046	0.911
376-06-7	Perfluorotetradecanoic acid	0.018	J	0.018	0.046	0.911
72629-94-8	Perfluorotridecanoic acid	0.091	U	0.027	0.091	0.911
2058-94-8	Perfluoroundecanoic acid	0.033	J	0.018	0.046	0.911

FORM I SV-1

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI02-01-SB-0.0-2.0</u>
Collect Date:	<u>03/24/22</u> Time: <u>1340</u>	GCAL Sample ID:	<u>22204064511</u>
Matrix:	<u>Solid</u> % Moisture: <u>28.9</u>	Instrument ID:	<u>QQQ5</u>
Sample Amt:	<u>5.47</u> g	Lab File ID:	<u>2220508A_11.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>05/06/22</u>	Analysis Date:	<u>05/08/22</u> Time: <u>1330</u>
Prep Batch:	<u>740299</u>	Analytical Batch:	<u>740431</u>
Prep Method:	<u>DOD QSM Table B-15 Prep</u>	Analytical Method:	<u>DOD QSM Table B-15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
763051-92-9	11CI-PF3OUdS	0.046	U	0.018	0.046	0.914
757124-72-4	4:2 Fluorotelomersulfonic acid	0.183	U	0.046	0.183	0.914
27619-97-2	6:2 Fluorotelomersulfonic acid	0.183	U	0.055	0.183	0.914
39108-34-4	8:2 Fluorotelomersulfonic acid	0.091	U	0.027	0.091	0.914
756426-58-1	9CI-PF3ONS	0.091	U	0.027	0.091	0.914
919005-14-4	ADONA	0.046	U	0.00914	0.046	0.914
13252-13-6	HFPO-DA	0.457	U	0.128	0.457	1.83
2991-50-6	NETFOSAA	0.091	U	0.027	0.091	0.914
2355-31-9	NMeFOSAA	0.046	U	0.018	0.046	0.914
375-73-5	Perfluorobutanesulfonic acid	0.046	J	0.018	0.046	0.914
375-22-4	Perfluorobutanoic acid	0.067	J	0.037	0.091	0.914
335-77-3	Perfluorodecane sulfonic acid	0.091	U	0.027	0.091	0.914
335-76-2	Perfluorodecanoic acid	0.091	U	0.037	0.091	0.914
307-55-1	Perfluorododecanoic acid	0.046	U	0.018	0.046	0.914
375-92-8	Perfluoroheptanesulfonic acid	0.024	J	0.018	0.046	0.914
375-85-9	Perfluoroheptanoic acid	0.047	J	0.018	0.046	0.914
355-46-4	Perfluorohexanesulfonic acid	1.41		0.027	0.091	0.914
307-24-4	Perfluorohexanoic acid	0.238	J	0.018	0.046	0.914
68259-12-1	Perfluorononanesulfonic acid	0.091	U	0.027	0.091	0.914
375-95-1	Perfluorononanoic acid	0.046	U	0.018	0.046	0.914
754-91-6	Perfluorooctane Sulfonylamide	0.046	U	0.018	0.046	0.914
1763-23-1	Perfluorooctanesulfonic acid	2.48		0.046	0.183	0.914
335-67-1	Perfluorooctanoic acid	0.183	U	0.073	0.183	0.914
2706-91-4	Perfluoropentanesulfonic acid	0.045	J	0.018	0.046	0.914
2706-90-3	Perfluoropentanoic acid	0.147	J	0.018	0.046	0.914
376-06-7	Perfluorotetradecanoic acid	0.046	U	0.018	0.046	0.914
72629-94-8	Perfluorotridecanoic acid	0.091	U	0.027	0.091	0.914
2058-94-8	Perfluoroundecanoic acid	0.046	U	0.018	0.046	0.914

FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI02-01-SB-14.5-16.5</u>
Collect Date:	<u>03/24/22</u> Time: <u>1410</u>	GCAL Sample ID:	<u>22204064512</u>
Matrix:	<u>Solid</u> % Moisture: <u>23.3</u>	Instrument ID:	<u>QQQ3</u>
Sample Amt:	<u>5.16</u> g	Lab File ID:	<u>2220513A_11.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>RXJ</u>
Prep Date:	<u>05/11/22</u>	Analysis Date:	<u>05/13/22</u> Time: <u>1546</u>
Prep Batch:	<u>740685</u>	Analytical Batch:	<u>740969</u>
Prep Method:	<u>DOD QSM Table B-15 Prep</u>	Analytical Method:	<u>DOD QSM Table B-15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
763051-92-9	11CI-PF3OUdS	0.048	U	0.019	0.048	0.969
757124-72-4	4:2 Fluorotelomersulfonic acid	0.194	U	0.048	0.194	0.969
27619-97-2	6:2 Fluorotelomersulfonic acid	0.194	U	0.058	0.194	0.969
39108-34-4	8:2 Fluorotelomersulfonic acid	0.097	U	0.029	0.097	0.969
756426-58-1	9CI-PF3ONS	0.097	U	0.029	0.097	0.969
919005-14-4	ADONA	0.048	U	0.00969	0.048	0.969
13252-13-6	HFPO-DA	0.484	U	0.136	0.484	1.94
2991-50-6	NETFOSAA	0.097	U	0.029	0.097	0.969
2355-31-9	NMeFOSAA	0.048	U	0.019	0.048	0.969
375-73-5	Perfluorobutanesulfonic acid	0.048	U	0.019	0.048	0.969
375-22-4	Perfluorobutanoic acid	0.047	J	0.039	0.097	0.969
335-77-3	Perfluorodecane sulfonic acid	0.097	U	0.029	0.097	0.969
335-76-2	Perfluorodecanoic acid	0.097	U	0.039	0.097	0.969
307-55-1	Perfluorododecanoic acid	0.048	U	0.019	0.048	0.969
375-92-8	Perfluoroheptanesulfonic acid	0.048	U	0.019	0.048	0.969
375-85-9	Perfluoroheptanoic acid	0.021	J	0.019	0.048	0.969
355-46-4	Perfluorohexanesulfonic acid	0.097	U	0.029	0.097	0.969
307-24-4	Perfluorohexanoic acid	0.058	J	0.019	0.048	0.969
68259-12-1	Perfluorononanesulfonic acid	0.097	U	0.029	0.097	0.969
375-95-1	Perfluorononanoic acid	0.021	J	0.019	0.048	0.969
754-91-6	Perfluorooctane Sulfonylamide	0.048	U	0.019	0.048	0.969
1763-23-1	Perfluorooctanesulfonic acid	0.132	J	0.048	0.194	0.969
335-67-1	Perfluorooctanoic acid	0.194	U	0.078	0.194	0.969
2706-91-4	Perfluoropentanesulfonic acid	0.048	U	0.019	0.048	0.969
2706-90-3	Perfluoropentanoic acid	0.044	J	0.019	0.048	0.969
376-06-7	Perfluorotetradecanoic acid	0.048	U	0.019	0.048	0.969
72629-94-8	Perfluorotridecanoic acid	0.097	U	0.029	0.097	0.969
2058-94-8	Perfluoroundecanoic acid	0.048	U	0.019	0.048	0.969

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI01-02-SB-25.5-27.5</u>
Collect Date:	<u>03/28/22</u> Time: <u>1105</u>	GCAL Sample ID:	<u>22204064513</u>
Matrix:	<u>Solid</u> % Moisture: <u>32.9</u>	Instrument ID:	<u>QQQ5</u>
Sample Amt:	<u>5.46</u> g	Lab File ID:	<u>2220508A_13.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>05/06/22</u>	Analysis Date:	<u>05/08/22</u> Time: <u>1400</u>
Prep Batch:	<u>740299</u>	Analytical Batch:	<u>740431</u>
Prep Method:	<u>DOD QSM Table B-15 Prep</u>	Analytical Method:	<u>DOD QSM Table B-15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
763051-92-9	11CI-PF3OUdS	0.046	U	0.018	0.046	0.916
757124-72-4	4:2 Fluorotelomersulfonic acid	0.183	U	0.046	0.183	0.916
27619-97-2	6:2 Fluorotelomersulfonic acid	0.183	U	0.055	0.183	0.916
39108-34-4	8:2 Fluorotelomersulfonic acid	0.092	U	0.027	0.092	0.916
756426-58-1	9CI-PF3ONS	0.092	U	0.027	0.092	0.916
919005-14-4	ADONA	0.046	U	0.00916	0.046	0.916
13252-13-6	HFPO-DA	0.458	U	0.128	0.458	1.83
2991-50-6	NETFOSAA	0.092	U	0.027	0.092	0.916
2355-31-9	NMeFOSAA	0.046	U	0.018	0.046	0.916
375-73-5	Perfluorobutanesulfonic acid	0.046	U	0.018	0.046	0.916
375-22-4	Perfluorobutanoic acid	0.039	J	0.037	0.092	0.916
335-77-3	Perfluorodecane sulfonic acid	0.092	U	0.027	0.092	0.916
335-76-2	Perfluorodecanoic acid	0.092	U	0.037	0.092	0.916
307-55-1	Perfluorododecanoic acid	0.046	U	0.018	0.046	0.916
375-92-8	Perfluoroheptanesulfonic acid	0.046	U	0.018	0.046	0.916
375-85-9	Perfluoroheptanoic acid	0.046	U	0.018	0.046	0.916
355-46-4	Perfluorohexanesulfonic acid	0.325	J	0.027	0.092	0.916
307-24-4	Perfluorohexanoic acid	0.071	J	0.018	0.046	0.916
68259-12-1	Perfluorononanesulfonic acid	0.092	U	0.027	0.092	0.916
375-95-1	Perfluorononanoic acid	0.046	U	0.018	0.046	0.916
754-91-6	Perfluorooctane Sulfonylamide	0.046	U	0.018	0.046	0.916
1763-23-1	Perfluorooctanesulfonic acid	0.524	J	0.046	0.183	0.916
335-67-1	Perfluorooctanoic acid	0.183	U	0.073	0.183	0.916
2706-91-4	Perfluoropentanesulfonic acid	0.046	U	0.018	0.046	0.916
2706-90-3	Perfluoropentanoic acid	0.049	J	0.018	0.046	0.916
376-06-7	Perfluorotetradecanoic acid	0.046	U	0.018	0.046	0.916
72629-94-8	Perfluorotridecanoic acid	0.092	U	0.027	0.092	0.916
2058-94-8	Perfluoroundecanoic acid	0.046	U	0.018	0.046	0.916

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI02-03-SB-16.5-18.5</u>
Collect Date:	<u>03/24/22</u> Time: <u>1005</u>	GCAL Sample ID:	<u>22204064514</u>
Matrix:	<u>Solid</u> % Moisture: <u>29.9</u>	Instrument ID:	<u>QQQ3</u>
Sample Amt:	<u>5.34</u> g	Lab File ID:	<u>2220513A_13.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>RXJ</u>
Prep Date:	<u>05/11/22</u>	Analysis Date:	<u>05/13/22</u> Time: <u>1616</u>
Prep Batch:	<u>740685</u>	Analytical Batch:	<u>740969</u>
Prep Method:	<u>DOD QSM Table B-15 Prep</u>	Analytical Method:	<u>DOD QSM Table B-15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
763051-92-9	11CI-PF3OUdS	0.047	U	0.019	0.047	0.936
757124-72-4	4:2 Fluorotelomersulfonic acid	0.187	U	0.047	0.187	0.936
27619-97-2	6:2 Fluorotelomersulfonic acid	0.187	U	0.056	0.187	0.936
39108-34-4	8:2 Fluorotelomersulfonic acid	0.094	U	0.028	0.094	0.936
756426-58-1	9CI-PF3ONS	0.094	U	0.028	0.094	0.936
919005-14-4	ADONA	0.047	U	0.00936	0.047	0.936
13252-13-6	HFPO-DA	0.468	U	0.131	0.468	1.87
2991-50-6	NEtFOSAA	0.094	U	0.028	0.094	0.936
2355-31-9	NMeFOSAA	0.047	U	0.019	0.047	0.936
375-73-5	Perfluorobutanesulfonic acid	0.047	U	0.019	0.047	0.936
375-22-4	Perfluorobutanoic acid	0.094	U	0.037	0.094	0.936
335-77-3	Perfluorodecane sulfonic acid	0.094	U	0.028	0.094	0.936
335-76-2	Perfluorodecanoic acid	0.094	U	0.037	0.094	0.936
307-55-1	Perfluorododecanoic acid	0.047	U	0.019	0.047	0.936
375-92-8	Perfluoroheptanesulfonic acid	0.047	U	0.019	0.047	0.936
375-85-9	Perfluoroheptanoic acid	0.047	U	0.019	0.047	0.936
355-46-4	Perfluorohexanesulfonic acid	0.076	J	0.028	0.094	0.936
307-24-4	Perfluorohexanoic acid	0.029	J	0.019	0.047	0.936
68259-12-1	Perfluorononanesulfonic acid	0.094	U	0.028	0.094	0.936
375-95-1	Perfluorononanoic acid	0.047	U	0.019	0.047	0.936
754-91-6	Perfluorooctane Sulfonylamide	0.047	U	0.019	0.047	0.936
1763-23-1	Perfluorooctanesulfonic acid	0.125	J	0.047	0.187	0.936
335-67-1	Perfluorooctanoic acid	0.187	U	0.075	0.187	0.936
2706-91-4	Perfluoropentanesulfonic acid	0.047	U	0.019	0.047	0.936
2706-90-3	Perfluoropentanoic acid	0.047	U	0.019	0.047	0.936
376-06-7	Perfluorotetradecanoic acid	0.047	U	0.019	0.047	0.936
72629-94-8	Perfluorotridecanoic acid	0.094	U	0.028	0.094	0.936
2058-94-8	Perfluoroundecanoic acid	0.047	U	0.019	0.047	0.936

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI02-06-SB-0.0-0.5</u>
Collect Date:	<u>03/29/22</u> Time: <u>1400</u>	GCAL Sample ID:	<u>22204064515</u>
Matrix:	<u>Solid</u> % Moisture: <u>12.3</u>	Instrument ID:	<u>QQQ5</u>
Sample Amt:	<u>5.47</u> g	Lab File ID:	<u>2220508A_15.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>05/06/22</u>	Analysis Date:	<u>05/08/22</u> Time: <u>1429</u>
Prep Batch:	<u>740299</u>	Analytical Batch:	<u>740431</u>
Prep Method:	<u>DOD QSM Table B-15 Prep</u>	Analytical Method:	<u>DOD QSM Table B-15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
763051-92-9	11CI-PF3OUdS	0.046	U	0.018	0.046	0.914
757124-72-4	4:2 Fluorotelomersulfonic acid	0.183	U	0.046	0.183	0.914
27619-97-2	6:2 Fluorotelomersulfonic acid	0.183	U	0.055	0.183	0.914
39108-34-4	8:2 Fluorotelomersulfonic acid	0.091	U	0.027	0.091	0.914
756426-58-1	9CI-PF3ONS	0.091	U	0.027	0.091	0.914
919005-14-4	ADONA	0.046	U	0.00914	0.046	0.914
13252-13-6	HFPO-DA	0.457	U	0.128	0.457	1.83
2991-50-6	NETFOSAA	0.091	U	0.027	0.091	0.914
2355-31-9	NMeFOSAA	0.046	U	0.018	0.046	0.914
375-73-5	Perfluorobutanesulfonic acid	0.046	U	0.018	0.046	0.914
375-22-4	Perfluorobutanoic acid	0.132	J	0.037	0.091	0.914
335-77-3	Perfluorodecane sulfonic acid	0.091	U	0.027	0.091	0.914
335-76-2	Perfluorodecanoic acid	0.317	J	0.037	0.091	0.914
307-55-1	Perfluorododecanoic acid	0.125	J	0.018	0.046	0.914
375-92-8	Perfluoroheptanesulfonic acid	0.046	U	0.018	0.046	0.914
375-85-9	Perfluoroheptanoic acid	0.112	J	0.018	0.046	0.914
355-46-4	Perfluorohexanesulfonic acid	0.032	J	0.027	0.091	0.914
307-24-4	Perfluorohexanoic acid	0.070	J	0.018	0.046	0.914
68259-12-1	Perfluorononanesulfonic acid	0.091	U	0.027	0.091	0.914
375-95-1	Perfluorononanoic acid	0.185	J	0.018	0.046	0.914
754-91-6	Perfluorooctane Sulfonylamide	0.046	U	0.018	0.046	0.914
1763-23-1	Perfluorooctanesulfonic acid	0.944		0.046	0.183	0.914
335-67-1	Perfluorooctanoic acid	0.166	J	0.073	0.183	0.914
2706-91-4	Perfluoropentanesulfonic acid	0.046	U	0.018	0.046	0.914
2706-90-3	Perfluoropentanoic acid	0.103	J	0.018	0.046	0.914
376-06-7	Perfluorotetradecanoic acid	0.055	J	0.018	0.046	0.914
72629-94-8	Perfluorotridecanoic acid	0.033	J	0.027	0.091	0.914
2058-94-8	Perfluoroundecanoic acid	0.104	J	0.018	0.046	0.914

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No: <u>222040645</u>	Client Sample ID: <u>AOI02-05-SB-0.0-0.5</u>
Collect Date: <u>03/29/22</u> Time: <u>1350</u>	GCAL Sample ID: <u>22204064516</u>
Matrix: <u>Solid</u> % Moisture: <u>12.4</u>	Instrument ID: <u>QQQ3</u>
Sample Amt: <u>5.47</u> g	Lab File ID: <u>2220513A_15.d</u>
Injection Vol.: <u>2</u> (µL)	GC Column: <u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>RXJ</u>
Prep Date: <u>05/11/22</u>	Analysis Date: <u>05/13/22</u> Time: <u>1645</u>
Prep Batch: <u>740685</u>	Analytical Batch: <u>740969</u>
Prep Method: <u>DOD QSM Table B-15 Prep</u>	Analytical Method: <u>DOD QSM Table B-15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
763051-92-9	11CI-PF3OUdS	0.046	U	0.018	0.046	0.914
757124-72-4	4:2 Fluorotelomersulfonic acid	0.183	U	0.046	0.183	0.914
27619-97-2	6:2 Fluorotelomersulfonic acid	0.183	U	0.055	0.183	0.914
39108-34-4	8:2 Fluorotelomersulfonic acid	0.073	J	0.027	0.091	0.914
756426-58-1	9CI-PF3ONS	0.091	U	0.027	0.091	0.914
919005-14-4	ADONA	0.046	U	0.00914	0.046	0.914
13252-13-6	HFPO-DA	0.457	U	0.128	0.457	1.83
2991-50-6	NETFOSAA	0.051	J	0.027	0.091	0.914
2355-31-9	NMeFOSAA	0.046	U	0.018	0.046	0.914
375-73-5	Perfluorobutanesulfonic acid	0.046	U	0.018	0.046	0.914
375-22-4	Perfluorobutanoic acid	0.078	J	0.037	0.091	0.914
335-77-3	Perfluorodecane sulfonic acid	0.034	J	0.027	0.091	0.914
335-76-2	Perfluorodecanoic acid	0.831	J	0.037	0.091	0.914
307-55-1	Perfluorododecanoic acid	0.237	J	0.018	0.046	0.914
375-92-8	Perfluoroheptanesulfonic acid	0.046	U	0.018	0.046	0.914
375-85-9	Perfluoroheptanoic acid	0.132	J	0.018	0.046	0.914
355-46-4	Perfluorohexanesulfonic acid	0.048	J	0.027	0.091	0.914
307-24-4	Perfluorohexanoic acid	0.073	J	0.018	0.046	0.914
68259-12-1	Perfluorononanesulfonic acid	0.091	U	0.027	0.091	0.914
375-95-1	Perfluorononanoic acid	0.795	J	0.018	0.046	0.914
754-91-6	Perfluorooctane Sulfonylamide	0.046	U	0.018	0.046	0.914
1763-23-1	Perfluorooctanesulfonic acid	2.50		0.046	0.183	0.914
335-67-1	Perfluorooctanoic acid	0.347	J	0.073	0.183	0.914
2706-91-4	Perfluoropentanesulfonic acid	0.046	U	0.018	0.046	0.914
2706-90-3	Perfluoropentanoic acid	0.069	J	0.018	0.046	0.914
376-06-7	Perfluorotetradecanoic acid	0.099	J	0.018	0.046	0.914
72629-94-8	Perfluorotridecanoic acid	0.073	J	0.027	0.091	0.914
2058-94-8	Perfluoroundecanoic acid	0.343	J	0.018	0.046	0.914

FORM I SV-1

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No: <u>222040645</u>	Client Sample ID: <u>WV-FRB-02</u>
Collect Date: <u>04/01/22</u> Time: <u>1045</u>	GCAL Sample ID: <u>22204064506</u>
Matrix: <u>Water</u> % Moisture: <u>NA</u>	Instrument ID: <u>QQQ4</u>
Sample Amt: <u>120</u> mL	Lab File ID: <u>2220421A_22.d</u>
Injection Vol.: <u>2</u> (µL)	GC Column: <u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>SXA</u>
Prep Date: <u>04/18/22</u>	Analysis Date: <u>04/21/22</u> Time: <u>1350</u>
Prep Batch: <u>738671</u>	Analytical Batch: <u>739037</u>
Prep Method: <u>PFAS ID QSM B15 Prep</u>	Analytical Method: <u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.13	U	1.56	3.13	4.17
39108-34-4	8:2 Fluorotelomersulfonic acid	3.13	U	1.10	3.13	4.17
2991-50-6	NEtFOSAA	4.17	U	1.65	4.17	8.33
2355-31-9	NMeFOSAA	4.17	U	0.938	4.17	8.33
375-73-5	Perfluorobutanesulfonic acid	2.08	U	0.646	2.08	4.17
375-22-4	Perfluorobutanoic acid	3.65	U	1.58	3.65	4.17
335-76-2	Perfluorodecanoic acid	3.13	U	1.50	3.13	4.17
307-55-1	Perfluorododecanoic acid	3.13	U	1.35	3.13	4.17
375-85-9	Perfluoroheptanoic acid	3.13	U	1.21	3.13	4.17
355-46-4	Perfluorohexanesulfonic acid	3.13	U	1.29	3.13	4.17
307-24-4	Perfluorohexanoic acid	2.08	U	0.979	2.08	4.17
375-95-1	Perfluorononanoic acid	2.08	U	1.02	2.08	4.17
1763-23-1	Perfluorooctanesulfonic acid	2.08	U	0.792	2.08	4.17
335-67-1	Perfluorooctanoic acid	2.08	U	0.875	2.08	4.17
2706-90-3	Perfluoropentanoic acid	2.08	U	0.917	2.08	4.17
376-06-7	Perfluorotetradecanoic acid	3.13	U	1.19	3.13	4.17
72629-94-8	Perfluorotridecanoic acid	3.13	U	1.28	3.13	4.17
2058-94-8	Perfluoroundecanoic acid	3.13	U	1.29	3.13	4.17

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI02-07-SB-0.0-2.0</u>
Collect Date:	<u>03/29/22</u> Time: <u>1410</u>	GCAL Sample ID:	<u>22204064507</u>
Matrix:	<u>Solid</u> % Moisture: <u>11.3</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5.46</u> g	Lab File ID:	<u>2220418B_9.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/15/22</u>	Analysis Date:	<u>04/18/22</u> Time: <u>2049</u>
Prep Batch:	<u>738457</u>	Analytical Batch:	<u>738768</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.206	U	0.062	0.206	1.03
39108-34-4	8:2 Fluorotelomersulfonic acid	0.103	U	0.031	0.103	1.03
2991-50-6	NEtFOSAA	0.103	U	0.031	0.103	1.03
2355-31-9	NMeFOSAA	0.052	U	0.021	0.052	1.03
375-73-5	Perfluorobutanesulfonic acid	0.029	J	0.021	0.052	1.03
375-22-4	Perfluorobutanoic acid	0.083	J	0.041	0.103	1.03
335-76-2	Perfluorodecanoic acid	0.152	J	0.041	0.103	1.03
307-55-1	Perfluorododecanoic acid	0.064	J	0.021	0.052	1.03
375-85-9	Perfluoroheptanoic acid	0.108	J	0.021	0.052	1.03
355-46-4	Perfluorohexanesulfonic acid	0.057	J	0.031	0.103	1.03
307-24-4	Perfluorohexanoic acid	0.088	J	0.021	0.052	1.03
375-95-1	Perfluorononanoic acid	0.120	J	0.021	0.052	1.03
1763-23-1	Perfluorooctanesulfonic acid	0.922	J	0.052	0.206	1.03
335-67-1	Perfluorooctanoic acid	0.178	J	0.083	0.206	1.03
2706-90-3	Perfluoropentanoic acid	0.093	J	0.021	0.052	1.03
376-06-7	Perfluorotetradecanoic acid	0.025	J	0.021	0.052	1.03
72629-94-8	Perfluorotridecanoic acid	0.103	U	0.031	0.103	1.03
2058-94-8	Perfluoroundecanoic acid	0.058	J	0.021	0.052	1.03

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No: <u>222040645</u>	Client Sample ID: <u>AOI02-03-SB-0.0-2.0</u>
Collect Date: <u>03/24/22</u> Time: <u>0935</u>	GCAL Sample ID: <u>22204064508</u>
Matrix: <u>Solid</u> % Moisture: <u>20.2</u>	Instrument ID: <u>QQQ4</u>
Sample Amt: <u>5.26</u> g	Lab File ID: <u>2220418B_10.d</u>
Injection Vol.: <u>2</u> (µL)	GC Column: <u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>SXA</u>
Prep Date: <u>04/15/22</u>	Analysis Date: <u>04/18/22</u> Time: <u>2103</u>
Prep Batch: <u>738457</u>	Analytical Batch: <u>738768</u>
Prep Method: <u>PFAS ID QSM B15 Prep</u>	Analytical Method: <u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.238	U	0.071	0.238	1.19
39108-34-4	8:2 Fluorotelomersulfonic acid	0.119	U	0.036	0.119	1.19
2991-50-6	NEtFOSAA	0.119	U	0.036	0.119	1.19
2355-31-9	NMeFOSAA	0.060	U	0.024	0.060	1.19
375-73-5	Perfluorobutanesulfonic acid	0.060	U	0.024	0.060	1.19
375-22-4	Perfluorobutanoic acid	0.119	U	0.048	0.119	1.19
335-76-2	Perfluorodecanoic acid	0.067	J	0.048	0.119	1.19
307-55-1	Perfluorododecanoic acid	0.037	J	0.024	0.060	1.19
375-85-9	Perfluoroheptanoic acid	0.026	J	0.024	0.060	1.19
355-46-4	Perfluorohexanesulfonic acid	0.119	U	0.036	0.119	1.19
307-24-4	Perfluorohexanoic acid	0.050	J	0.024	0.060	1.19
375-95-1	Perfluorononanoic acid	0.060	U	0.024	0.060	1.19
1763-23-1	Perfluorooctanesulfonic acid	0.148	J	0.060	0.238	1.19
335-67-1	Perfluorooctanoic acid	0.238	U	0.095	0.238	1.19
2706-90-3	Perfluoropentanoic acid	0.049	J	0.024	0.060	1.19
376-06-7	Perfluorotetradecanoic acid	0.026	J	0.024	0.060	1.19
72629-94-8	Perfluorotridecanoic acid	0.119	U	0.036	0.119	1.19
2058-94-8	Perfluoroundecanoic acid	0.029	J	0.024	0.060	1.19

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI01-02-SB-0.0-1.0-D</u>
Collect Date:	<u>03/28/22</u> Time: <u>0910</u>	GCAL Sample ID:	<u>22204064509</u>
Matrix:	<u>Solid</u> % Moisture: <u>14.5</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5.28</u> g	Lab File ID:	<u>2220418B_11.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/15/22</u>	Analysis Date:	<u>04/18/22</u> Time: <u>2118</u>
Prep Batch:	<u>738457</u>	Analytical Batch:	<u>738768</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.221	U	0.066	0.221	1.11
39108-34-4	8:2 Fluorotelomersulfonic acid	0.111	U	0.033	0.111	1.11
2991-50-6	NEtFOSAA	0.111	U	0.033	0.111	1.11
2355-31-9	NMeFOSAA	0.055	U	0.022	0.055	1.11
375-73-5	Perfluorobutanesulfonic acid	0.055	U	0.022	0.055	1.11
375-22-4	Perfluorobutanoic acid	0.189	J	0.044	0.111	1.11
335-76-2	Perfluorodecanoic acid	0.281	J	0.044	0.111	1.11
307-55-1	Perfluorododecanoic acid	0.137	J	0.022	0.055	1.11
375-85-9	Perfluoroheptanoic acid	0.094	J	0.022	0.055	1.11
355-46-4	Perfluorohexanesulfonic acid	0.058	J	0.033	0.111	1.11
307-24-4	Perfluorohexanoic acid	0.118	J	0.022	0.055	1.11
375-95-1	Perfluorononanoic acid	0.134	J	0.022	0.055	1.11
1763-23-1	Perfluorooctanesulfonic acid	1.49		0.055	0.221	1.11
335-67-1	Perfluorooctanoic acid	0.092	J	0.089	0.221	1.11
2706-90-3	Perfluoropentanoic acid	0.316	J	0.022	0.055	1.11
376-06-7	Perfluorotetradecanoic acid	0.052	J	0.022	0.055	1.11
72629-94-8	Perfluorotridecanoic acid	0.040	J	0.033	0.111	1.11
2058-94-8	Perfluoroundecanoic acid	0.120	J	0.022	0.055	1.11

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI01-02-SB-0.0-1.0</u>
Collect Date:	<u>03/28/22</u> Time: <u>0910</u>	GCAL Sample ID:	<u>22204064510</u>
Matrix:	<u>Solid</u> % Moisture: <u>17.4</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5.46</u> g	Lab File ID:	<u>2220419A_5.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/15/22</u>	Analysis Date:	<u>04/19/22</u> Time: <u>0801</u>
Prep Batch:	<u>738457</u>	Analytical Batch:	<u>738977</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.222	U	0.067	0.222	1.11
39108-34-4	8:2 Fluorotelomersulfonic acid	0.111	U	0.033	0.111	1.11
2991-50-6	NEtFOSAA	0.111	U	0.033	0.111	1.11
2355-31-9	NMeFOSAA	0.055	U	0.022	0.055	1.11
375-73-5	Perfluorobutanesulfonic acid	0.055	U	0.022	0.055	1.11
375-22-4	Perfluorobutanoic acid	0.181	J	0.044	0.111	1.11
335-76-2	Perfluorodecanoic acid	0.195	J	0.044	0.111	1.11
307-55-1	Perfluorododecanoic acid	0.093	J	0.022	0.055	1.11
375-85-9	Perfluoroheptanoic acid	0.084	J	0.022	0.055	1.11
355-46-4	Perfluorohexanesulfonic acid	0.054	J	0.033	0.111	1.11
307-24-4	Perfluorohexanoic acid	0.112	J	0.022	0.055	1.11
375-95-1	Perfluorononanoic acid	0.135	J	0.022	0.055	1.11
1763-23-1	Perfluorooctanesulfonic acid	1.05	J	0.055	0.222	1.11
335-67-1	Perfluorooctanoic acid	0.222	U	0.089	0.222	1.11
2706-90-3	Perfluoropentanoic acid	0.321	J	0.022	0.055	1.11
376-06-7	Perfluorotetradecanoic acid	0.037	J	0.022	0.055	1.11
72629-94-8	Perfluorotridecanoic acid	0.111	U	0.033	0.111	1.11
2058-94-8	Perfluoroundecanoic acid	0.080	J	0.022	0.055	1.11

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI02-01-SB-0.0-2.0</u>
Collect Date:	<u>03/24/22</u> Time: <u>1340</u>	GCAL Sample ID:	<u>22204064511</u>
Matrix:	<u>Solid</u> % Moisture: <u>28.9</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5.15</u> g	Lab File ID:	<u>2220419A_6.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/15/22</u>	Analysis Date:	<u>04/19/22</u> Time: <u>0816</u>
Prep Batch:	<u>738457</u>	Analytical Batch:	<u>738977</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.273	U	0.082	0.273	1.37
39108-34-4	8:2 Fluorotelomersulfonic acid	0.137	U	0.041	0.137	1.37
2991-50-6	NEtFOSAA	0.137	U	0.041	0.137	1.37
2355-31-9	NMeFOSAA	0.068	U	0.027	0.068	1.37
375-73-5	Perfluorobutanesulfonic acid	0.056	J	0.027	0.068	1.37
375-22-4	Perfluorobutanoic acid	0.068	J	0.055	0.137	1.37
335-76-2	Perfluorodecanoic acid	0.137	U	0.055	0.137	1.37
307-55-1	Perfluorododecanoic acid	0.068	U	0.027	0.068	1.37
375-85-9	Perfluoroheptanoic acid	0.050	J	0.027	0.068	1.37
355-46-4	Perfluorohexanesulfonic acid	1.39		0.041	0.137	1.37
307-24-4	Perfluorohexanoic acid	0.259	J	0.027	0.068	1.37
375-95-1	Perfluorononanoic acid	0.068	U	0.027	0.068	1.37
1763-23-1	Perfluorooctanesulfonic acid	4.89		0.068	0.273	1.37
335-67-1	Perfluorooctanoic acid	0.273	U	0.109	0.273	1.37
2706-90-3	Perfluoropentanoic acid	0.170	J	0.027	0.068	1.37
376-06-7	Perfluorotetradecanoic acid	0.068	U	0.027	0.068	1.37
72629-94-8	Perfluorotridecanoic acid	0.137	U	0.041	0.137	1.37
2058-94-8	Perfluoroundecanoic acid	0.068	U	0.027	0.068	1.37

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No: <u>222040645</u>	Client Sample ID: <u>AOI02-01-SB-14.5-16.5</u>
Collect Date: <u>03/24/22</u> Time: <u>1410</u>	GCAL Sample ID: <u>22204064512</u>
Matrix: <u>Solid</u> % Moisture: <u>23.3</u>	Instrument ID: <u>QQQ4</u>
Sample Amt: <u>5.38</u> g	Lab File ID: <u>2220418B_14.d</u>
Injection Vol.: <u>2</u> (µL)	GC Column: <u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>SXA</u>
Prep Date: <u>04/15/22</u>	Analysis Date: <u>04/18/22</u> Time: <u>2133</u>
Prep Batch: <u>738457</u>	Analytical Batch: <u>738768</u>
Prep Method: <u>PFAS ID QSM B15 Prep</u>	Analytical Method: <u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.242	U	0.073	0.242	1.21
39108-34-4	8:2 Fluorotelomersulfonic acid	0.121	U	0.036	0.121	1.21
2991-50-6	NEtFOSAA	0.121	U	0.036	0.121	1.21
2355-31-9	NMeFOSAA	0.061	U	0.024	0.061	1.21
375-73-5	Perfluorobutanesulfonic acid	0.061	U	0.024	0.061	1.21
375-22-4	Perfluorobutanoic acid	0.121	U	0.048	0.121	1.21
335-76-2	Perfluorodecanoic acid	0.121	U	0.048	0.121	1.21
307-55-1	Perfluorododecanoic acid	0.061	U	0.024	0.061	1.21
375-85-9	Perfluoroheptanoic acid	0.061	U	0.024	0.061	1.21
355-46-4	Perfluorohexanesulfonic acid	0.121	U	0.036	0.121	1.21
307-24-4	Perfluorohexanoic acid	0.034	J	0.024	0.061	1.21
375-95-1	Perfluorononanoic acid	0.061	U	0.024	0.061	1.21
1763-23-1	Perfluorooctanesulfonic acid	0.088	J	0.061	0.242	1.21
335-67-1	Perfluorooctanoic acid	0.242	U	0.097	0.242	1.21
2706-90-3	Perfluoropentanoic acid	0.061	U	0.024	0.061	1.21
376-06-7	Perfluorotetradecanoic acid	0.061	U	0.024	0.061	1.21
72629-94-8	Perfluorotridecanoic acid	0.121	U	0.036	0.121	1.21
2058-94-8	Perfluoroundecanoic acid	0.061	U	0.024	0.061	1.21

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI01-02-SB-25.5-27.5</u>
Collect Date:	<u>03/28/22</u> Time: <u>1105</u>	GCAL Sample ID:	<u>22204064513</u>
Matrix:	<u>Solid</u> % Moisture: <u>32.9</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5.36</u> g	Lab File ID:	<u>2220418B_15.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/15/22</u>	Analysis Date:	<u>04/18/22</u> Time: <u>2148</u>
Prep Batch:	<u>738457</u>	Analytical Batch:	<u>738768</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.278	U	0.083	0.278	1.39
39108-34-4	8:2 Fluorotelomersulfonic acid	0.139	U	0.042	0.139	1.39
2991-50-6	NEtFOSAA	0.139	U	0.042	0.139	1.39
2355-31-9	NMeFOSAA	0.070	U	0.028	0.070	1.39
375-73-5	Perfluorobutanesulfonic acid	0.070	U	0.028	0.070	1.39
375-22-4	Perfluorobutanoic acid	0.139	U	0.056	0.139	1.39
335-76-2	Perfluorodecanoic acid	0.139	U	0.056	0.139	1.39
307-55-1	Perfluorododecanoic acid	0.070	U	0.028	0.070	1.39
375-85-9	Perfluoroheptanoic acid	0.070	U	0.028	0.070	1.39
355-46-4	Perfluorohexanesulfonic acid	0.139	U	0.042	0.139	1.39
307-24-4	Perfluorohexanoic acid	0.070	U	0.028	0.070	1.39
375-95-1	Perfluorononanoic acid	0.070	U	0.028	0.070	1.39
1763-23-1	Perfluorooctanesulfonic acid	0.278	U	0.070	0.278	1.39
335-67-1	Perfluorooctanoic acid	0.278	U	0.111	0.278	1.39
2706-90-3	Perfluoropentanoic acid	0.070	U	0.028	0.070	1.39
376-06-7	Perfluorotetradecanoic acid	0.070	U	0.028	0.070	1.39
72629-94-8	Perfluorotridecanoic acid	0.139	U	0.042	0.139	1.39
2058-94-8	Perfluoroundecanoic acid	0.070	U	0.028	0.070	1.39

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No: <u>222040645</u>	Client Sample ID: <u>AOI02-03-SB-16.5-18.5</u>
Collect Date: <u>03/24/22</u> Time: <u>1005</u>	GCAL Sample ID: <u>22204064514</u>
Matrix: <u>Solid</u> % Moisture: <u>29.9</u>	Instrument ID: <u>QQQ4</u>
Sample Amt: <u>5.31</u> g	Lab File ID: <u>2220418B_17.d</u>
Injection Vol.: <u>2</u> (µL)	GC Column: <u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>SXA</u>
Prep Date: <u>04/15/22</u>	Analysis Date: <u>04/18/22</u> Time: <u>2218</u>
Prep Batch: <u>738457</u>	Analytical Batch: <u>738768</u>
Prep Method: <u>PFAS ID QSM B15 Prep</u>	Analytical Method: <u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.269	U	0.081	0.269	1.34
39108-34-4	8:2 Fluorotelomersulfonic acid	0.134	U	0.040	0.134	1.34
2991-50-6	NEtFOSAA	0.134	U	0.040	0.134	1.34
2355-31-9	NMeFOSAA	0.067	U	0.027	0.067	1.34
375-73-5	Perfluorobutanesulfonic acid	0.067	U	0.027	0.067	1.34
375-22-4	Perfluorobutanoic acid	0.134	U	0.054	0.134	1.34
335-76-2	Perfluorodecanoic acid	0.134	U	0.054	0.134	1.34
307-55-1	Perfluorododecanoic acid	0.067	U	0.027	0.067	1.34
375-85-9	Perfluoroheptanoic acid	0.067	U	0.027	0.067	1.34
355-46-4	Perfluorohexanesulfonic acid	0.134	U	0.040	0.134	1.34
307-24-4	Perfluorohexanoic acid	0.067	U	0.027	0.067	1.34
375-95-1	Perfluorononanoic acid	0.067	U	0.027	0.067	1.34
1763-23-1	Perfluorooctanesulfonic acid	0.067	J	0.067	0.269	1.34
335-67-1	Perfluorooctanoic acid	0.269	U	0.108	0.269	1.34
2706-90-3	Perfluoropentanoic acid	0.067	U	0.027	0.067	1.34
376-06-7	Perfluorotetradecanoic acid	0.067	U	0.027	0.067	1.34
72629-94-8	Perfluorotridecanoic acid	0.134	U	0.040	0.134	1.34
2058-94-8	Perfluoroundecanoic acid	0.067	U	0.027	0.067	1.34

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI02-06-SB-0.0-0.5</u>
Collect Date:	<u>03/29/22</u> Time: <u>1400</u>	GCAL Sample ID:	<u>22204064515</u>
Matrix:	<u>Solid</u> % Moisture: <u>12.3</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5.46</u> g	Lab File ID:	<u>2220418B_18.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/15/22</u>	Analysis Date:	<u>04/18/22</u> Time: <u>2233</u>
Prep Batch:	<u>738457</u>	Analytical Batch:	<u>738768</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.209	U	0.063	0.209	1.04
39108-34-4	8:2 Fluorotelomersulfonic acid	0.040	J	0.031	0.104	1.04
2991-50-6	NEtFOSAA	0.104	U	0.031	0.104	1.04
2355-31-9	NMeFOSAA	0.052	U	0.021	0.052	1.04
375-73-5	Perfluorobutanesulfonic acid	0.033	J	0.021	0.052	1.04
375-22-4	Perfluorobutanoic acid	0.159	J	0.042	0.104	1.04
335-76-2	Perfluorodecanoic acid	0.527	J	0.042	0.104	1.04
307-55-1	Perfluorododecanoic acid	0.232	J	0.021	0.052	1.04
375-85-9	Perfluoroheptanoic acid	0.138	J	0.021	0.052	1.04
355-46-4	Perfluorohexanesulfonic acid	0.050	J	0.031	0.104	1.04
307-24-4	Perfluorohexanoic acid	0.088	J	0.021	0.052	1.04
375-95-1	Perfluorononanoic acid	0.265	J	0.021	0.052	1.04
1763-23-1	Perfluorooctanesulfonic acid	1.49		0.052	0.209	1.04
335-67-1	Perfluorooctanoic acid	0.213	J	0.084	0.209	1.04
2706-90-3	Perfluoropentanoic acid	0.114	J	0.021	0.052	1.04
376-06-7	Perfluorotetradecanoic acid	0.086	J	0.021	0.052	1.04
72629-94-8	Perfluorotridecanoic acid	0.052	J	0.031	0.104	1.04
2058-94-8	Perfluoroundecanoic acid	0.207	J	0.021	0.052	1.04

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI02-05-SB-0.0-0.5</u>
Collect Date:	<u>03/29/22</u> Time: <u>1350</u>	GCAL Sample ID:	<u>22204064516</u>
Matrix:	<u>Solid</u> % Moisture: <u>12.4</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5.28</u> g	Lab File ID:	<u>2220418B_19.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/15/22</u>	Analysis Date:	<u>04/18/22</u> Time: <u>2248</u>
Prep Batch:	<u>738457</u>	Analytical Batch:	<u>738768</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.216	U	0.065	0.216	1.08
39108-34-4	8:2 Fluorotelomersulfonic acid	0.050	J	0.032	0.108	1.08
2991-50-6	NEtFOSAA	0.041	J	0.032	0.108	1.08
2355-31-9	NMeFOSAA	0.054	U	0.022	0.054	1.08
375-73-5	Perfluorobutanesulfonic acid	0.054	U	0.022	0.054	1.08
375-22-4	Perfluorobutanoic acid	0.108	U	0.043	0.108	1.08
335-76-2	Perfluorodecanoic acid	0.853	J	0.043	0.108	1.08
307-55-1	Perfluorododecanoic acid	0.284	J	0.022	0.054	1.08
375-85-9	Perfluoroheptanoic acid	0.077	J	0.022	0.054	1.08
355-46-4	Perfluorohexanesulfonic acid	0.108	U	0.032	0.108	1.08
307-24-4	Perfluorohexanoic acid	0.038	J	0.022	0.054	1.08
375-95-1	Perfluorononanoic acid	0.588	J	0.022	0.054	1.08
1763-23-1	Perfluorooctanesulfonic acid	2.22		0.054	0.216	1.08
335-67-1	Perfluorooctanoic acid	0.227	J	0.086	0.216	1.08
2706-90-3	Perfluoropentanoic acid	0.036	J	0.022	0.054	1.08
376-06-7	Perfluorotetradecanoic acid	0.099	J	0.022	0.054	1.08
72629-94-8	Perfluorotridecanoic acid	0.084	J	0.032	0.108	1.08
2058-94-8	Perfluoroundecanoic acid	0.439	J	0.022	0.054	1.08

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No: <u>222040645</u>	Client Sample ID: <u>AOI02-03-SB-0.0-2.0</u>
Collect Date: <u>03/24/22</u> Time: <u>0935</u>	GCAL Sample ID: <u>22204064508</u>
Matrix: <u>Solid</u> % Moisture: <u>20.2</u>	Instrument ID: <u>QQQ5</u>
Sample Amt: <u>5.29</u> g	Lab File ID: <u>2220508A_8.d</u>
Injection Vol.: <u>2</u> (µL)	GC Column: <u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>SXA</u>
Prep Date: <u>05/06/22</u>	Analysis Date: <u>05/08/22</u> Time: <u>1246</u>
Prep Batch: <u>740299</u>	Analytical Batch: <u>740431</u>
Prep Method: <u>DOD QSM Table B-15 Prep</u>	Analytical Method: <u>DOD QSM Table B-15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
763051-92-9	11CI-PF3OUdS	0.047	U	0.019	0.047	0.945
757124-72-4	4:2 Fluorotelomersulfonic acid	0.189	U	0.047	0.189	0.945
27619-97-2	6:2 Fluorotelomersulfonic acid	0.189	U	0.057	0.189	0.945
39108-34-4	8:2 Fluorotelomersulfonic acid	0.095	U	0.028	0.095	0.945
756426-58-1	9CI-PF3ONS	0.095	U	0.028	0.095	0.945
919005-14-4	ADONA	0.047	U	0.00945	0.047	0.945
13252-13-6	HFPO-DA	0.473	U	0.132	0.473	1.89
2991-50-6	NETFOSAA	0.095	U	0.028	0.095	0.945
2355-31-9	NMeFOSAA	0.047	U	0.019	0.047	0.945
375-73-5	Perfluorobutanesulfonic acid	0.047	U	0.019	0.047	0.945
375-22-4	Perfluorobutanoic acid	0.095	U	0.038	0.095	0.945
335-77-3	Perfluorodecane sulfonic acid	0.095	U	0.028	0.095	0.945
335-76-2	Perfluorodecanoic acid	0.077	J	0.038	0.095	0.945
307-55-1	Perfluorododecanoic acid	0.047	U	0.019	0.047	0.945
375-92-8	Perfluoroheptanesulfonic acid	0.047	U	0.019	0.047	0.945
375-85-9	Perfluoroheptanoic acid	0.034	J	0.019	0.047	0.945
355-46-4	Perfluorohexanesulfonic acid	0.095	U	0.028	0.095	0.945
307-24-4	Perfluorohexanoic acid	0.069	J	0.019	0.047	0.945
68259-12-1	Perfluorononanesulfonic acid	0.095	U	0.028	0.095	0.945
375-95-1	Perfluorononanoic acid	0.049	J	0.019	0.047	0.945
754-91-6	Perfluorooctane Sulfonylamide	0.047	U	0.019	0.047	0.945
1763-23-1	Perfluorooctanesulfonic acid	0.223	J	0.047	0.189	0.945
335-67-1	Perfluorooctanoic acid	0.189	U	0.076	0.189	0.945
2706-91-4	Perfluoropentanesulfonic acid	0.047	U	0.019	0.047	0.945
2706-90-3	Perfluoropentanoic acid	0.089	J	0.019	0.047	0.945
376-06-7	Perfluorotetradecanoic acid	0.047	U	0.019	0.047	0.945
72629-94-8	Perfluorotridecanoic acid	0.095	U	0.028	0.095	0.945
2058-94-8	Perfluoroundecanoic acid	0.047	U	0.019	0.047	0.945

FORM I SV-1

I - GENERAL CHEMISTRY ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI01-02-SB-0.0-1.0</u>
Collect Date:	<u>03/28/22 0900</u>	LAB Sample ID:	<u>22204064501</u>
Matrix:	<u>Solid</u>	Instrument ID:	<u>PH01</u>
% Solids:	<u>NA</u>	Analyst:	<u>LMH</u>
Sample Amt:	<u>NA</u>	Lab File ID:	<u>NA</u>
Prep Vol.:	<u>NA</u>	Dilution Factor:	<u>1</u>
Prep Date:	<u>NA</u>	Analysis Date:	<u>04/08/22 1339</u>
Prep Batch:	<u>NA</u>	Analytical Batch:	<u>737979</u>
Prep Method:	<u>NA</u>	Analytical Method:	<u>EPA 9045D</u>

<i>ANALYTE</i>	<i>RESULT</i>	<i>UNITS</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>
pH	8.10	pH UNITS		1.00	1.00	1.00

I - GENERAL CHEMISTRY ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI02-01-SB-14.5-16.5</u>
Collect Date:	<u>03/24/22 1425</u>	LAB Sample ID:	<u>22204064502</u>
Matrix:	<u>Solid</u>	Instrument ID:	<u>PH01</u>
% Solids:	<u>NA</u>	Analyst:	<u>LMH</u>
Sample Amt:	<u>NA</u>	Lab File ID:	<u>NA</u>
Prep Vol.:	<u>NA</u>	Dilution Factor:	<u>1</u>
Prep Date:	<u>NA</u>	Analysis Date:	<u>04/08/22 1339</u>
Prep Batch:	<u>NA</u>	Analytical Batch:	<u>737979</u>
Prep Method:	<u>NA</u>	Analytical Method:	<u>EPA 9045D</u>

<i>ANALYTE</i>	<i>RESULT</i>	<i>UNITS</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>
pH	7.98	pH UNITS		1.00	1.00	1.00

I - GENERAL CHEMISTRY ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI01-02-SB-0.0-1.0</u>
Collect Date:	<u>03/28/22 0900</u>	LAB Sample ID:	<u>22204064501</u>
Matrix:	<u>Solid</u>	Instrument ID:	<u>TOC7</u>
% Solids:	<u>NA</u>	Analyst:	<u>JGD</u>
Sample Amt:	<u>NA</u>	Lab File ID:	<u>NA</u>
Prep Vol.:	<u>NA</u>	Dilution Factor:	<u>1</u>
Prep Date:	<u>NA</u>	Analysis Date:	<u>04/14/22 1208</u>
Prep Batch:	<u>NA</u>	Analytical Batch:	<u>738467</u>
Prep Method:	<u>NA</u>	Analytical Method:	<u>EPA 9060A</u>

<i>ANALYTE</i>	<i>RESULT</i>	<i>UNITS</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>
Total Organic Carbon	6290	mg/kg		153	350	500

I - GENERAL CHEMISTRY ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI02-01-SB-14.5-16.5</u>
Collect Date:	<u>03/24/22 1425</u>	LAB Sample ID:	<u>22204064502</u>
Matrix:	<u>Solid</u>	Instrument ID:	<u>TOC7</u>
% Solids:	<u>NA</u>	Analyst:	<u>JGD</u>
Sample Amt:	<u>NA</u>	Lab File ID:	<u>NA</u>
Prep Vol.:	<u>NA</u>	Dilution Factor:	<u>1</u>
Prep Date:	<u>NA</u>	Analysis Date:	<u>04/14/22 1221</u>
Prep Batch:	<u>NA</u>	Analytical Batch:	<u>738467</u>
Prep Method:	<u>NA</u>	Analytical Method:	<u>EPA 9060A</u>

<i>ANALYTE</i>	<i>RESULT</i>	<i>UNITS</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>
Total Organic Carbon	176	mg/kg	J	153	350	500

I - GENERAL CHEMISTRY ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>AOI02-01-SB-14.5-16.5-D</u>
Collect Date:	<u>03/24/22 1425</u>	LAB Sample ID:	<u>22204064505</u>
Matrix:	<u>Solid</u>	Instrument ID:	<u>TOC7</u>
% Solids:	<u>NA</u>	Analyst:	<u>JGD</u>
Sample Amt:	<u>NA</u>	Lab File ID:	<u>NA</u>
Prep Vol.:	<u>NA</u>	Dilution Factor:	<u>1</u>
Prep Date:	<u>NA</u>	Analysis Date:	<u>04/14/22 1354</u>
Prep Batch:	<u>NA</u>	Analytical Batch:	<u>738467</u>
Prep Method:	<u>NA</u>	Analytical Method:	<u>EPA 9060A</u>

<i>ANALYTE</i>	<i>RESULT</i>	<i>UNITS</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>
Total Organic Carbon	346	mg/kg	J	153	350	500

DATA VALIDATION WORKSHEET

Per- and Polyfluorinated Compounds by LC/MS/MS

Reviewer: Tyler Bryant
Date: 6/21/2022
DV Level: II III IV

Project Name: Waiawa
Project Number: 60552172
Laboratory: Pace Gulf Coast
221081365 + 222040507 +
SDG No.: 645 + 903
Test Name: PFAS

Review Document:

National Functional Guidelines for Organic Data Review
 DOD QSM 5.3, Table B-15

1.0 Laboratory Deliverables

		Yes	No	NA
1.1	Do Chain-of-Custody forms list all samples that were analyzed?	X		
1.2	Are all Chain-of-Custody forms signed, indicating sample chain-of-custody was maintained?	X		
1.3	Do sample preservation, collection and storage condition meet method requirement? 4±2°C		X	
	If samples were received with the cooler temperature exceeding 6°C, then flag J(+)/UJ(-). If >20°C, J(+)/X(-)			
1.4	Do the traffic Reports, chain-of-custody, and lab narrative indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data?		X	

Notes: Several coolers containing field samples in SDG 222040507 were received at a temperature exceeding the QC limit of 6°C.

2.0 Holding Times

		Yes	No	NA
2.1	Have any technical holding times, determined from date of sampling to date of analysis, been exceeded? If yes, J(+)/UJ(-). Extraction: 14 days; Analysis: 40 days.	X		
2.2	Have any technical holding time grossly (twice the holding time) been exceeded? If yes, J(+)/X(-) .		X	

Notes: 22204064507-16 were initially not prepared as ISM samples by the lab, they were re-extracted out of holding time using ISM as per the QAPP.

3.0 Blanks (Laboratory and Field)

		Yes	No	NA
3.1	Were method blanks (MB) prepared at the appropriate frequency (one per 20 samples, per batch per matrix?)	X		
3.2	Do any instrument/method blanks have positive results?	X		
3.3	Do any field equipment blanks/trip blanks have positive results?		X	

Notes: Four instrument blanks displayed concentrations for target analytes greater than the detection limit.

4.0 Initial and Continuing Calibration

		Yes	No	NA
4.1	For each calibration standard, was each analyte calculated within 70%-130% of the true value, RSD ≤20%, or $r^2 \geq 0.99$?	X		
4.2	Was the retention time window for each analyte and surrogate set using the midpoint standard of the curve?	X		
4.3	Was the relative retention time of each analyte within laboratory control limits?	X		
4.4	Was a second source calibration verification (ICV) analyzed for each calibration curve? If no, flag "X".	X		
4.5	Were continuing calibration standards analyzed every ten samples and at the end of the sequence? If no, flag "X".	X		
4.6	For each calibration standard used for quantitation, was the S/N Ratio ≥10:1 and for all analytes with promulgated standards was the confirmation ion at a S/N at 3:1? (Table B-15, non-DW matrices)			X
For initial calibration: 70%-130%, RSD ≤20%, or $r^2 \geq 0.99$. J(+)/UJ(-)				
For ICV/CCV: %D>30%, Positive: J(+), Negative:J(+)/UJ(-).				

Notes:

5.0 Laboratory Control Sample (LCS)

		Yes	No	NA
5.1	Were LCS/LCSD analyzed at required frequency (one per 20 samples per batch) for each matrix?	X		
5.2	Are there any %R for LCS/LCSD recoveries outside the laboratory QC limits(lab default is 70%-130%)?		X	
	Action: If Yes, for %R >130, J+(+) only; for %R 30%-70%, J-(-)/UJ(-), and %R<30%, J-(-)/X(-).			
5.3	Are there any RPD for LCS/LCSD recoveries outside the QC limits? If Yes, J(+) only.		X	

Notes:

6.0 Surrogate Recovery/Internal Standard Area Count/Extracted Internal Standards (For Table B-15 Matrices)

		Yes	No	NA
6.1	Are recoveries within acceptance criteria for all samples and method blanks?		X	
6.2	If No in Section 6.1, are these sample(s) or method blank(s) reanalyzed?	X		
6.3	If No in Section 6.2, is any sample dilution factor greater than 10? (recoveries may be diluted out.)		X	
	<10% low high			
	Positives J- J- J+			
	Non-detects X UJ None			
6.4	Has the Extracted/Injected Standard area count been met for all quality control and field samples? (50%-150%) If		X	
	<20% low high			
	Positives J+ J+ J-			
	Non-detects X UJ None			

Notes: Several field and QC samples displayed EIS area counts outside QC limits.

7.0 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

		Yes	No	NA
7.1	Were matrix spikes analyzed at required frequency (one per 20 samples per batch) for each matrix?	X		
7.2	Are there any %R for matrix spike and matrix spike duplicate recoveries outside the laboratory QC limits?		X	
	%Recovery: <30% 30%-70% >130%			
	Action: J-(+)/X(-) J-(+)/UJ(-) J+(+) only			
7.3	Are there any RPD for matrix spike and matrix spike duplicate recoveries outside the QC limits? ($\pm 30\%$)	X		
	Action: No action is required based on MS/MSD failure alone. Note in the report and use professional judgement.			

Notes: The MS/MSD performed on parent sample AOI01-01-SB-0.0-2.0 displayed RPD exceedances for multiple analytes.

8.0 Field/Laboratory Duplicates

		Yes	No	NA
8.1	Acceptable field duplicate results? If no, J(+) parent sample/field duplicate only.		X	

Notes: The field duplicate pairs collected at three separate sites displayed positive results in one sample and non-detect result in the associated duplicate sample.

9.0 Instrument Sensitivity Check (ISC)

		Yes	No	NA
9.1	Was an instrument sensitivity check analyzed prior to analysis and every 12 hours? If not X(+/-)	X		
9.2	Were analyte concentrations at the LOQ for the ISC and within $\pm 30\%$ of their true values? If not (J+)/UJ(-)	X		

Notes:

10.0 Compound Identification/Tune and Detection Limit Verification

		Yes	No	NA
10.1	Do detection limits meet those required by the project QAPP and were they properly adjusted for dilution factors and moisture (including adjustment of wet weight aliquot)?	X		
10.2	Was a mass calibration performed daily prior to analysis?	X		

Notes:

11.0 Data Completeness

		Yes	No	NA
11.1	Is % completeness within the control limits? (Control limit 95% _{aq} and 90% _{so})	X		
11.1.1	Number of samples: <u>36</u>			
11.1.2	Number of target compounds in each analysis: <u>18</u>			
11.1.3	Number of results "X" or "R" flagged results: <u>0</u>			

LC-QQQ Instrument Run Log

Instrument: QQQ 3
Instrument Batch: 2210816B.batch.bin
Current ICAL Batch: 2210813BCAL
ICAL Std (ID/Exp): 019-13-5 2/13/22
ICV Std (ID/Exp): 019-9-2 2/2/22

LIMS Batch (HBN): 718930
20mM NH4OAc (ID/Exp): 019-14-2 8/18/21 12:45
Methanol (ID/Exp): 2130577 5/31/26
EIS Mix (ID/Exp): 019-12-5 1/19/22
IIS Mix (ID/Exp): 019-12-6 2/9/22

Acquisition time	Data File	Name	Type	Dilution	Comment
08/13/21 16:04:44	2210813B_1.d	1201	Cal	1	ADA,QQQ3;ICAL
08/13/21 16:19:29	2210813B_2.d	1202	Cal	1	ADA,QQQ3;ICAL
08/13/21 16:34:05	2210813B_3.d	1203	Cal	1	ADA,QQQ3;ICAL
08/13/21 16:48:42	2210813B_4.d	1204	Cal	1	ADA,QQQ3;ICAL
08/13/21 17:03:18	2210813B_5.d	1205	Cal	1	ADA,QQQ3;ICAL
08/13/21 17:17:55	2210813B_6.d	1206	Cal	1	ADA,QQQ3;ICAL
08/13/21 17:32:31	2210813B_7.d	1207	Cal	1	ADA,QQQ3;ICAL
08/13/21 17:55:36	2210813B_8.d	1500	Blank	1	ADA,QQQ3;ICAL
08/13/21 18:10:22	2210813B_9.d	1600	Sample	1	ADA,QQQ3;ICAL
08/13/21 18:25:01	2210813B_10.d	1450	QC	1	ADA,QQQ3;ICAL
08/16/21 23:04:43	2210816B_1.d	1500	Sample	1	ADA,QQQ3;CAL blank
08/16/21 23:19:20	2210816B_2.d	1450	QC	1	ADA,QQQ3;CCV
08/16/21 23:33:59	2210816B_3.d	2227758	Sample	1	ADA,QQQ3;718820
08/16/21 23:48:52	2210816B_4.d	2227759	QC	1	ADA,QQQ3;718820
08/17/21 00:03:28	2210816B_5.d	2227760	QC	1	ADA,QQQ3;718820
08/17/21 00:18:04	2210816B_6.d	22108143001	Sample	1	ADA,QQQ3;718820
08/17/21 00:32:41	2210816B_7.d	22108143002*5	Sample	5	ADA,QQQ3;718820
08/17/21 00:47:19	2210816B_8.d	22108143002	Sample	1	ADA,QQQ3;718820
08/17/21 01:01:56	2210816B_9.d	22108136501	Sample	1	ADA,QQQ3;718820
08/17/21 01:16:33	2210816B_10.d	22108136502	Sample	1	ADA,QQQ3;718820
08/17/21 01:31:11	2210816B_11.d	22108136601	Sample	1	ADA,QQQ3;718820
08/17/21 01:45:47	2210816B_12.d	22108136701	Sample	1	ADA,QQQ3;718820
08/17/21 02:00:25	2210816B_13.d	22108136702	Sample	1	ADA,QQQ3;718820
08/17/21 02:15:01	2210816B_14.d	22108136801	Sample	1	ADA,QQQ3;718820
08/17/21 02:29:37	2210816B_15.d	22108143101	Sample	1	ADA,QQQ3;718820
08/17/21 02:44:14	2210816B_16.d	1400	QC	1	ADA,QQQ3;CCV
08/17/21 02:59:06	2210816B_17.d	22108143102	Sample	1	ADA,QQQ3;718820
08/17/21 03:14:03	2210816B_18.d	22108143103	Sample	1	ADA,QQQ3;718820
08/17/21 03:28:40	2210816B_19.d	22108143104	Sample	1	ADA,QQQ3;718820
08/17/21 03:43:16	2210816B_20.d	22108143105	Sample	1	ADA,QQQ3;718820
08/17/21 03:57:53	2210816B_21.d	22108143106	Sample	1	ADA,QQQ3;718820
08/17/21 04:12:36	2210816B_22.d	22108143108	Sample	1	ADA,QQQ3;718820
08/17/21 04:27:13	2210816B_23.d	22108143109	Sample	1	ADA,QQQ3;718820
08/17/21 04:41:49	2210816B_24.d	22108143112	Sample	1	ADA,QQQ3;718820
08/17/21 04:56:25	2210816B_25.d	22108143113	Sample	1	ADA,QQQ3;718820
08/17/21 05:11:02	2210816B_26.d	1400	QC	1	ADA,QQQ3;CCV
08/17/21 05:25:55	2210816B_27.d	22107317510	Sample	1	ADA,QQQ3;718458
08/17/21 05:40:51	2210816B_28.d	22108090903	Sample	1	ADA,QQQ3;718458
08/17/21 05:55:27	2210816B_29.d	22108090904	QC	1	ADA,QQQ3;718458
08/17/21 06:10:04	2210816B_30.d	22108090905	QC	1	ADA,QQQ3;718458
08/17/21 06:24:40	2210816B_31.d	22108090908	Sample	1	ADA,QQQ3;718458
08/17/21 06:39:17	2210816B_32.d	22108090909	Sample	1	ADA,QQQ3;718458
08/17/21 06:53:53	2210816B_33.d	22108090910	Sample	1	ADA,QQQ3;718458
08/17/21 07:08:29	2210816B_34.d	22108090911	Sample	1	ADA,QQQ3;718458
08/17/21 07:23:07	2210816B_35.d	22108090912	Sample	1	ADA,QQQ3;718458
08/17/21 07:37:44	2210816B_36.d	22108105301	Sample	1	ADA,QQQ3;718458
08/17/21 07:52:27	2210816B_37.d	1400	QC	1	ADA,QQQ3;CCV
08/17/21 08:09:58	2210816B_38.d	22108134001*5	Sample	5	ADA,QQQ3;718856
08/17/21 08:24:44	2210816B_39.d	22108134002*5	Sample	5	ADA,QQQ3;718856
08/17/21 08:40:02	2210816B_40.d	22108134003*5	Sample	5	ADA,QQQ3;718856
08/17/21 08:54:39	2210816B_41.d	2226917	QC	1	ADA,QQQ3;718668
08/17/21 09:09:15	2210816B_42.d	1400	QC	1	ADA,QQQ3;CCV

ORGANICS INITIAL CALIBRATION VERIFICATION

Report No: 221081365 Instrument ID: QQQ3
 Analysis Date: 08/13/2021 18:10 Lab File ID: 2210813B_9.d
 Analytical Method: _____ Analytical Batch: 718797

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>% REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	10000	9790	98	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	10100	9970	99	70	130	
NEtFOSAA	ng/L	10000	9760	98	70	130	
NMeFOSAA	ng/L	10000	9640	96	70	130	
Perfluorobutanoic acid	ng/L	10000	9640	96	70	130	
Perfluorobutanesulfonic acid	ng/L	10000	9610	96	70	130	
Perfluorodecanoic acid	ng/L	10000	9760	98	70	130	
Perfluorododecanoic acid	ng/L	10000	9150	91	70	130	
Perfluoroheptanoic acid	ng/L	10000	9720	97	70	130	
Perfluorohexanoic acid	ng/L	10100	9520	94	70	130	
Perfluorohexanesulfonic acid	ng/L	10000	9400	94	70	130	
Perfluorononanoic acid	ng/L	10000	10300	103	70	130	
Perfluorooctanoic acid	ng/L	10100	9590	95	70	130	
Perfluorooctanesulfonic acid	ng/L	10000	8460	85	70	130	
Perfluoropentanoic acid	ng/L	10100	9820	97	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10300	103	70	130	
Perfluorotridecanoic acid	ng/L	10000	8740	87	70	130	
Perfluoroundecanoic acid	ng/L	10000	9380	94	70	130	

ORGANICS INSTRUMENT SENSITIVITY CHECK

Report No: 221081365 Instrument ID: QQQ3
 Analysis Date: 08/16/2021 23:19 Lab File ID: 2210816B_2.d
 Analytical Method: _____ Analytical Batch: 718930

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>% REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.81	3.60	95	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	3.84	3.94	102	70	130	
NEtFOSAA	ng/L	4.00	3.85	96	70	130	
NMeFOSAA	ng/L	4.00	4.05	101	70	130	
Perfluorobutanoic acid	ng/L	4.00	3.79	95	70	130	
Perfluorobutanesulfonic acid	ng/L	3.55	3.35	95	70	130	
Perfluorodecanoic acid	ng/L	4.00	3.82	96	70	130	
Perfluorododecanoic acid	ng/L	4.00	3.80	95	70	130	
Perfluoroheptanoic acid	ng/L	4.00	3.69	92	70	130	
Perfluorohexanoic acid	ng/L	4.00	3.85	96	70	130	
Perfluorohexanesulfonic acid	ng/L	3.66	3.74	102	70	130	
Perfluorononanoic acid	ng/L	4.00	3.80	95	70	130	
Perfluorooctanoic acid	ng/L	4.00	3.90	98	70	130	
Perfluorooctanesulfonic acid	ng/L	3.71	3.64	98	70	130	
Perfluoropentanoic acid	ng/L	4.00	3.84	96	70	130	
Perfluorotetradecanoic acid	ng/L	4.00	3.82	95	70	130	
Perfluorotridecanoic acid	ng/L	4.00	3.68	92	70	130	
Perfluoroundecanoic acid	ng/L	4.00	3.64	91	70	130	

ORGANICS INSTRUMENT BLANK

Report No:	<u>221081365</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>08/16/2021 23:04</u>	Lab File ID:	<u>2210816B_1.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>718930</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>RESULT</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>	<i>#</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.50	3.00	4.00	
8:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.06	3.00	4.00	
NEtFOSAA	ng/L	4.00	U	1.58	4.00	8.00	
NMeFOSAA	ng/L	4.00	U	0.90	4.00	8.00	
Perfluorobutanesulfonic acid	ng/L	2.00	U	0.62	2.00	4.00	
Perfluorobutanoic acid	ng/L	3.50	U	1.52	3.50	4.00	
Perfluorodecanoic acid	ng/L	3.00	U	1.44	3.00	4.00	
Perfluorododecanoic acid	ng/L	3.00	U	1.30	3.00	4.00	
Perfluoroheptanoic acid	ng/L	3.00	U	1.16	3.00	4.00	
Perfluorohexanesulfonic acid	ng/L	3.00	U	1.24	3.00	4.00	
Perfluorohexanoic acid	ng/L	2.00	U	0.94	2.00	4.00	
Perfluorononanoic acid	ng/L	2.00	U	0.98	2.00	4.00	
Perfluorooctanesulfonic acid	ng/L	2.00	U	0.76	2.00	4.00	
Perfluorooctanoic acid	ng/L	2.00	U	0.84	2.00	4.00	
Perfluoropentanoic acid	ng/L	2.00	U	0.88	2.00	4.00	
Perfluorotetradecanoic acid	ng/L	3.00	U	1.14	3.00	4.00	
Perfluorotridecanoic acid	ng/L	3.00	U	1.23	3.00	4.00	
Perfluoroundecanoic acid	ng/L	3.00	U	1.24	3.00	4.00	

* - Result greater than 1/2 LOQ

Quantitative Analysis Calibration Report

Batch Data Path	D:\MassHunter\Data\QQQ3\2210813BCAL\QuantResults\2210816B.batch.bin		
Analysis Time	8/17/2021 10:17 AM	Analyst Name	GCAL\jcms
Report Time	8/18/2021 6:51 AM	Reporter Name	GCAL\jcms
Last Calib Update	8/17/2021 10:07 AM	Batch State	Processed

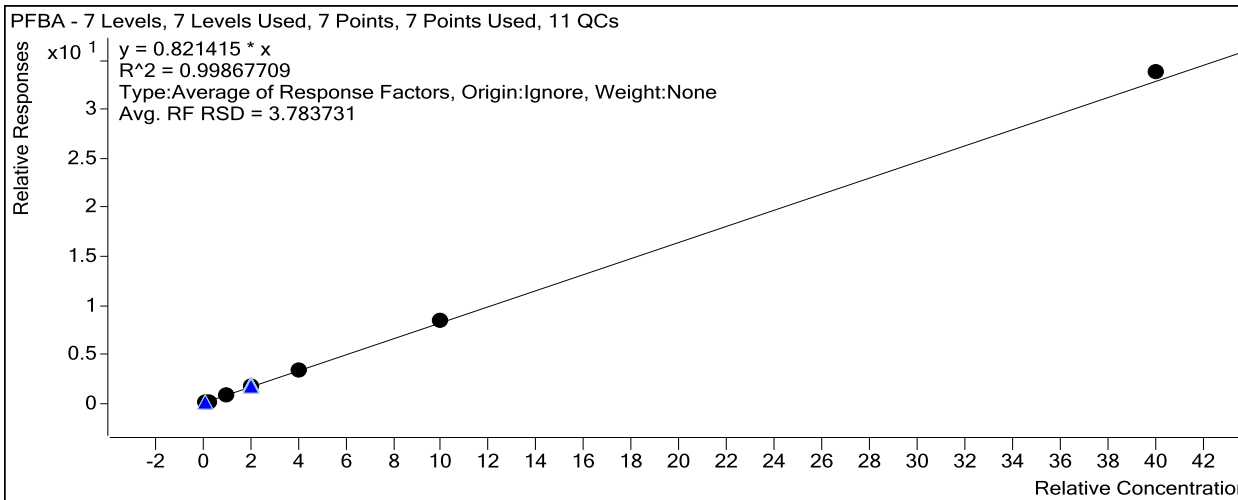
Calibration Info

Extracted ISTD MPFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	106460	5.0000	21292.0490
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	109186	5.0000	21837.2275
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	116017	5.0000	23203.3087
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	112005	5.0000	22401.0947
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	117225	5.0000	23445.0316
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	111999	5.0000	22399.8587
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	107475	5.0000	21495.0473

Target Compound PFBA

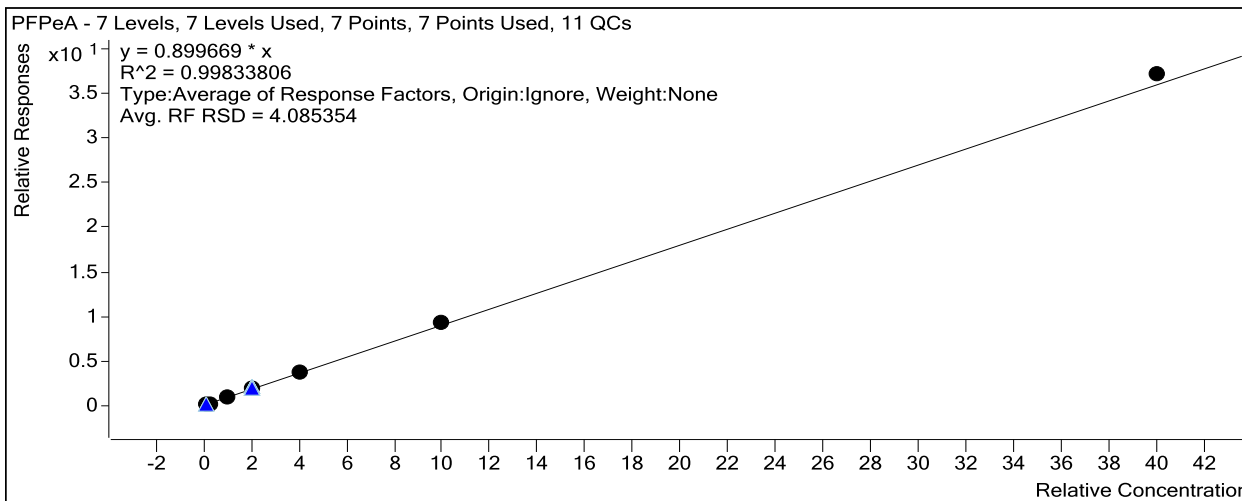
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	8352	0.5000	0.7845
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	21725	1.2500	0.7959
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	91157	5.0000	0.7857
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	190161	10.0000	0.8489
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	392590	20.0000	0.8373
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	951954	50.0000	0.8500
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	3644054	200.0000	0.8476



Target Compound PFMPA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	1523	0.5000	0.1303
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	3818	1.2500	0.1273
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	15234	5.0000	0.1224
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	31948	10.0000	0.1306

Quantitative Analysis Calibration Report



Extracted ISTD

M3PFBS

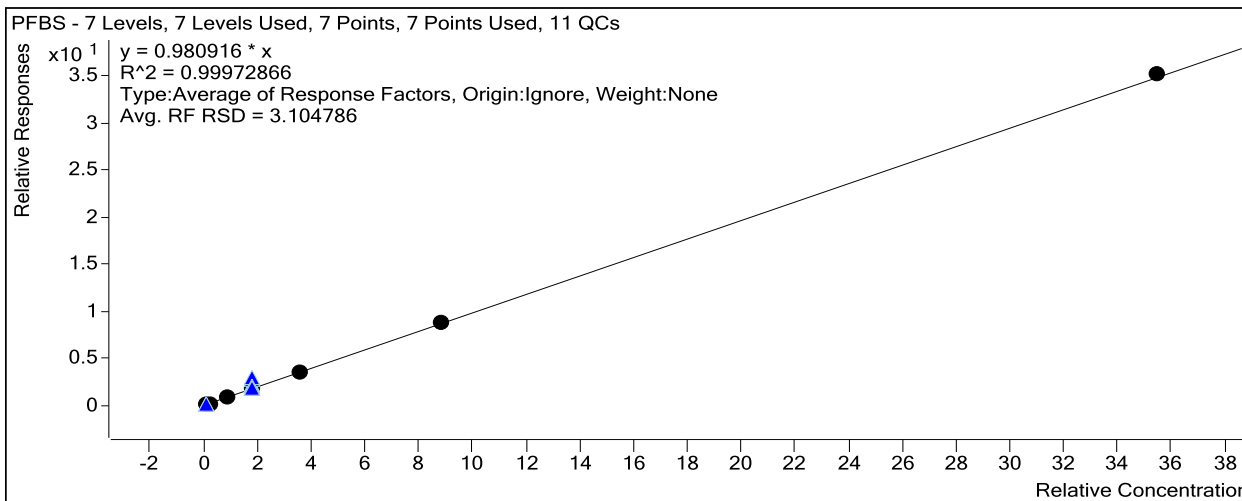
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	39090	5.0000	7818.0404
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	40265	5.0000	8052.9044
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	42522	5.0000	8504.4875
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	40854	5.0000	8170.7328
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	42392	5.0000	8478.3083
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	39258	5.0000	7851.5159
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	35841	5.0000	7168.1850

Target Compound

PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	3429	0.4435	0.9890
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	8659	1.1088	0.9697
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	34563	4.4350	0.9164
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	72719	8.8700	1.0034
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	149468	17.7400	0.9938
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	348137	44.3500	0.9998
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1264537	177.4000	0.9944

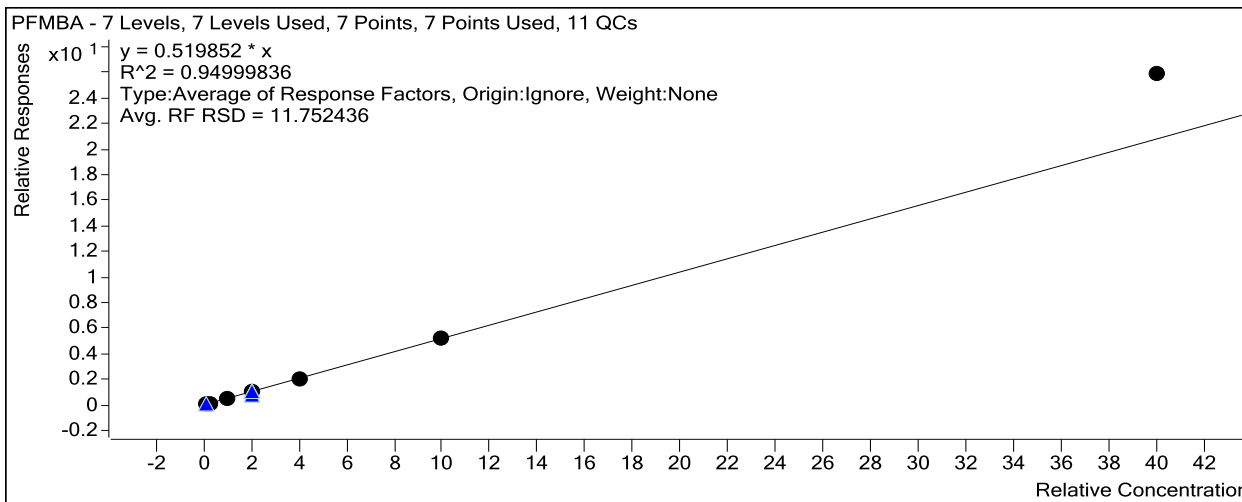
Quantitative Analysis Calibration Report



Target Compound

PFMBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	7638	0.5000	0.4612
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	20556	1.2500	0.5014
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	83713	5.0000	0.4762
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	172566	10.0000	0.5204
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	355876	20.0000	0.5109
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	852638	50.0000	0.5200
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	4052468	200.0000	0.6488



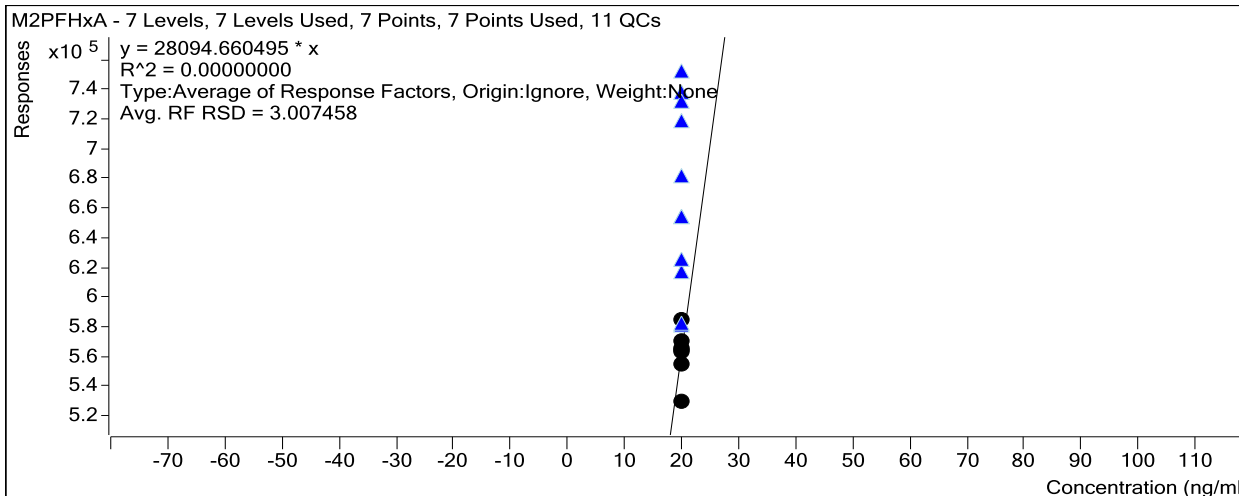
Target Compound

PFEESA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	9184	0.4450	3.0351
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	24237	1.1125	3.1327
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	99387	4.4500	3.0992
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	210594	8.9000	3.3866
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	429166	17.8000	3.3246

Quantitative Analysis Calibration Report

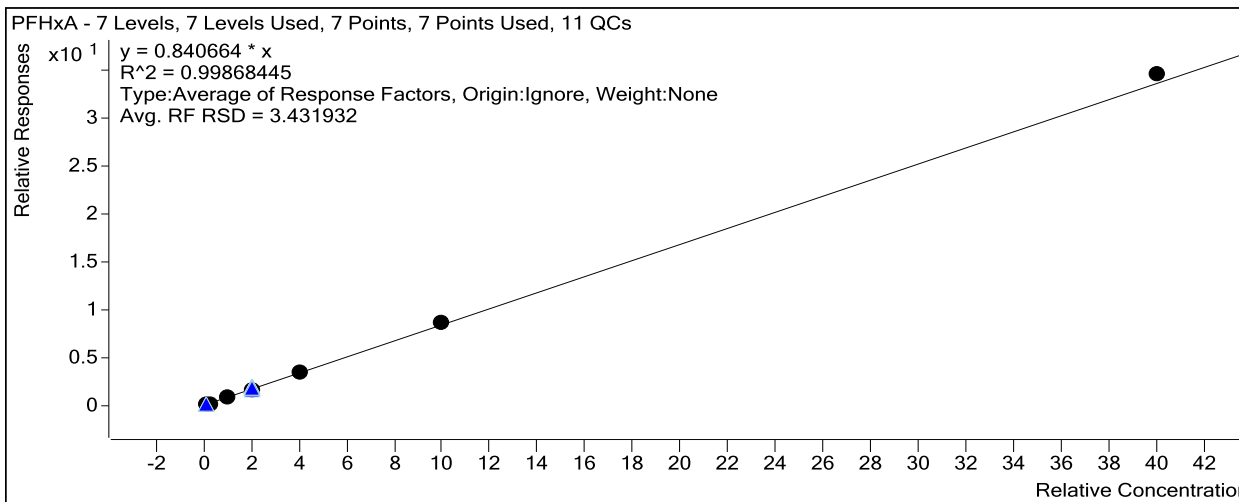
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	570577	20.0000	28528.8504
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	529367	20.0000	26468.3716



Target Compound

PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	13486	0.5000	0.8143
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	33775	1.2500	0.8239
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	139965	5.0000	0.7962
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	283134	10.0000	0.8539
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	600366	20.0000	0.8619
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	1421431	50.0000	0.8669
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	5419129	200.0000	0.8676



Target Compound

PFPeS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	3573	0.4705	0.9713
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	9544	1.1763	1.0076
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	39235	4.7050	0.9805

Quantitative Analysis Calibration Report

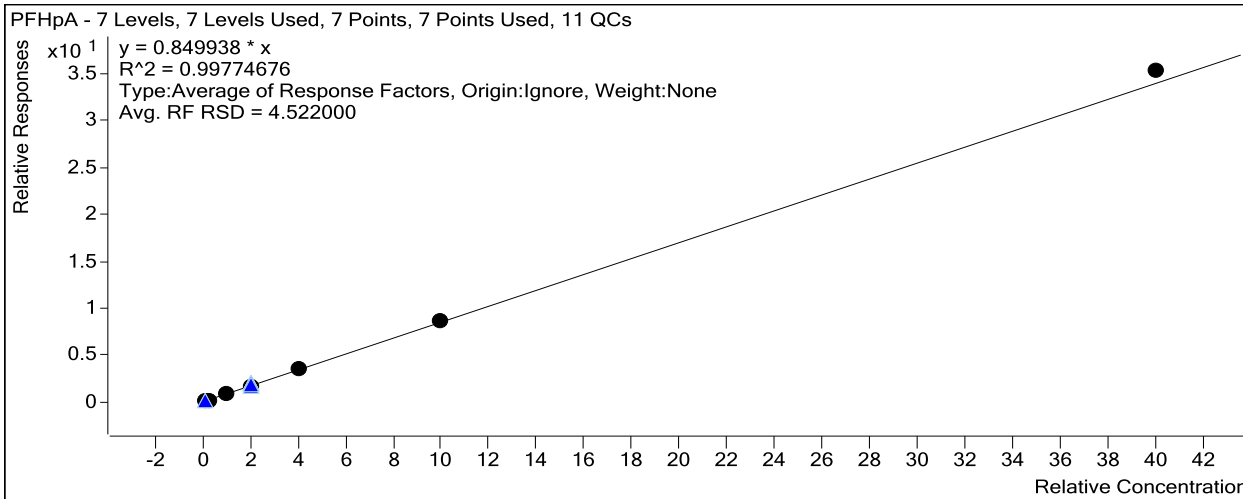
File Name	Calibration	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	36360	10.0000	3636.0019
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	41494	10.0000	4149.4198
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	40020	10.0000	4002.0031
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	40540	10.0000	4053.9882
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	39021	10.0000	3902.0841
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	35846	10.0000	3584.5847

Extracted ISTD *M4PFHpA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	202115	5.0000	40423.0766
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	203765	5.0000	40753.0851
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	212092	5.0000	42418.3259
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	205103	5.0000	41020.5982
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	212900	5.0000	42579.9747
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	204327	5.0000	40865.4358
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	192035	5.0000	38407.0579

Target Compound *PFHpA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	16190	0.5000	0.8010
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	41610	1.2500	0.8168
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	171925	5.0000	0.8106
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	358482	10.0000	0.8739
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	754781	20.0000	0.8863
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	1786664	50.0000	0.8744
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	6809200	200.0000	0.8865



Extracted ISTD *M3PFHxS*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	34000	5.0000	6800.0246
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	34772	5.0000	6954.4920
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	36032	5.0000	7206.4797

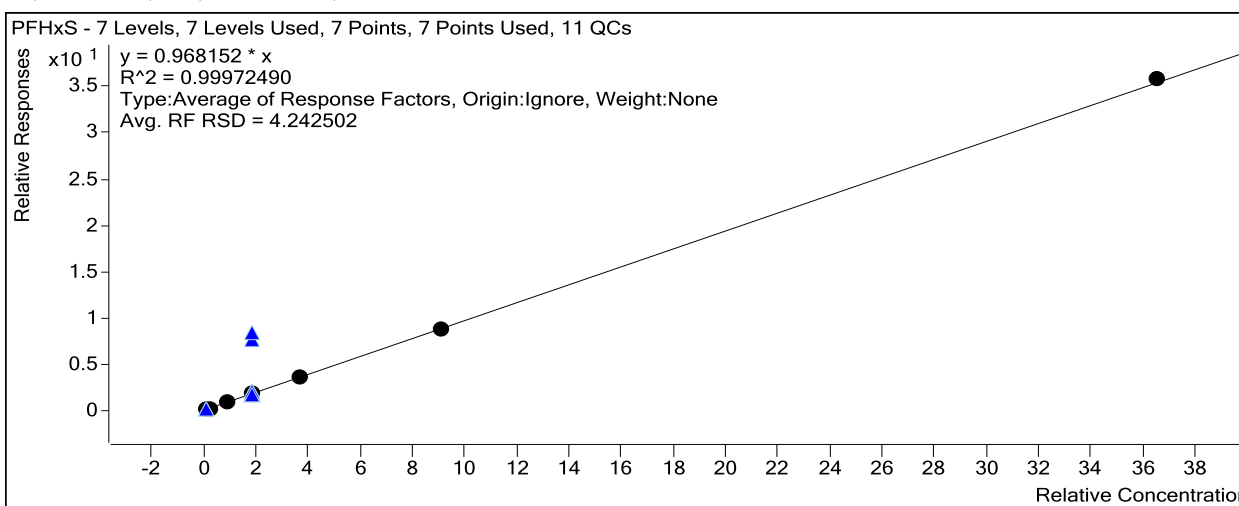
Quantitative Analysis Calibration Report

K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	34935	5.0000	6987.0206
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	36261	5.0000	7252.1343
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	34205	5.0000	6840.9033
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	31308	5.0000	6261.5955

Target Compound

PFHxS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	3220	0.4570	1.0361
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	7492	1.1425	0.9429
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	29688	4.5700	0.9015
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	62488	9.1400	0.9785
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	129273	18.2800	0.9751
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	300312	45.7000	0.9606
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1124377	182.8000	0.9823

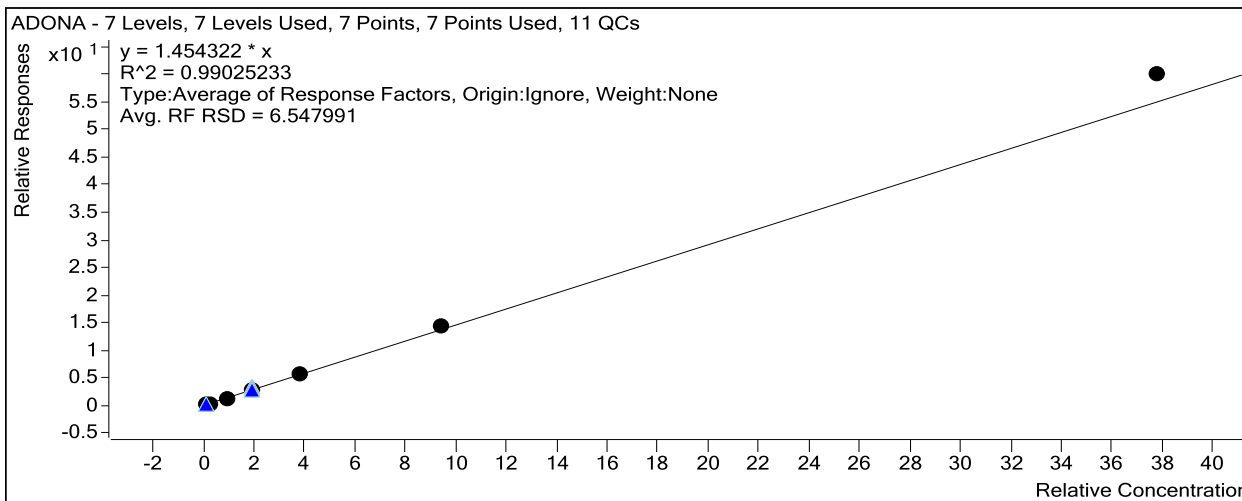


Target Compound

ADONA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	23838	0.4725	1.3349
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	62643	1.1813	1.3909
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	257339	4.7250	1.3553
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	548766	9.4500	1.4951
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	1132793	18.9000	1.4949
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	2721798	47.2500	1.5165
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	10677828	189.0000	1.5927

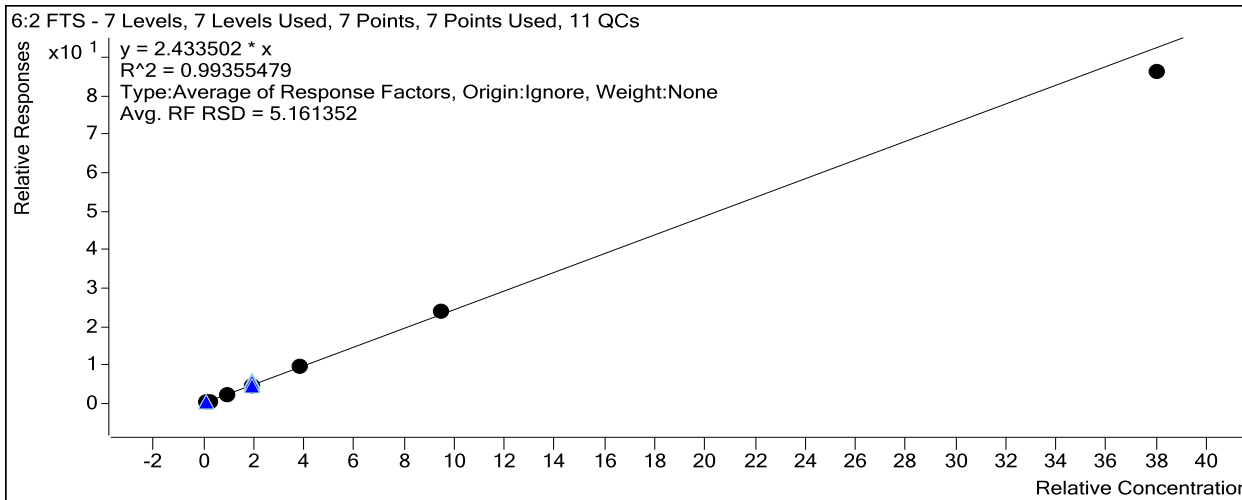
Quantitative Analysis Calibration Report



Target Compound

6:2 FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	3896	0.4755	2.5833
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	8696	1.1888	2.3296
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	29443	4.7550	2.3089
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	64456	9.5100	2.4941
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	126885	19.0200	2.5429
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	284170	47.5500	2.5022
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	858022	190.2000	2.2736



Extracted ISTD

M2 6:2 FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	15857	5.0000	3171.4770
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	15700	5.0000	3139.9596
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	13409	5.0000	2681.8014
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	13588	5.0000	2717.5032
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	13117	5.0000	2623.4771

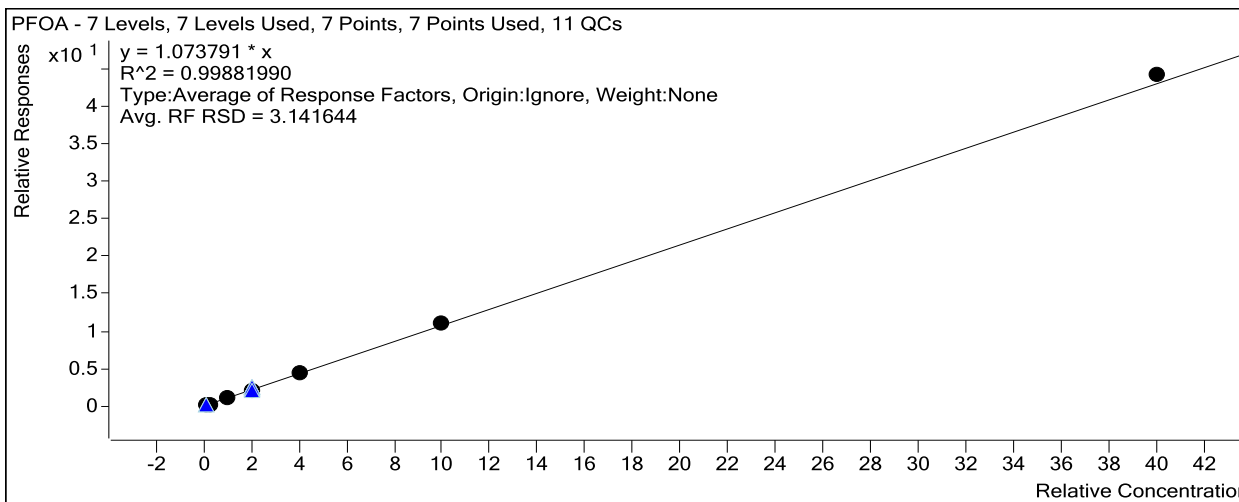
Quantitative Analysis Calibration Report

K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	11942	5.0000	2388.4301
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	9921	5.0000	1984.1493

Target Compound

PFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	19561	0.5000	1.0352
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	50947	1.2500	1.0690
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	205044	5.0000	1.0205
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	425374	10.0000	1.0952
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	874929	20.0000	1.0911
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	2086948	50.0000	1.0989
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	7851910	200.0000	1.1068



Extracted ISTD

M8PFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	188964	5.0000	37792.8825
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	190628	5.0000	38125.5244
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	200930	5.0000	40186.0076
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	194203	5.0000	38840.5091
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	200475	5.0000	40094.9430
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	189921	5.0000	37984.1910
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	177363	5.0000	35472.5134

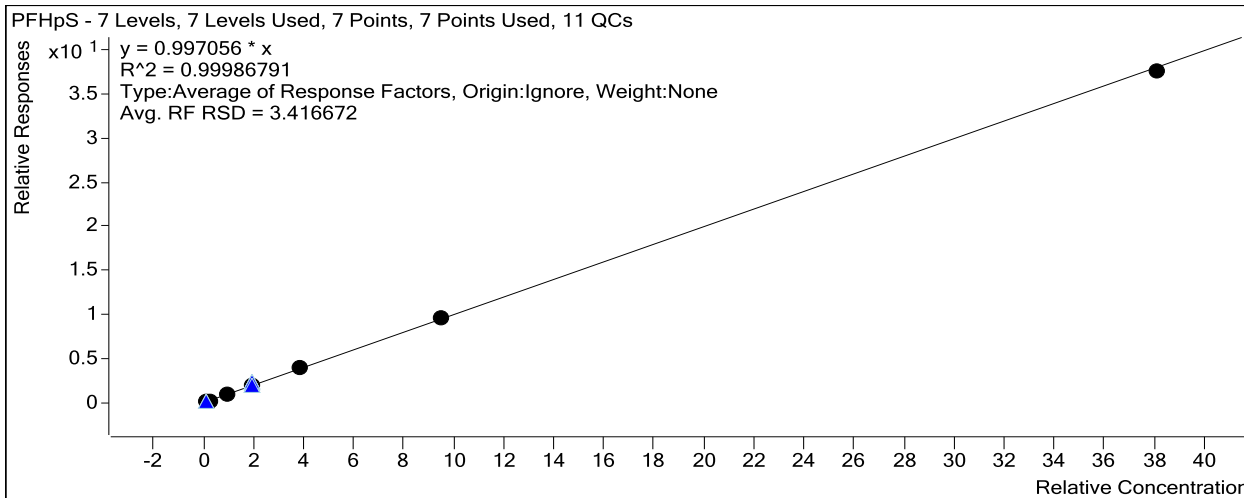
Instrument ISTD

MPFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	1143505	25.0000	45740.1941
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	1108392	25.0000	44335.6798
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	1117106	25.0000	44684.2285
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	1144073	25.0000	45762.9332
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	1145210	25.0000	45808.3823
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	1087495	25.0000	43499.7821
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1010477	25.0000	40419.0918

Quantitative Analysis Calibration Report

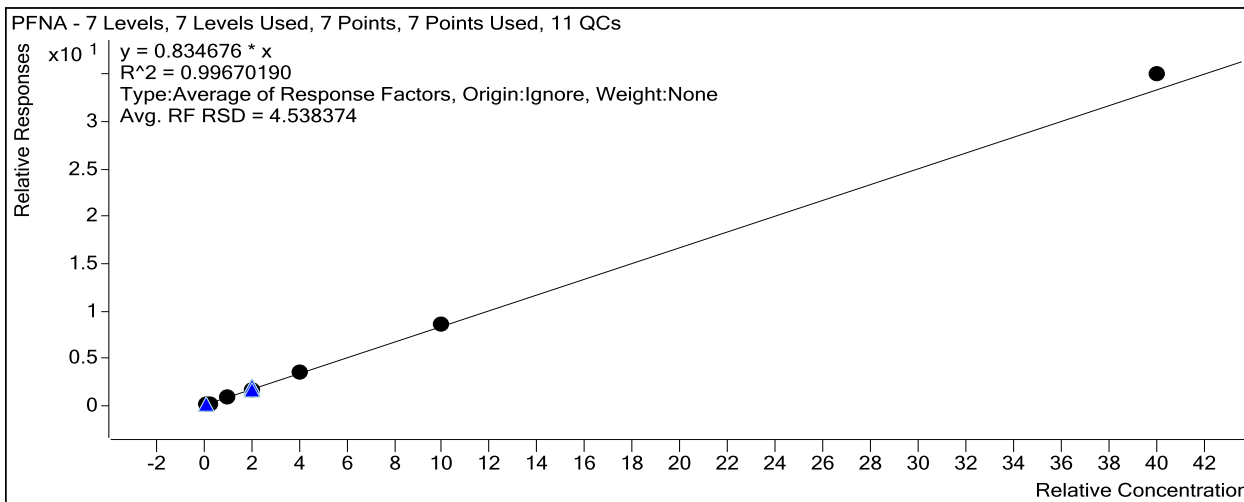
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	326312	47.6500	1.0011
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1178900	190.6000	0.9878



Target Compound

PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	16678	0.5000	0.7809
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	42935	1.2500	0.8038
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	178625	5.0000	0.8023
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	371500	10.0000	0.8601
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	773744	20.0000	0.8576
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	1813248	50.0000	0.8592
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	6729092	200.0000	0.8788



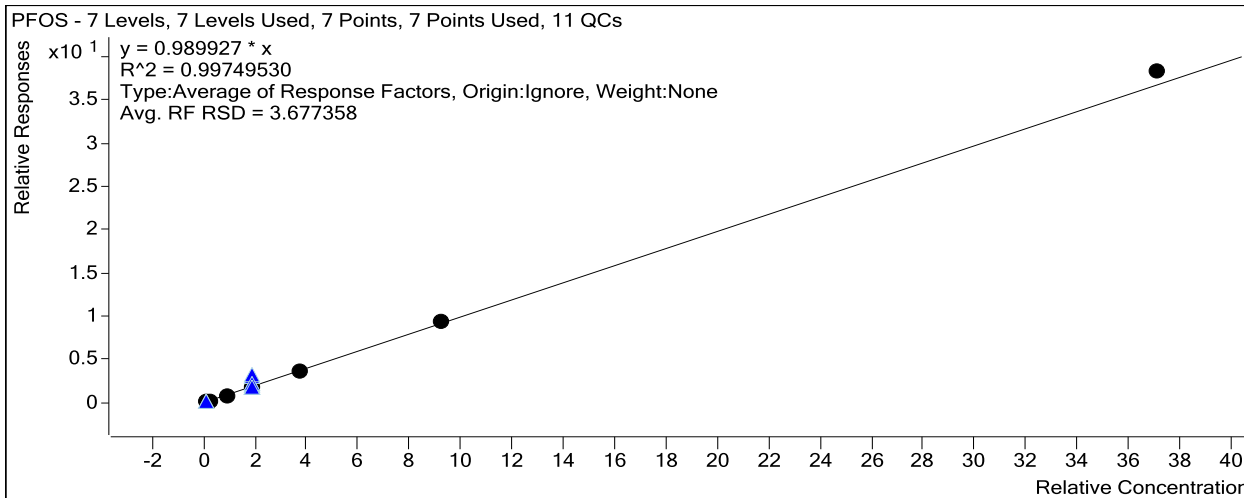
Extracted ISTD

M9PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	213567	5.0000	42713.3910
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	213651	5.0000	42730.2723
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	222638	5.0000	44527.6231

Quantitative Analysis Calibration Report

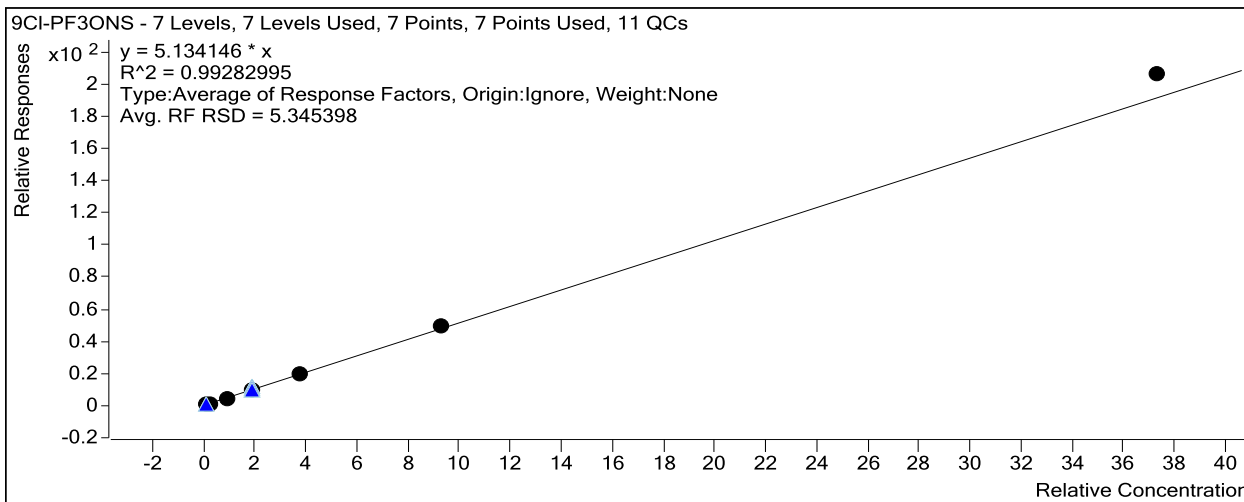
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	294223	46.4000	1.0096
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1088513	185.6000	1.0355



Target Compound

9CI-PF3ONS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	14237	0.4665	4.8467
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	37233	1.1663	4.8828
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	151120	4.6650	4.8582
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	315650	9.3300	5.2327
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	661488	18.6600	5.2429
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	1557857	46.5500	5.3286
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	5862484	186.6000	5.5472



Extracted ISTD

M2 8:2 FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	11870	5.0000	2374.0035
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	10755	5.0000	2151.0841
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	10663	5.0000	2132.6409

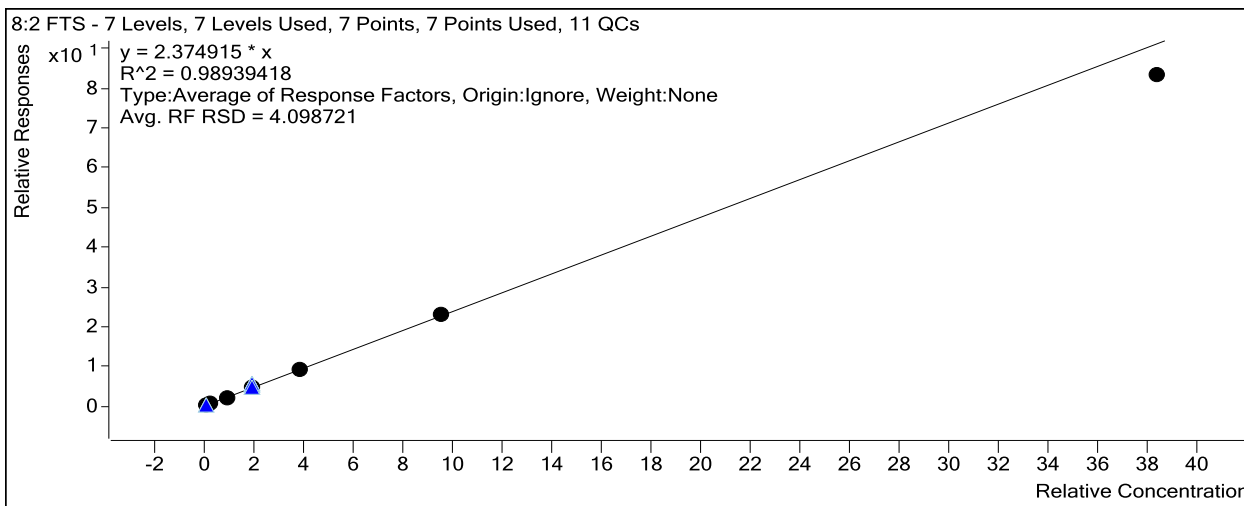
Quantitative Analysis Calibration Report

K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	10115	5.0000	2022.9585
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	10276	5.0000	2055.2712
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	8609	5.0000	1721.8218
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	6988	5.0000	1397.5137

Target Compound

8:2 FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	2653	0.4800	2.3283
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	6371	1.2000	2.4680
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	24631	4.8000	2.4062
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	47415	9.6000	2.4415
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	94976	19.2000	2.4068
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	198062	48.0000	2.3965
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	584169	192.0000	2.1771



Extracted ISTD

M6PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	210981	5.0000	42196.2614
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	204719	5.0000	40943.7696
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	211951	5.0000	42390.2799
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	207603	5.0000	41520.5449
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	212766	5.0000	42553.2841
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	201246	5.0000	40249.2913
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	184506	5.0000	36901.1256

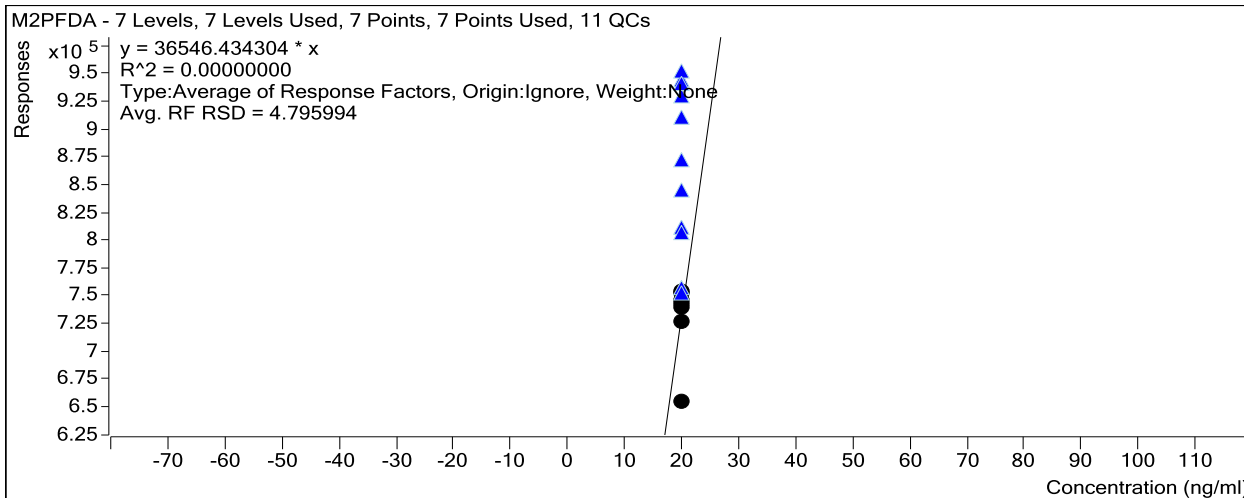
Instrument ISTD

M2PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	752358	20.0000	37617.8923
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	739600	20.0000	36980.0190
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	746572	20.0000	37328.5987
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	743309	20.0000	37165.4595
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	753854	20.0000	37692.6796

Quantitative Analysis Calibration Report

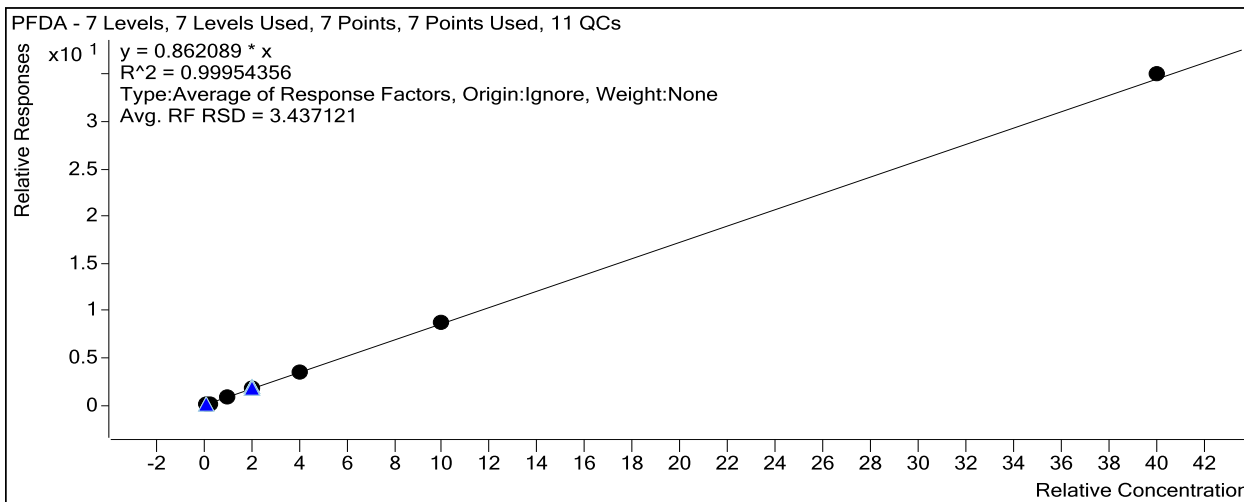
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	726672	20.0000	36333.6108
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	654136	20.0000	32706.7802



Target Compound

PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	17109	0.5000	0.8109
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	43167	1.2500	0.8434
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	179281	5.0000	0.8459
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	366413	10.0000	0.8825
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	761763	20.0000	0.8951
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	1769194	50.0000	0.8791
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	6477878	200.0000	0.8777

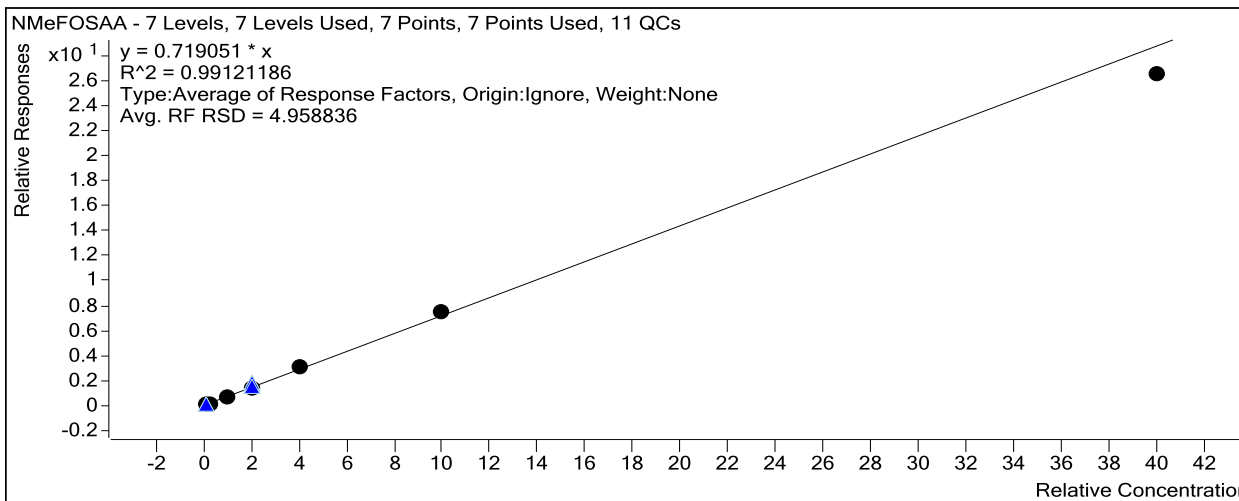


Target Compound

PFNS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	2440	0.4810	0.8058
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	6738	1.2025	0.8570
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	25992	4.8100	0.8104

Quantitative Analysis Calibration Report



Extracted ISTD

M8FOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	68215	5.0000	13642.9429
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	69042	5.0000	13808.4478
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	72753	5.0000	14550.6657
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	68621	5.0000	13724.2141
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	71618	5.0000	14323.5652
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	68666	5.0000	13733.2159
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	66461	5.0000	13292.1897

Target Compound

FOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	5594	0.5000	0.8201
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	14162	1.2500	0.8205
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	59263	5.0000	0.8146
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	125483	10.0000	0.9143
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	256875	20.0000	0.8967
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	615493	50.0000	0.8964
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	2387927	200.0000	0.8982

Quantitative Analysis Calibration Report

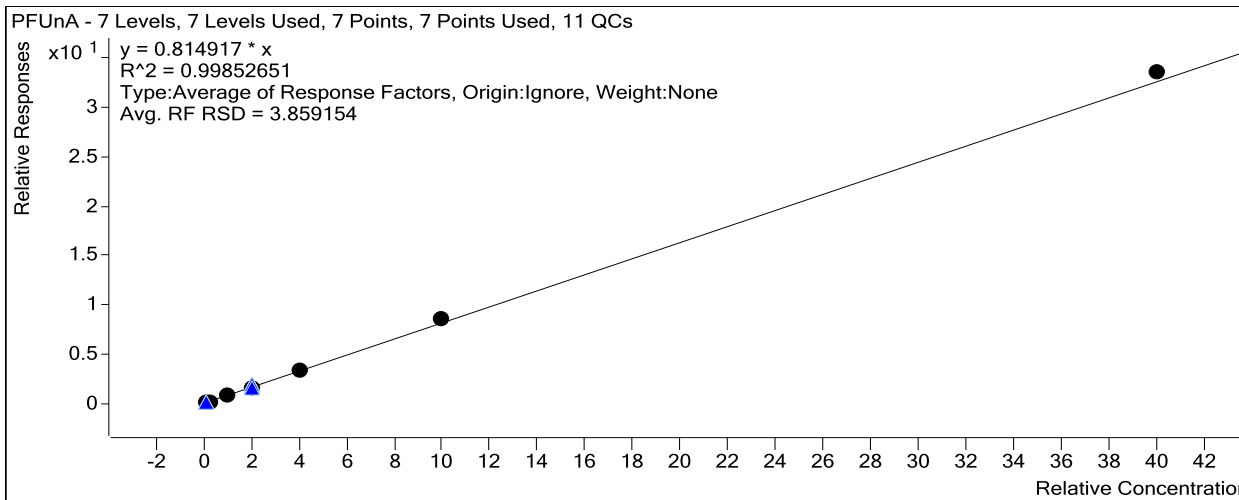
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	34373	5.0000	6874.5582
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	29688	5.0000	5937.6055

Extracted ISTD *M7PFUnA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	213765	5.0000	42752.9813
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	214072	5.0000	42814.3250
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	220327	5.0000	44065.3087
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	217004	5.0000	43400.7875
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	223521	5.0000	44704.1435
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	202441	5.0000	40488.2940
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	188319	5.0000	37663.8689

Target Compound *PFUnA*

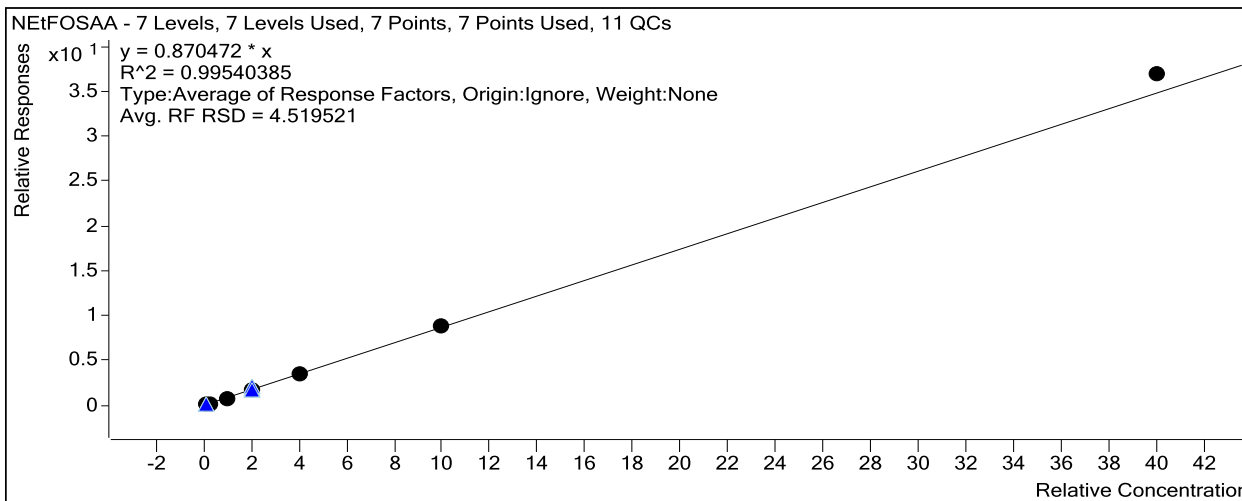
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	16600	0.5000	0.7766
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	42425	1.2500	0.7927
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	172003	5.0000	0.7807
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	360442	10.0000	0.8305
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	738526	20.0000	0.8260
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	1733779	50.0000	0.8564
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	6338965	200.0000	0.8415



Target Compound *NETFOSAA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	3024	0.5000	0.8662
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	7629	1.2500	0.8432
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	30567	5.0000	0.8027
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	63986	10.0000	0.8913
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	130709	20.0000	0.8728
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	306365	50.0000	0.8913
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1099385	200.0000	0.9258

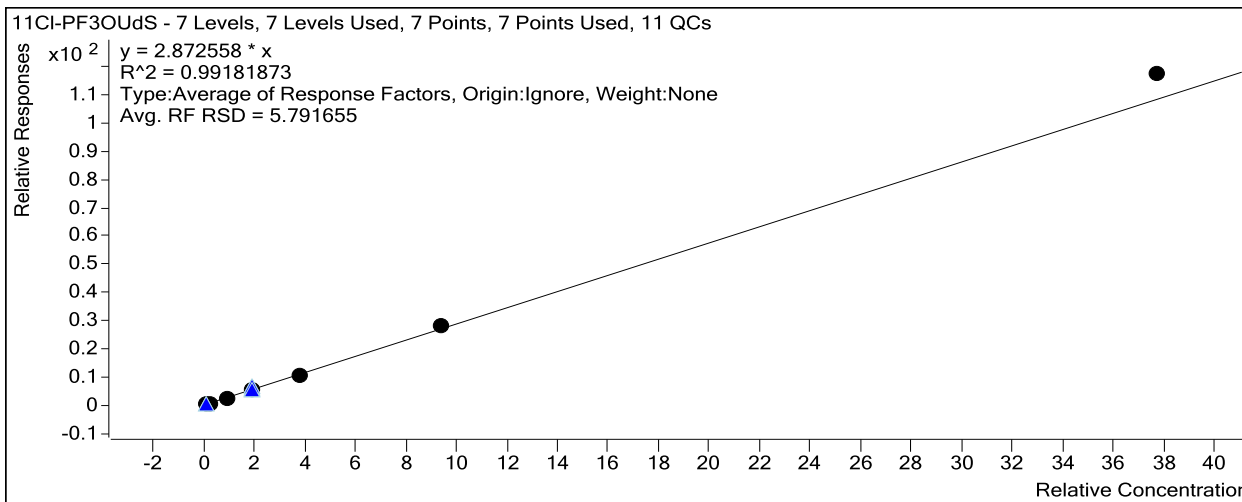
Quantitative Analysis Calibration Report



Target Compound

11CI-PF3OUdS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	8039	0.4715	2.7077
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	21311	1.1788	2.7652
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	84009	4.7150	2.6721
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	182366	9.4300	2.9911
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	366202	18.8600	2.8717
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	882136	47.1500	2.9789
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	3333936	188.6000	3.1212



Extracted ISTD

MPFDoA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	248256	5.0000	49651.2079
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	247039	5.0000	49407.7998
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	257696	5.0000	51539.2129
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	249026	5.0000	49805.2295
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	259636	5.0000	51927.2588

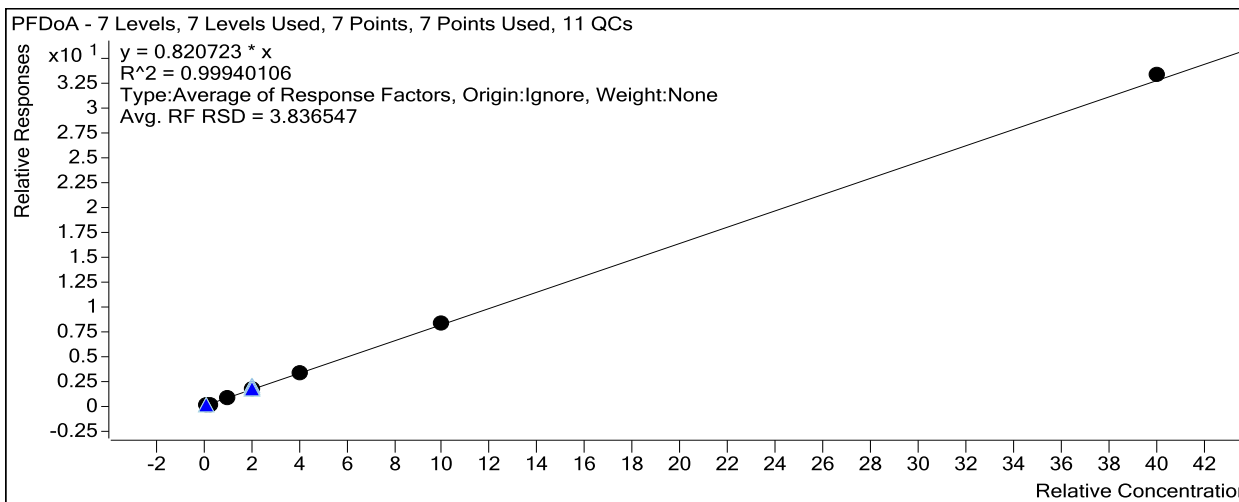
Quantitative Analysis Calibration Report

K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	245642	5.0000	49128.3088
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	235717	5.0000	47143.3526

Target Compound

PFD_oA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	19333	0.5000	0.7788
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	48882	1.2500	0.7915
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	204504	5.0000	0.7936
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	426370	10.0000	0.8561
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	876782	20.0000	0.8442
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	2071289	50.0000	0.8432
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	7898346	200.0000	0.8377

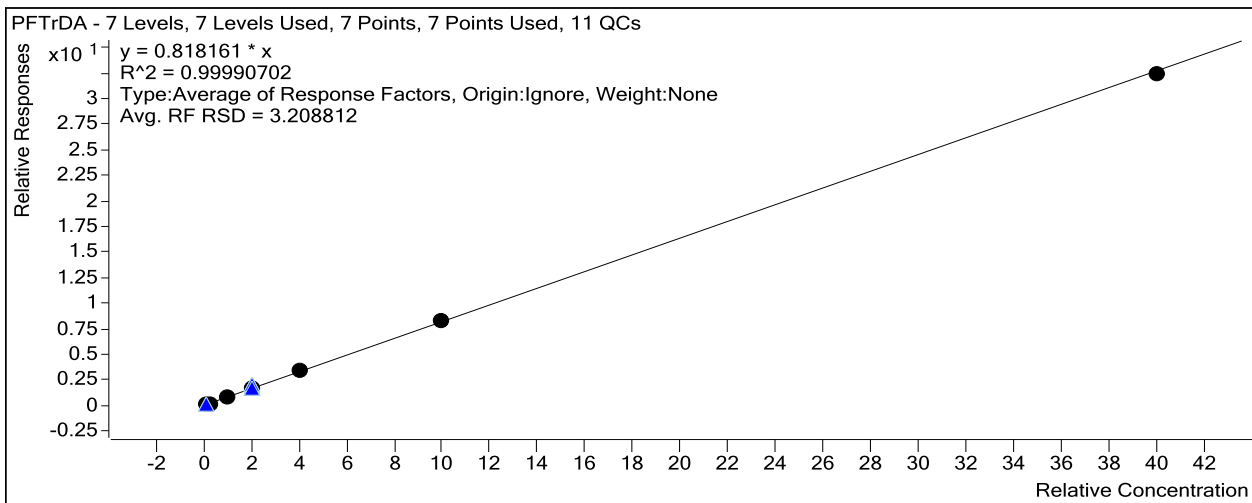


Target Compound

10:2 FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	2198	0.4820	1.9206
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	6186	1.2050	2.3867
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	23529	4.8200	2.2889
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	50684	9.6400	2.5990
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	99844	19.2800	2.5197
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	221692	48.2000	2.6712
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	819178	192.8000	3.0403

Quantitative Analysis Calibration Report



Extracted ISTD

d9-NetFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	11261	5.0000	2252.1700
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	11099	5.0000	2219.8880
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	11854	5.0000	2370.8278
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	11677	5.0000	2335.4254
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	11740	5.0000	2347.9789
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	11668	5.0000	2333.6888
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	11406	5.0000	2281.1752

Extracted ISTD

d-NetFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	14816	5.0000	2963.1316
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	15170	5.0000	3033.9067
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	15568	5.0000	3113.5786
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	14936	5.0000	2987.1324
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	15489	5.0000	3097.7444
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	15357	5.0000	3071.3301
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	14373	5.0000	2874.5733

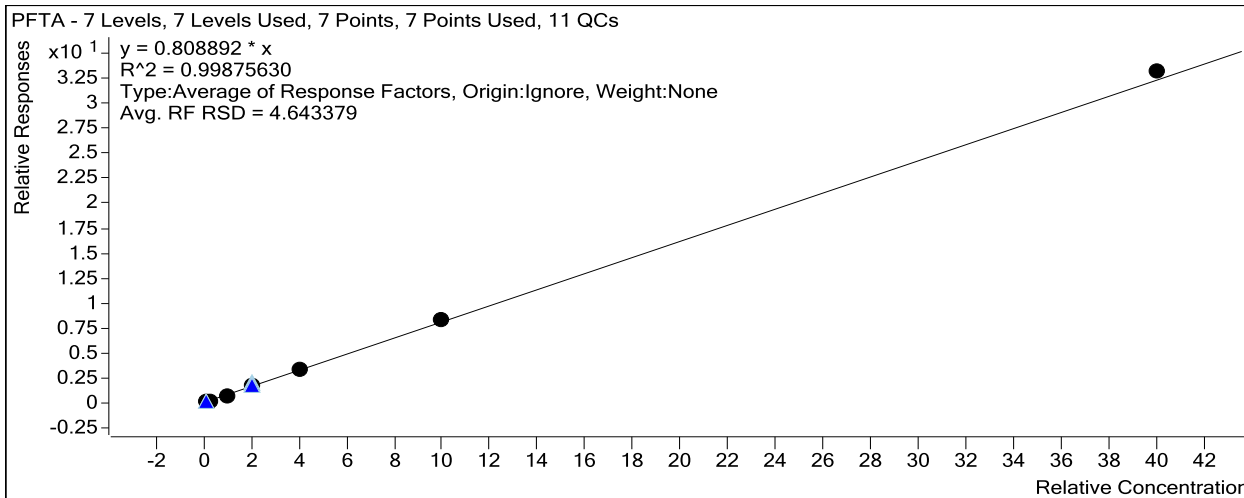
Target Compound

NetFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	1258	0.5000	1.1170
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	2885	1.2500	1.0396
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	11525	5.0000	0.9723
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	25160	10.0000	1.0773
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	52088	20.0000	1.1092
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	122469	50.0000	1.0496
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	619384	200.0000	1.3576

Quantitative Analysis Calibration Report

K:\MassHunter\Data\2210813BCAL\2210813B_6.d Calibration 6 2127999 50.0000 0.8408
 K:\MassHunter\Data\2210813BCAL\2210813B_7.d Calibration 7 8498252 200.0000 0.8333



Extracted ISTD

M2PFTA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	256702	5.0000	51340.4034
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	259338	5.0000	51867.5970
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	269114	5.0000	53822.7206
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	264020	5.0000	52803.9313
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	270160	5.0000	54031.9106
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	253086	5.0000	50617.2178
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	254956	5.0000	50991.1612

Extracted ISTD

M2PFHxDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	16608	5.0000	3321.5344
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	16326	5.0000	3265.2503
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	17060	5.0000	3411.9763
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	16440	5.0000	3287.9393
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	17053	5.0000	3410.6276
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	16660	5.0000	3331.9270
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	15778	5.0000	3155.5820

Target Compound

PFHxDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
K:\MassHunter\Data\2210813BCAL\2210813B_1.d	Calibration	1	<input checked="" type="checkbox"/>	22721	0.5000	13.6811
K:\MassHunter\Data\2210813BCAL\2210813B_2.d	Calibration	2	<input checked="" type="checkbox"/>	54005	1.2500	13.2315
K:\MassHunter\Data\2210813BCAL\2210813B_3.d	Calibration	3	<input checked="" type="checkbox"/>	213268	5.0000	12.5011
K:\MassHunter\Data\2210813BCAL\2210813B_4.d	Calibration	4	<input checked="" type="checkbox"/>	449437	10.0000	13.6693
K:\MassHunter\Data\2210813BCAL\2210813B_5.d	Calibration	5	<input checked="" type="checkbox"/>	913539	20.0000	13.3925
K:\MassHunter\Data\2210813BCAL\2210813B_6.d	Calibration	6	<input checked="" type="checkbox"/>	2233820	50.0000	13.4086
K:\MassHunter\Data\2210813BCAL\2210813B_7.d	Calibration	7	<input checked="" type="checkbox"/>	10619591	200.0000	16.8267

ORGANICS CALIBRATION VERIFICATION

Report No: 221081365 Instrument ID: QQQ3
 Analysis Date: 08/17/2021 02:44 Lab File ID: 2210816B_16.d
 Analytical Method: _____ Analytical Batch: 718930

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>% REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	9970	105	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10200	106	70	130	
NEtFOSAA	ng/L	10000	10400	104	70	130	
NMeFOSAA	ng/L	10000	10600	106	70	130	
Perfluorobutanoic acid	ng/L	10000	10300	103	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9310	105	70	130	
Perfluorodecanoic acid	ng/L	10000	10200	102	70	130	
Perfluorododecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroheptanoic acid	ng/L	10000	10300	103	70	130	
Perfluorohexanoic acid	ng/L	10000	10200	102	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9140	100	70	130	
Perfluorononanoic acid	ng/L	10000	10400	104	70	130	
Perfluorooctanoic acid	ng/L	10000	10300	103	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9350	101	70	130	
Perfluoropentanoic acid	ng/L	10000	10300	103	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorotridecanoic acid	ng/L	10000	10700	107	70	130	
Perfluoroundecanoic acid	ng/L	10000	10300	103	70	130	

ORGANICS CALIBRATION VERIFICATION

Report No: 221081365 Instrument ID: QQQ3
 Analysis Date: 08/17/2021 05:11 Lab File ID: 2210816B_26.d
 Analytical Method: _____ Analytical Batch: 718930

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>% REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	9850	104	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10400	108	70	130	
NEtFOSAA	ng/L	10000	10400	104	70	130	
NMeFOSAA	ng/L	10000	11200	112	70	130	
Perfluorobutanoic acid	ng/L	10000	10300	103	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9160	103	70	130	
Perfluorodecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorododecanoic acid	ng/L	10000	10200	102	70	130	
Perfluoroheptanoic acid	ng/L	10000	10300	103	70	130	
Perfluorohexanoic acid	ng/L	10000	10300	103	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9190	101	70	130	
Perfluorononanoic acid	ng/L	10000	10400	104	70	130	
Perfluorooctanoic acid	ng/L	10000	10500	105	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9310	100	70	130	
Perfluoropentanoic acid	ng/L	10000	10400	104	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10400	104	70	130	
Perfluorotridecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroundecanoic acid	ng/L	10000	10400	104	70	130	

7E

ORGANICS CALIBRATION VERIFICATION

Report No: 221081365 Instrument ID: QQQ3
 Analysis Date: 08/17/2021 07:52 Lab File ID: 2210816B_37.d
 Analytical Method: _____ Analytical Batch: 718930

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>% REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	9880	104	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10700	111	70	130	
NEtFOSAA	ng/L	10000	9870	99	70	130	
NMeFOSAA	ng/L	10000	10800	108	70	130	
Perfluorobutanoic acid	ng/L	10000	10300	103	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9360	106	70	130	
Perfluorodecanoic acid	ng/L	10000	10200	102	70	130	
Perfluorododecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroheptanoic acid	ng/L	10000	10300	103	70	130	
Perfluorohexanoic acid	ng/L	10000	10400	104	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9330	102	70	130	
Perfluorononanoic acid	ng/L	10000	10500	105	70	130	
Perfluorooctanoic acid	ng/L	10000	10300	103	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9470	102	70	130	
Perfluoropentanoic acid	ng/L	10000	10400	104	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10300	103	70	130	
Perfluorotridecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroundecanoic acid	ng/L	10000	10300	103	70	130	

FORM 7E - ORG

ORGANICS CALIBRATION VERIFICATION

Report No: 221081365 Instrument ID: QQQ3
 Analysis Date: 08/17/2021 09:09 Lab File ID: 2210816B_42.d
 Analytical Method: _____ Analytical Batch: 718930

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>% REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	9680	102	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10100	105	70	130	
NEtFOSAA	ng/L	10000	10100	101	70	130	
NMeFOSAA	ng/L	10000	10400	104	70	130	
Perfluorobutanoic acid	ng/L	10000	10300	103	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9140	103	70	130	
Perfluorodecanoic acid	ng/L	10000	10300	103	70	130	
Perfluorododecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroheptanoic acid	ng/L	10000	10400	104	70	130	
Perfluorohexanoic acid	ng/L	10000	10400	104	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9180	100	70	130	
Perfluorononanoic acid	ng/L	10000	10400	104	70	130	
Perfluorooctanoic acid	ng/L	10000	10200	102	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9390	101	70	130	
Perfluoropentanoic acid	ng/L	10000	10400	104	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10300	103	70	130	
Perfluorotridecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroundecanoic acid	ng/L	10000	10000	100	70	130	

INTERNAL STANDARD AREA SUMMARY

Report No:	<u>221081365</u>	Standard ID:	<u>1450 (ISC)</u>
Analyst:	<u>ADA</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>08/16/21 23:19</u>	Lab File ID:	<u>2210816B_2.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>718930</u>

	M2PFDA Area	M2PFHxA Area	M2PFOA Area	M4PFOS Area
STANDARD	910573	681373	812452	146739

CLIENT SAMPLE ID	LAB SAMP ID	#	#	#	#
WU-DECON-01	22108136501	818535	627344	758340	134445
WU-DECON-02	22108136502	786388	601621	718840	128753
MB2227758	2227758	834606	637637	760397	133852
LCS2227759	2227759	811956	617021	733209	130180
LCSD2227760	2227760	752166	582232	684104	123404

AREA UPPER LIMIT = +50% of internal standard area
 AREA LOWER LIMIT = -50% of internal standard area

Column used to flag values outside QC limits
 * Value outside QC limits

LC-QQQ Instrument Run Log

Instrument: QQQ 4
Instrument Batch: 2220423A.batch.bin
Current ICAL Batch: 2220423ACAL
ICAL Std (ID/Exp): 022-47-1 10/21/22
ICV Std (ID/Exp): 022-49-1 7/19/22

LIMS Batch (HBN): 739271
20mM NH4OAc (ID/Exp): 022-47-4 4/24/22 8:00AM
Methanol (ID/Exp): 2131526 11/30/26
EIS Mix (ID/Exp): 022-45-2 10/12/22
IIS Mix (ID/Exp): 022-45-3 10/20/22

Acquisition time	Data File	Name	Type	Dilution	Comment
04/23/22 16:18:32	2220423A_01.d	1201	Cal	1	SXA,QQQ4,ICAL#022-47-5
04/23/22 16:33:20	2220423A_02.d	1202	Cal	1	SXA,QQQ4,ICAL#022-47-6
04/23/22 16:48:08	2220423A_03.d	1203	Cal	1	SXA,QQQ4,ICAL#022-48-1
04/23/22 17:02:56	2220423A_04.d	1204	Cal	1	SXA,QQQ4,ICAL#022-48-2
04/23/22 17:17:44	2220423A_05.d	1205	Cal	1	SXA,QQQ4,ICAL#022-48-3
04/23/22 17:32:32	2220423A_06.d	1206	Cal	1	SXA,QQQ4,ICAL#022-48-4
04/23/22 17:47:23	2220423A_07.d	1207	Cal	1	SXA,QQQ4,ICAL#022-48-5
04/23/22 18:02:11	2220423A_08.d	1500	Blank	1	SXA,QQQ4,Instrument Blank
04/23/22 18:17:01	2220423A_09.d	1600	Sample	1	SXA,QQQ4,ICV#022-49-1
04/23/22 18:31:49	2220423A_10.d	1450	QC	1	SXA,QQQ4,CCV
04/23/22 18:46:37	2220423A_11.d	2336115	Blank	1	SXA,QQQ4,739042
04/23/22 19:01:41	2220423A_12.d	2336116	QC	1	SXA,QQQ4,739042
04/23/22 19:16:29	2220423A_13.d	2336117	QC	1	SXA,QQQ4,739042
04/23/22 19:31:17	2220423A_14.d	22204090304	Sample	1	SXA,QQQ4,739042
04/23/22 19:46:05	2220423A_15.d	22204090305	Sample	1	SXA,QQQ4,739042
04/23/22 20:00:54	2220423A_16.d	22204013609	Sample	1	SXA,QQQ4,739042
04/23/22 20:15:45	2220423A_17.d	22204013610	Sample	1	SXA,QQQ4,739042
04/23/22 20:30:33	2220423A_18.d	22204090301	Sample	1	SXA,QQQ4,739042
04/23/22 20:45:23	2220423A_19.d	22204090302	Sample	1	SXA,QQQ4,739042
04/23/22 21:00:12	2220423A_20.d	22204090303	Sample	1	SXA,QQQ4,739042
04/23/22 21:15:02	2220423A_21.d	22204090307	Sample	1	SXA,QQQ4,739042
04/23/22 21:29:51	2220423A_22.d	22204090308	Sample	1	SXA,QQQ4,739042
04/23/22 21:44:40	2220423A_23.d	22204090309	Sample	1	SXA,QQQ4,739042
04/23/22 21:59:29	2220423A_24.d	1400	QC	1	SXA,QQQ4,CCV
04/23/22 22:14:34	2220423A_25.d	22204090311	Sample	1	SXA,QQQ4,739042
04/23/22 22:29:39	2220423A_26.d	22204093907	Sample	1	SXA,QQQ4,739042
04/23/22 22:44:31	2220423A_27.d	22204088405	Sample	1	SXA,QQQ4,739042
04/23/22 22:59:20	2220423A_28.d	22204088406	Sample	1	SXA,QQQ4,739042
04/23/22 23:14:09	2220423A_29.d	22204088407	Sample	1	SXA,QQQ4,739042
04/23/22 23:28:58	2220423A_30.d	22204088408	Sample	1	SXA,QQQ4,739042
04/23/22 23:43:47	2220423A_31.d	22204088424	Sample	1	SXA,QQQ4,739042
04/23/22 23:58:36	2220423A_32.d	22204088425	Sample	1	SXA,QQQ4,739042
04/24/22 00:13:25	2220423A_33.d	1400	QC	1	SXA,QQQ4,CCV

LC-QQQ Instrument Run Log

Instrument: QQQ 3
Instrument Batch: 2220425B.batch.bin
Current ICAL Batch: 2220425BCAL
ICAL Std (ID/Exp): 022-47-1 10/21/22
ICV Std (ID/Exp): 022-49-1 7/19/22

LIMS Batch (HBN): 739406
20mM NH4OAc (ID/Exp): 022-50-4 4/27/22 8:00 AM
Methanol (ID/Exp): 2131526 11/30/26
EIS Mix (ID/Exp): 022-45-2 10/12/22
IIS Mix (ID/Exp): 022-45-3 10/20/22

Acquisition time	Data File	Name	Type	Dilution	Comment
04/25/22 16:53:23	2220425B_2.d	1201	Cal	1	RXJ,QQQ3;022-47-5
04/25/22 17:08:01	2220425B_3.d	1202	Cal	1	RXJ,QQQ3;022-47-6
04/25/22 17:22:39	2220425B_4.d	1203	Cal	1	RXJ,QQQ3;022-48-1
04/25/22 17:37:19	2220425B_5.d	1204	Cal	1	RXJ,QQQ3;022-48-2
04/25/22 17:51:57	2220425B_6.d	1205	Cal	1	RXJ,QQQ3;022-48-3
04/25/22 18:06:35	2220425B_7.d	1206	Cal	1	RXJ,QQQ3;022-48-4
04/25/22 18:21:13	2220425B_8.d	1207	Cal	1	RXJ,QQQ3;022-48-5
04/25/22 18:47:22	2220425B_9.d	1500	Blank	1	RXJ,QQQ3;Instrument Blank
04/25/22 19:02:09	2220425B_10.d	1600	QC	1	RXJ,QQQ3;ICV 022-49-1
04/25/22 19:16:48	2220425B_11.d	1450	QC	1	RXJ,QQQ3;022-47-5
04/25/22 22:55:56	2220425B_12.d	22204192201	Sample	1	RXJ,QQQ3;738987
04/25/22 23:10:43	2220425B_13.d	2337443	Blank	1	RXJ,QQQ3;739295
04/25/22 23:25:38	2220425B_14.d	2337444	QC	1	RXJ,QQQ3;739295
04/25/22 23:40:19	2220425B_15.d	2337445	QC	1	RXJ,QQQ3;739295
04/25/22 23:54:58	2220425B_16.d	22204090306	Sample	1	RXJ,QQQ3;739295
04/26/22 00:09:36	2220425B_17.d	22204090310	Sample	1	RXJ,QQQ3;739295
04/26/22 00:24:16	2220425B_18.d	22204133816	Sample	1	RXJ,QQQ3;739295
04/26/22 00:38:56	2220425B_19.d	22204133817	Sample	1	RXJ,QQQ3;739295
04/26/22 00:53:34	2220425B_20.d	22204133818	Sample	1	RXJ,QQQ3;739295
04/26/22 01:08:12	2220425B_21.d	22204134101	Sample	1	RXJ,QQQ3;739295
04/26/22 01:22:51	2220425B_22.d	22204134102	Sample	1	RXJ,QQQ3;739295
04/26/22 01:37:30	2220425B_23.d	22204134103	Sample	1	RXJ,QQQ3;739295
04/26/22 01:52:08	2220425B_24.d	22204134201	Sample	1	RXJ,QQQ3;739295
04/26/22 02:06:50	2220425B_25.d	22204134202	Sample	1	RXJ,QQQ3;739295
04/26/22 02:21:29	2220425B_26.d	1400	QC	1	RXJ,QQQ3;CCV
04/26/22 02:36:24	2220425B_27.d	22204134203	Sample	1	RXJ,QQQ3;739295
04/26/22 02:51:20	2220425B_28.d	22204134204	Sample	1	RXJ,QQQ3;739295
04/26/22 03:06:00	2220425B_29.d	22204134205	Sample	1	RXJ,QQQ3;739295
04/26/22 03:20:38	2220425B_30.d	22204134206	Sample	1	RXJ,QQQ3;739295
04/26/22 03:35:17	2220425B_31.d	22204134207	Sample	1	RXJ,QQQ3;739295
04/26/22 03:49:56	2220425B_32.d	22204134208	Sample	1	RXJ,QQQ3;739295
04/26/22 04:04:35	2220425B_33.d	22204134209	Sample	1	RXJ,QQQ3;739295
04/26/22 04:19:13	2220425B_34.d	22204145701	Sample	1	RXJ,QQQ3;739295
04/26/22 04:33:54	2220425B_35.d	22204145702	Sample	1	RXJ,QQQ3;739295
04/26/22 04:48:32	2220425B_36.d	22204145703	Sample	1	RXJ,QQQ3;739295
04/26/22 05:03:11	2220425B_37.d	1400	QC	1	RXJ,QQQ3;CCV

ORGANICS INSTRUMENT SENSITIVITY CHECK

Report No:	<u>222040903</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/23/2022 18:31</u>	Lab File ID:	<u>2220423A_10.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739271</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	476	472	99	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	480	488	102	70	130	
NEtFOSAA	ng/L	500	489	98	70	130	
NMeFOSAA	ng/L	500	506	101	70	130	
Perfluorobutanoic acid	ng/L	500	481	96	70	130	
Perfluorobutanesulfonic acid	ng/L	444	418	94	70	130	
Perfluorodecanoic acid	ng/L	500	474	95	70	130	
Perfluorododecanoic acid	ng/L	500	483	97	70	130	
Perfluoroheptanoic acid	ng/L	500	468	94	70	130	
Perfluorohexanoic acid	ng/L	500	476	95	70	130	
Perfluorohexanesulfonic acid	ng/L	457	456	100	70	130	
Perfluorononanoic acid	ng/L	500	459	92	70	130	
Perfluorooctanoic acid	ng/L	500	469	94	70	130	
Perfluorooctanesulfonic acid	ng/L	464	449	97	70	130	
Perfluoropentanoic acid	ng/L	500	490	98	70	130	
Perfluorotetradecanoic acid	ng/L	500	466	93	70	130	
Perfluorotridecanoic acid	ng/L	500	495	99	70	130	
Perfluoroundecanoic acid	ng/L	500	465	93	70	130	

ORGANICS INSTRUMENT SENSITIVITY CHECK

Report No:	<u>222040903</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>04/25/2022 19:16</u>	Lab File ID:	<u>2220425B_11.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739406</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	476	474	100	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	480	513	107	70	130	
NEtFOSAA	ng/L	500	498	100	70	130	
NMeFOSAA	ng/L	500	524	105	70	130	
Perfluorobutanoic acid	ng/L	500	486	97	70	130	
Perfluorobutanesulfonic acid	ng/L	444	464	105	70	130	
Perfluorodecanoic acid	ng/L	500	488	98	70	130	
Perfluorododecanoic acid	ng/L	500	476	95	70	130	
Perfluoroheptanoic acid	ng/L	500	491	98	70	130	
Perfluorohexanoic acid	ng/L	500	497	99	70	130	
Perfluorohexanesulfonic acid	ng/L	457	456	100	70	130	
Perfluorononanoic acid	ng/L	500	471	94	70	130	
Perfluorooctanoic acid	ng/L	500	492	98	70	130	
Perfluorooctanesulfonic acid	ng/L	464	463	100	70	130	
Perfluoropentanoic acid	ng/L	500	483	97	70	130	
Perfluorotetradecanoic acid	ng/L	500	462	92	70	130	
Perfluorotridecanoic acid	ng/L	500	469	94	70	130	
Perfluoroundecanoic acid	ng/L	500	486	97	70	130	

ORGANICS INITIAL CALIBRATION VERIFICATION

Report No:	<u>222040903</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/23/2022 18:17</u>	Lab File ID:	<u>2220423A_09.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739271</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	10000	10600	106	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	10100	10900	108	70	130	
NEtFOSAA	ng/L	10000	10400	104	70	130	
NMeFOSAA	ng/L	10000	9880	99	70	130	
Perfluorobutanoic acid	ng/L	10000	10100	101	70	130	
Perfluorobutanesulfonic acid	ng/L	10000	10900	109	70	130	
Perfluorodecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorododecanoic acid	ng/L	10000	9350	94	70	130	
Perfluoroheptanoic acid	ng/L	10000	10400	104	70	130	
Perfluorohexanoic acid	ng/L	10100	11000	109	70	130	
Perfluorohexanesulfonic acid	ng/L	10000	10700	107	70	130	
Perfluorononanoic acid	ng/L	10000	10700	107	70	130	
Perfluorooctanoic acid	ng/L	10100	9910	98	70	130	
Perfluorooctanesulfonic acid	ng/L	10000	9150	92	70	130	
Perfluoropentanoic acid	ng/L	10100	10400	103	70	130	
Perfluorotetradecanoic acid	ng/L	10000	11000	110	70	130	
Perfluorotridecanoic acid	ng/L	10000	9540	95	70	130	
Perfluoroundecanoic acid	ng/L	10000	9660	97	70	130	

ORGANICS INITIAL CALIBRATION VERIFICATION

Report No:	<u>222040903</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>04/25/2022 19:02</u>	Lab File ID:	<u>2220425B_10.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739406</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	10000	10700	107	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	10100	10600	105	70	130	
NEtFOSAA	ng/L	10000	9830	98	70	130	
NMeFOSAA	ng/L	10000	10300	103	70	130	
Perfluorobutanoic acid	ng/L	10000	10200	102	70	130	
Perfluorobutanesulfonic acid	ng/L	10000	10900	109	70	130	
Perfluorodecanoic acid	ng/L	10000	10700	107	70	130	
Perfluorododecanoic acid	ng/L	10000	9380	94	70	130	
Perfluoroheptanoic acid	ng/L	10000	10300	103	70	130	
Perfluorohexanoic acid	ng/L	10100	10900	107	70	130	
Perfluorohexanesulfonic acid	ng/L	10000	10800	108	70	130	
Perfluorononanoic acid	ng/L	10000	10600	106	70	130	
Perfluorooctanoic acid	ng/L	10100	9940	98	70	130	
Perfluorooctanesulfonic acid	ng/L	10000	9130	91	70	130	
Perfluoropentanoic acid	ng/L	10100	10300	102	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorotridecanoic acid	ng/L	10000	9400	94	70	130	
Perfluoroundecanoic acid	ng/L	10000	9770	98	70	130	

4I - ORGANICS INSTRUMENT BLANK

Report No:	<u>222040903</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/23/2022 18:02</u>	Lab File ID:	<u>2220423A_08.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>739271</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>RESULT</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>	<i>#</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.50	3.00	4.00	
8:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.06	3.00	4.00	
NEtFOSAA	ng/L	4.00	U	1.58	4.00	8.00	
NMeFOSAA	ng/L	4.00	U	0.90	4.00	8.00	
Perfluorobutanesulfonic acid	ng/L	2.00	U	0.62	2.00	4.00	
Perfluorobutanoic acid	ng/L	3.50	U	1.52	3.50	4.00	
Perfluorodecanoic acid	ng/L	3.00	U	1.44	3.00	4.00	
Perfluorododecanoic acid	ng/L	3.00	U	1.30	3.00	4.00	
Perfluoroheptanoic acid	ng/L	3.00	U	1.16	3.00	4.00	
Perfluorohexanesulfonic acid	ng/L	3.00	U	1.24	3.00	4.00	
Perfluorohexanoic acid	ng/L	2.00	U	0.94	2.00	4.00	
Perfluorononanoic acid	ng/L	2.00	U	0.98	2.00	4.00	
Perfluorooctanesulfonic acid	ng/L	2.00	U	0.76	2.00	4.00	
Perfluorooctanoic acid	ng/L	2.00	U	0.84	2.00	4.00	
Perfluoropentanoic acid	ng/L	2.00	U	0.88	2.00	4.00	
Perfluorotetradecanoic acid	ng/L	3.00	U	1.14	3.00	4.00	
Perfluorotridecanoic acid	ng/L	3.00	U	1.23	3.00	4.00	
Perfluoroundecanoic acid	ng/L	3.00	U	1.24	3.00	4.00	

* - Result greater than 1/2 LOQ

4I - ORGANICS INSTRUMENT BLANK

Report No:	<u>222040903</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>04/25/2022 18:47</u>	Lab File ID:	<u>2220425B_9.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>739406</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>RESULT</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>	<i>#</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.50	3.00	4.00	
8:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.06	3.00	4.00	
NEtFOSAA	ng/L	4.00	U	1.58	4.00	8.00	
NMeFOSAA	ng/L	4.00	U	0.90	4.00	8.00	
Perfluorobutanesulfonic acid	ng/L	2.00	U	0.62	2.00	4.00	
Perfluorobutanoic acid	ng/L	3.50	U	1.52	3.50	4.00	
Perfluorodecanoic acid	ng/L	3.00	U	1.44	3.00	4.00	
Perfluorododecanoic acid	ng/L	3.00	U	1.30	3.00	4.00	
Perfluoroheptanoic acid	ng/L	3.00	U	1.16	3.00	4.00	
Perfluorohexanesulfonic acid	ng/L	3.00	U	1.24	3.00	4.00	
Perfluorohexanoic acid	ng/L	2.00	U	0.94	2.00	4.00	
Perfluorononanoic acid	ng/L	2.00	U	0.98	2.00	4.00	
Perfluorooctanesulfonic acid	ng/L	2.00	U	0.76	2.00	4.00	
Perfluorooctanoic acid	ng/L	2.00	U	0.84	2.00	4.00	
Perfluoropentanoic acid	ng/L	2.00	U	0.88	2.00	4.00	
Perfluorotetradecanoic acid	ng/L	3.00	U	1.14	3.00	4.00	
Perfluorotridecanoic acid	ng/L	3.00	U	1.23	3.00	4.00	
Perfluoroundecanoic acid	ng/L	3.00	U	1.24	3.00	4.00	

* - Result greater than 1/2 LOQ

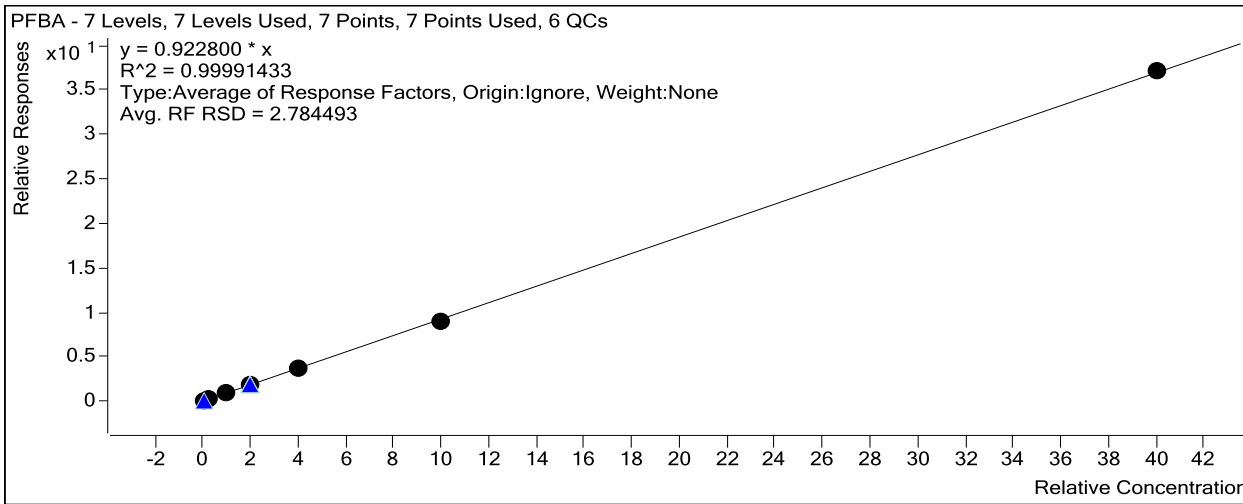
Quantitative Analysis Calibration Report

Batch Data Path	C:\MassHunter\Data\QQQ3\2220425BCAL\QuantResults\2220425B.batch.bin		
Analysis Time	4/26/2022 10:20 AM	Analyst Name	GCAL\lcms
Report Time	4/27/2022 11:56 AM	Reporter Name	GCAL\lcms
Last Calib Update	4/26/2022 8:56 AM	Batch State	Processed

Calibration Info

Target Compound PFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	10630	0.5000	0.8834
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	26051	1.2500	0.9360
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	104082	5.0000	0.9623
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	214381	10.0000	0.9145
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	422307	20.0000	0.9339
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1006576	50.0000	0.9015
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	3715912	200.0000	0.9280



Extracted ISTD

MPFBA

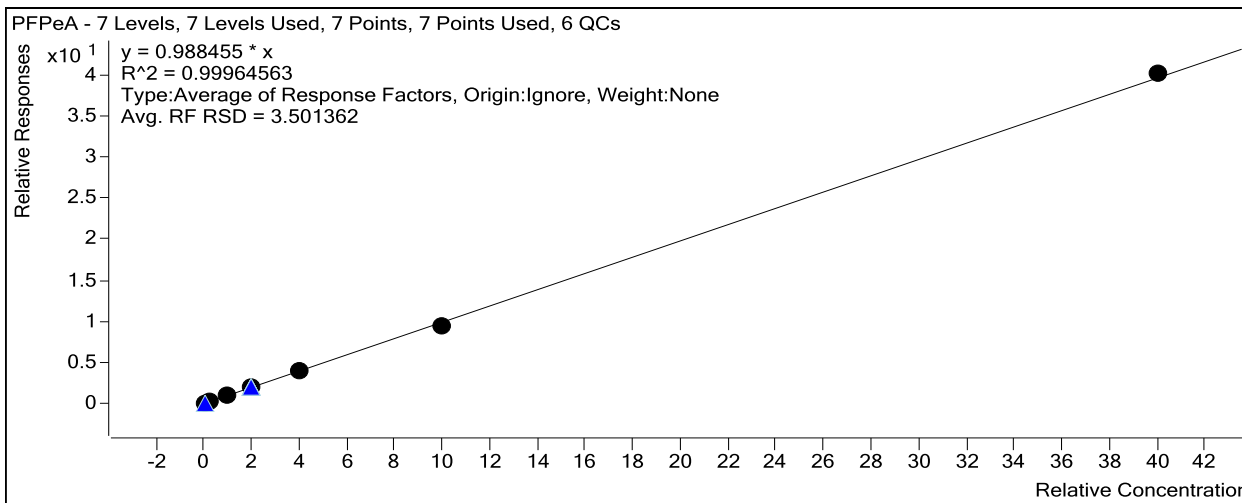
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	120332	5.0000	24066.3490
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	111321	5.0000	22264.2448
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	108161	5.0000	21632.2550
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	117213	5.0000	23442.5790
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	113050	5.0000	22610.0854
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	111651	5.0000	22330.1622
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	100106	5.0000	20021.1752

Target Compound

PFMPA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1856	0.5000	0.1290
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4552	1.2500	0.1398
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	17912	5.0000	0.1394
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	36128	10.0000	0.1302

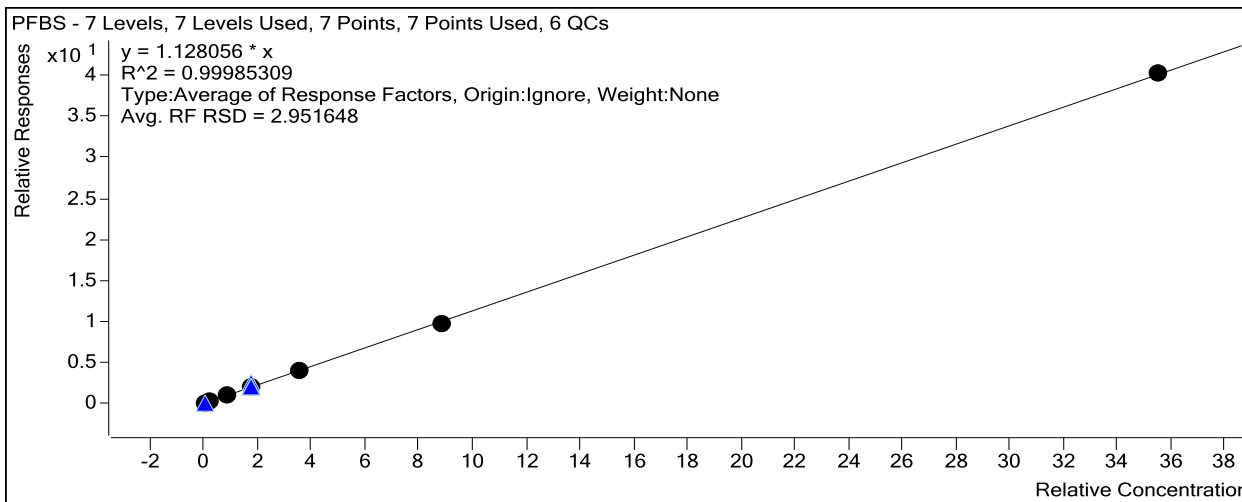
Quantitative Analysis Calibration Report



Target Compound

PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	5324	0.4435	1.1011
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	12962	1.1088	1.1507
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	51173	4.4350	1.1867
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	102124	8.8700	1.1189
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	198207	17.7400	1.1196
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	458441	44.3500	1.0857
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1582566	177.4000	1.1337

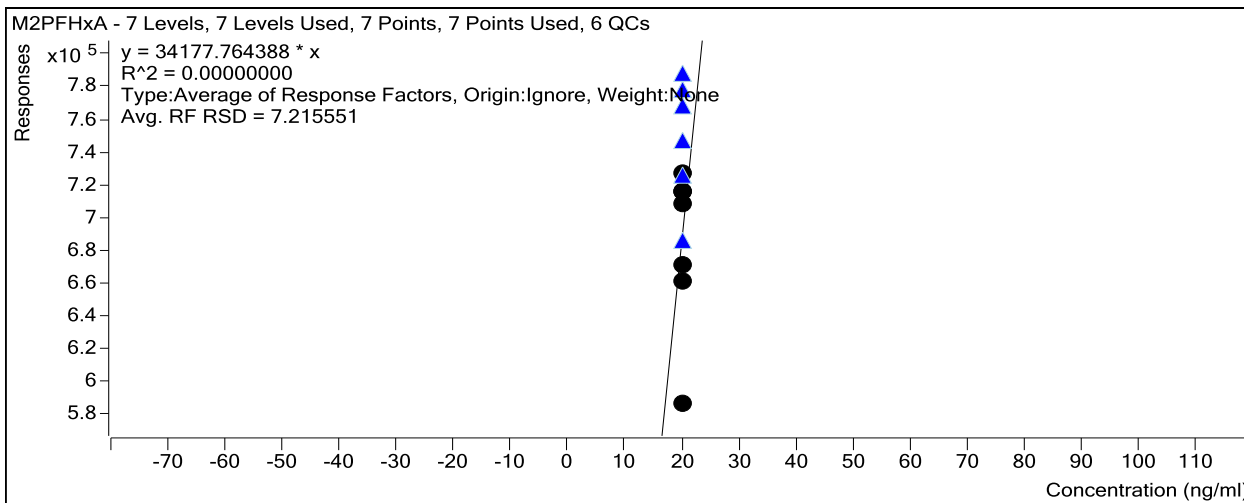


Extracted ISTD

M3PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	54507	5.0000	10901.4834
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	50798	5.0000	10159.5121
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	48617	5.0000	9723.3955
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	51448	5.0000	10289.6209
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	49899	5.0000	9979.7406

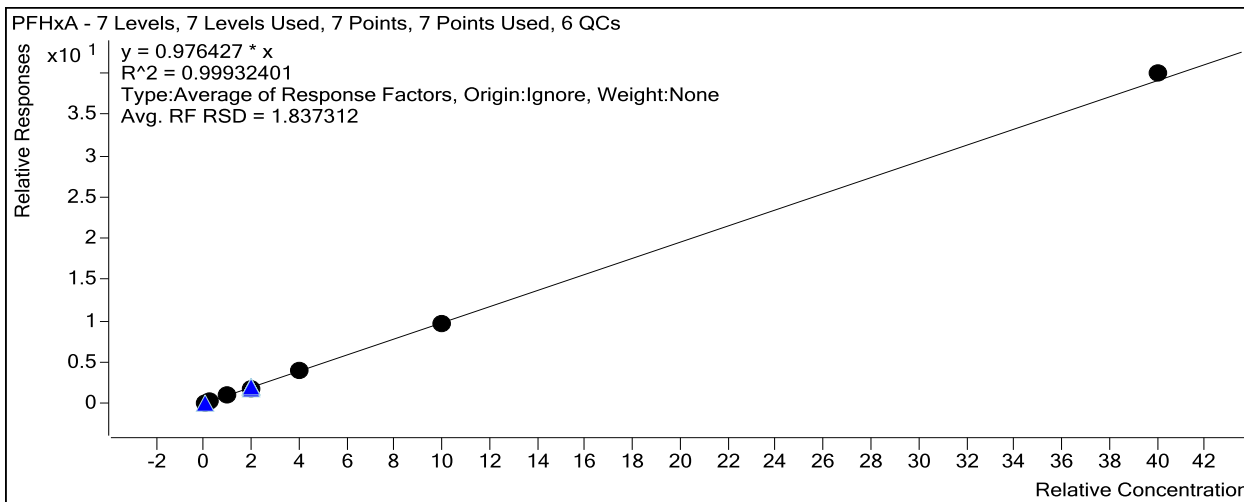
Quantitative Analysis Calibration Report



Target Compound

PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	19501	0.5000	0.9650
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	45711	1.2500	0.9828
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	181344	5.0000	0.9918
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	367763	10.0000	0.9474
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	734653	20.0000	0.9833
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1727522	50.0000	0.9655
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	6319285	200.0000	0.9992

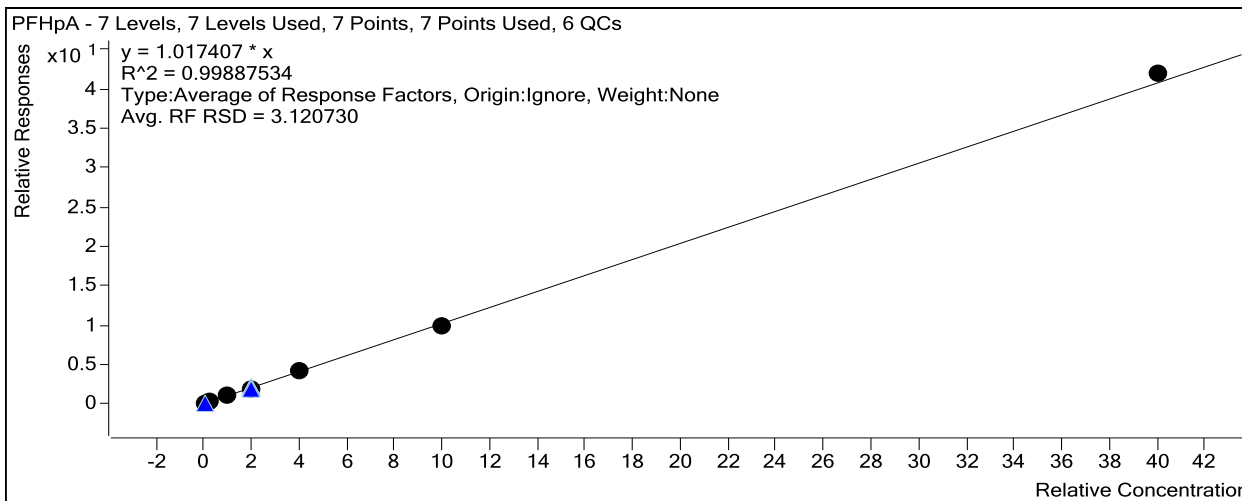


Target Compound

PFPeS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	5325	0.4705	1.0382
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	13270	1.1763	1.1104
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	53108	4.7050	1.1609
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	105297	9.4100	1.0875
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	205897	18.8200	1.0963

Quantitative Analysis Calibration Report



Extracted ISTD

M3PFHXS

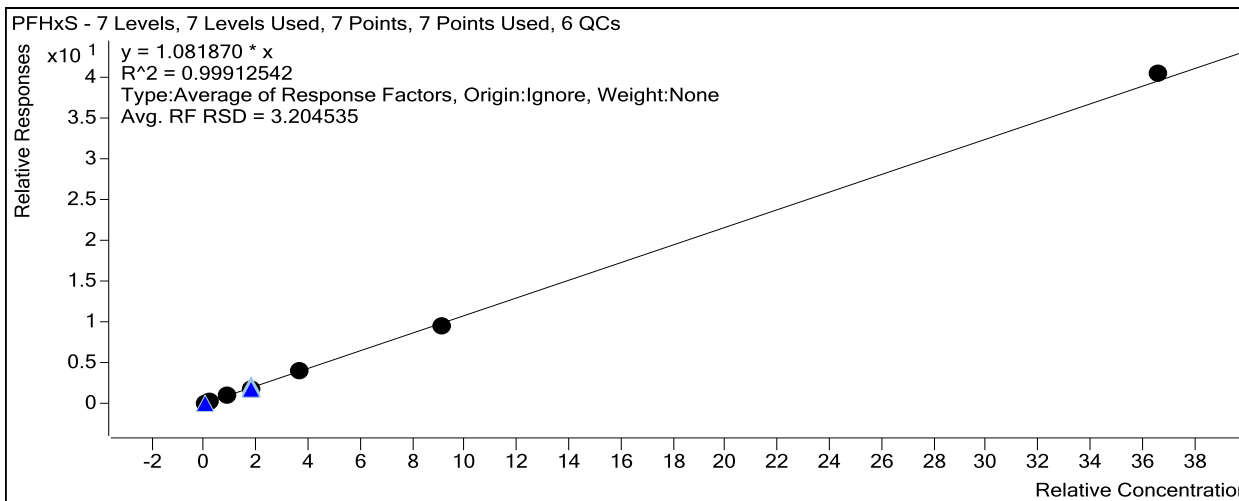
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	43191	5.0000	8638.2866
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	39560	5.0000	7912.0320
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	38096	5.0000	7619.1452
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	41824	5.0000	8364.7148
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	39698	5.0000	7939.6370
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	38483	5.0000	7696.6028
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	32728	5.0000	6545.5393

Target Compound

PFHXS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	4279	0.4570	1.0840
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	10034	1.1425	1.1100
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	38758	4.5700	1.1131
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	79048	9.1400	1.0339
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	158320	18.2800	1.0908
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	363388	45.7000	1.0331
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1325778	182.8000	1.1080

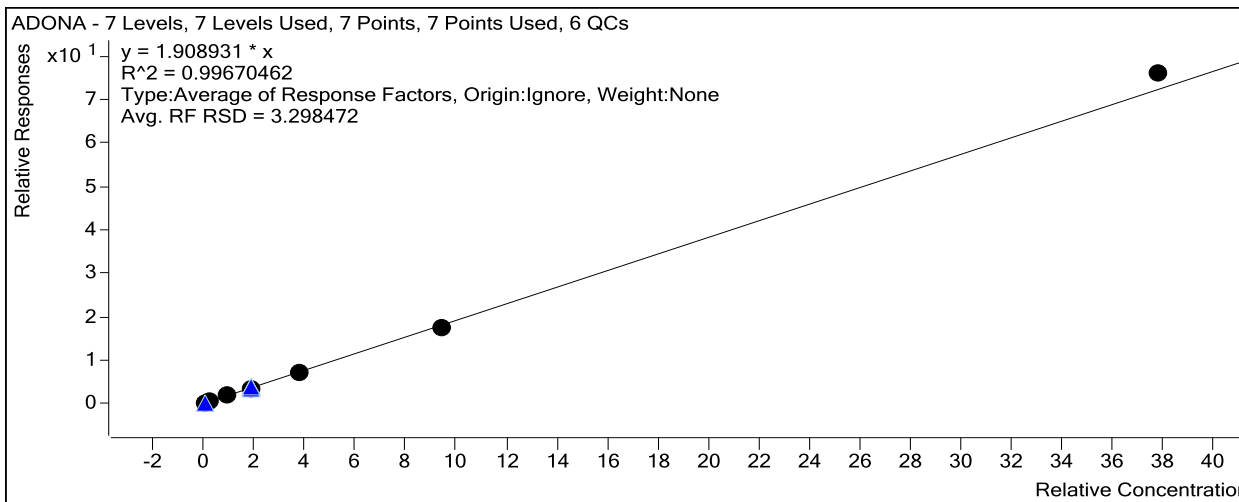
Quantitative Analysis Calibration Report



Target Compound

ADONA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	34724	0.4725	1.8248
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	85894	1.1813	1.9183
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	334617	4.7250	1.9468
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	688892	9.4500	1.8777
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1364957	18.9000	1.9341
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	3184414	47.2500	1.8509
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	11817313	189.0000	2.0099



Extracted ISTD

M2 6:2 FTS

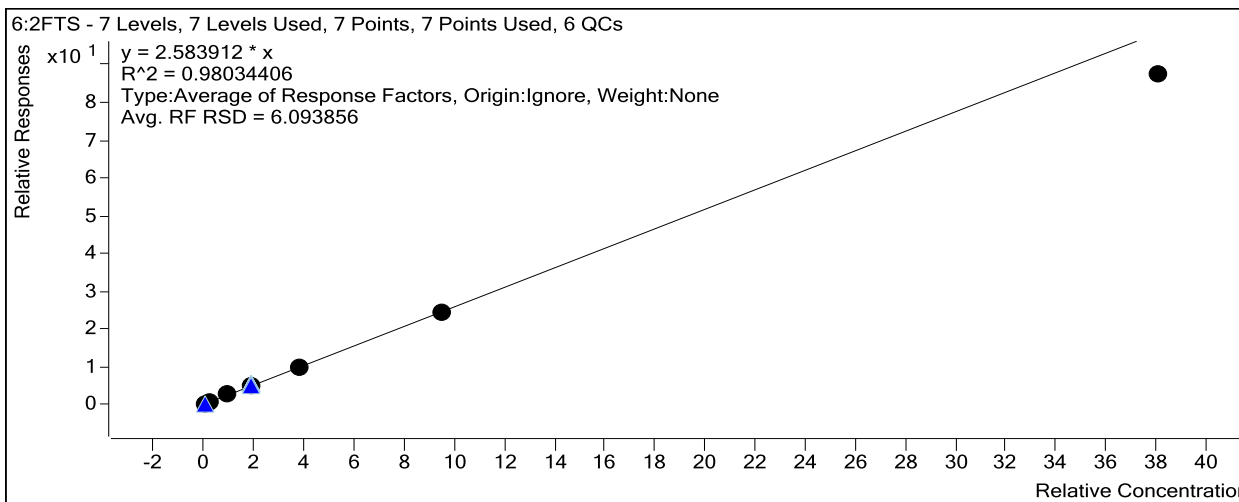
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	21458	5.0000	4291.5786
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	19909	5.0000	3981.8430
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	17643	5.0000	3528.5797
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	19537	5.0000	3907.4003
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	19706	5.0000	3941.2777

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	14482	5.0000	2896.3470
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	11352	5.0000	2270.3033

Target Compound 6:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	5264	0.4755	2.5796
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	12339	1.1888	2.6068
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	47699	4.7550	2.8429
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	95661	9.5100	2.5743
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	194759	19.0200	2.5981
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	356173	47.5500	2.5862
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	992971	190.2000	2.2995



Extracted ISTD M8PFOA

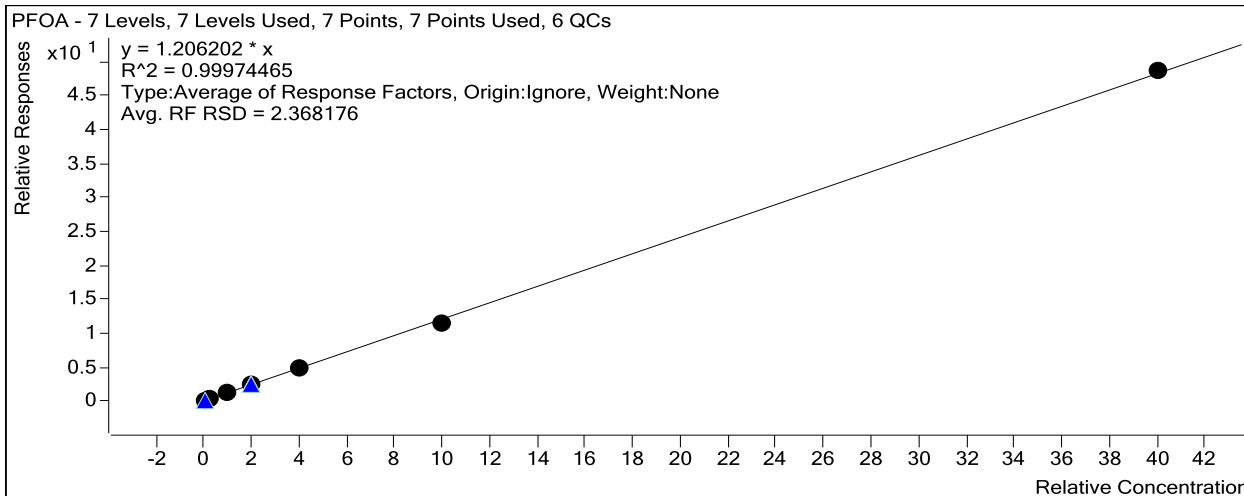
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	201366	5.0000	40273.1042
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	189519	5.0000	37903.8249
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	181880	5.0000	36375.9254
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	194116	5.0000	38823.1628
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	186704	5.0000	37340.8665
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	182063	5.0000	36412.5916
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	155541	5.0000	31108.2550

Instrument ISTD MPFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1134167	25.0000	45366.6918
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	1118714	25.0000	44748.5565
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	1089696	25.0000	43587.8465
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	1126284	25.0000	45051.3632
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1064119	25.0000	42564.7778
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	993997	25.0000	39759.8769
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	857566	25.0000	34302.6554

Quantitative Analysis Calibration Report

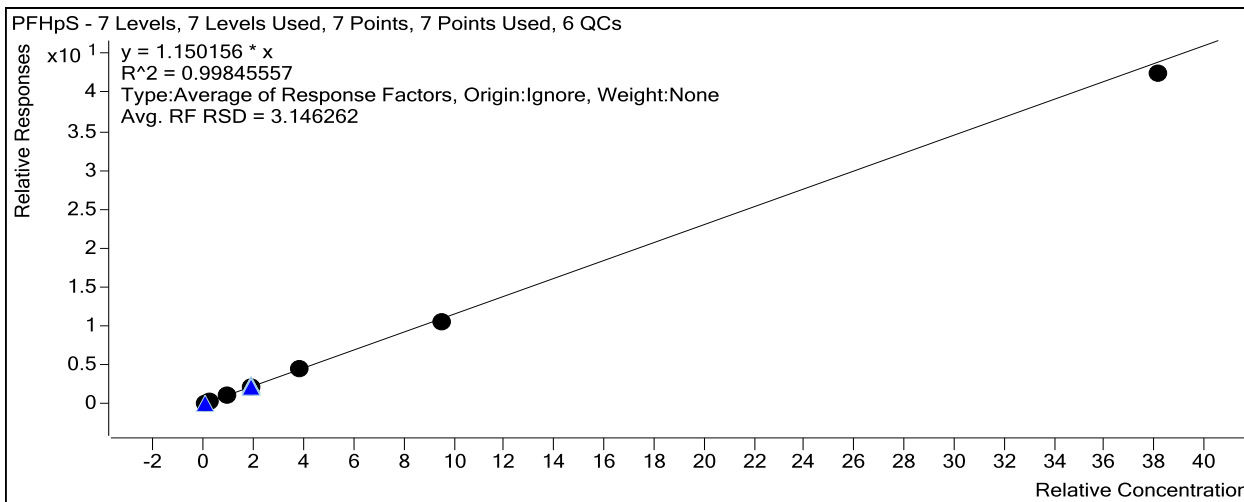
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2100718	50.0000	1.1538
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	7571751	200.0000	1.2170



Target Compound

PFHpS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	4779	0.4765	1.1609
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	11138	1.1913	1.1817
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	43722	4.7650	1.2043
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	89860	9.5300	1.1273
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	175084	19.0600	1.1570
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	405931	47.6500	1.1069
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1388705	190.6000	1.1131



Extracted ISTD

M9PFNA

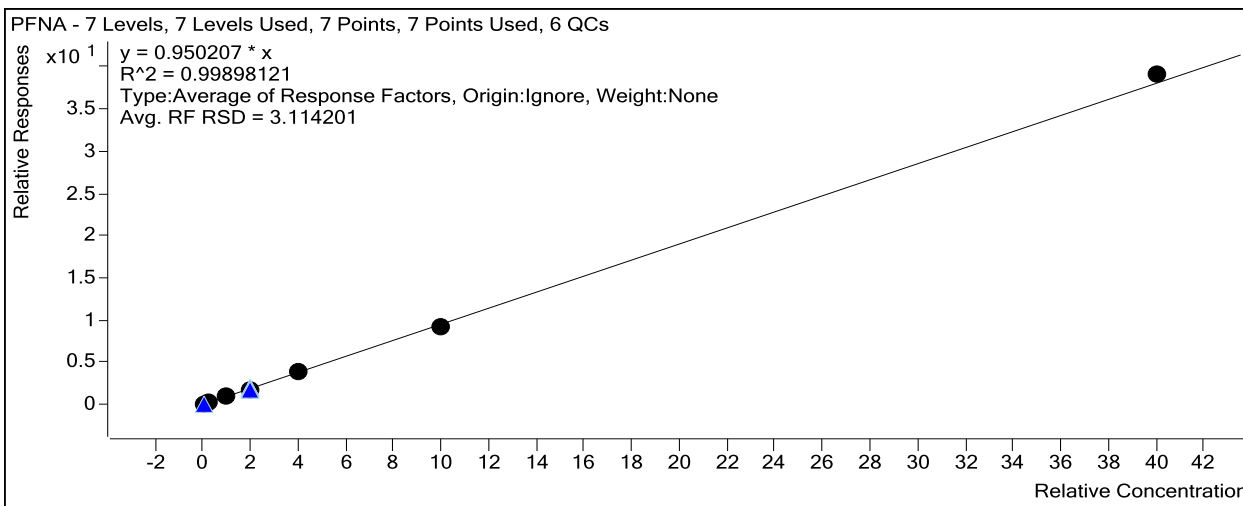
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	235842	5.0000	47168.4484
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	216879	5.0000	43375.7342
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	207046	5.0000	41409.1772

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	224834	5.0000	44966.8555
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	212224	5.0000	42444.7994
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	203531	5.0000	40706.2385
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	169506	5.0000	33901.1497

Target Compound PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	21522	0.5000	0.9126
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	52363	1.2500	0.9657
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	204461	5.0000	0.9875
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	415106	10.0000	0.9231
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	815517	20.0000	0.9607
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1882337	50.0000	0.9248
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	6624114	200.0000	0.9770



Extracted ISTD M8PFOS

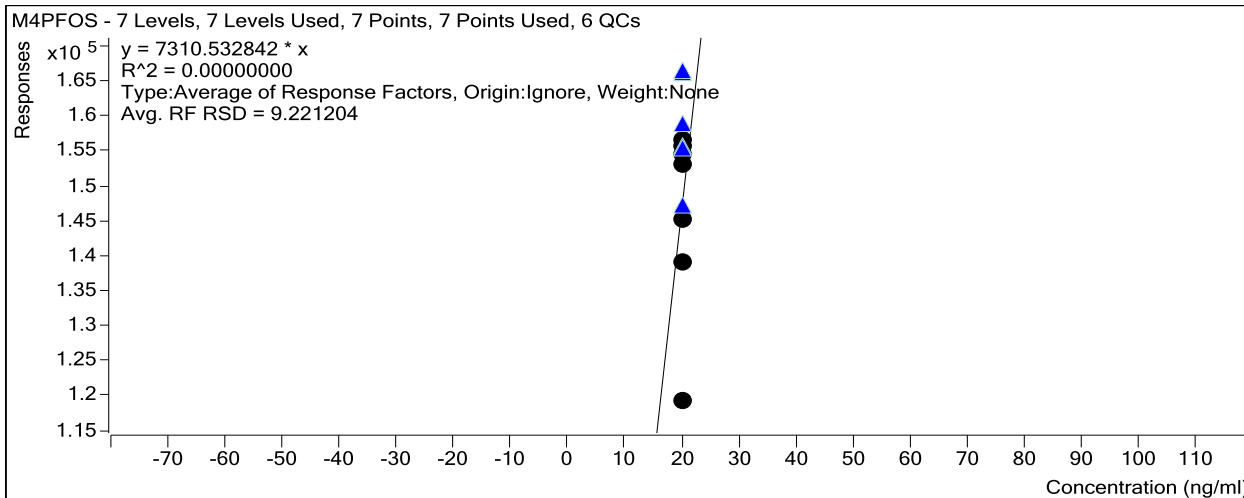
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	41522	5.0000	8304.3581
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	38006	5.0000	7601.2214
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	36960	5.0000	7392.0084
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	39241	5.0000	7848.1997
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	37395	5.0000	7478.9030
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	35991	5.0000	7198.2384
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	29461	5.0000	5892.2632

Instrument ISTD M4PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	154526	20.0000	7726.3211
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	155615	20.0000	7780.7478
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	145174	20.0000	7258.7101
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	153233	20.0000	7661.6298
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	156566	20.0000	7828.2808

Quantitative Analysis Calibration Report

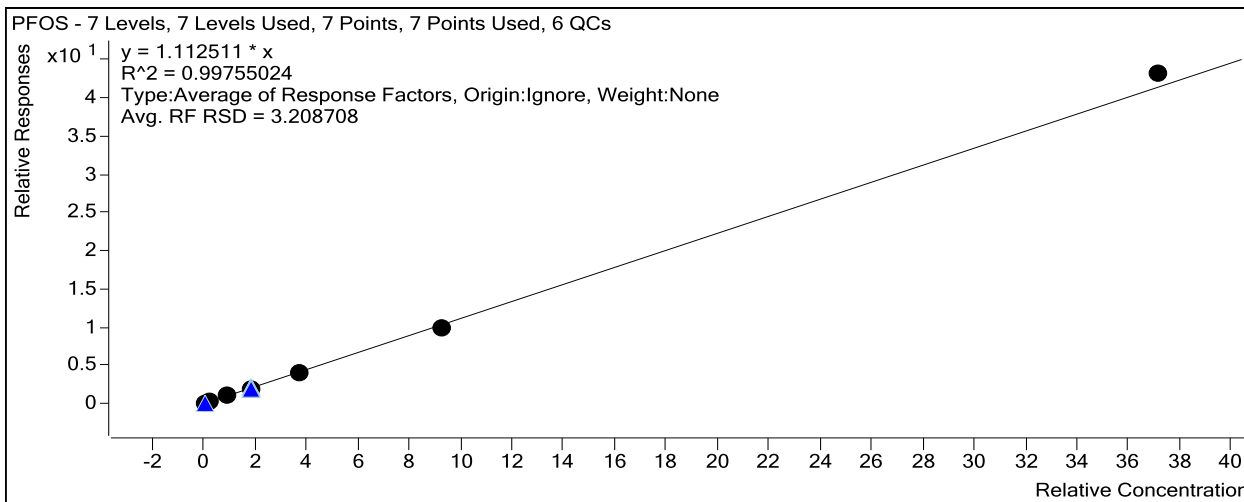
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	139064	20.0000	6953.2229
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	119296	20.0000	5964.8174



Target Compound

PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	4327	0.4640	1.1229
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	9982	1.1600	1.1321
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	38669	4.6400	1.1274
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	77524	9.2800	1.0644
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	154455	18.5600	1.1127
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	356020	46.4000	1.0659
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1270761	185.6000	1.1620

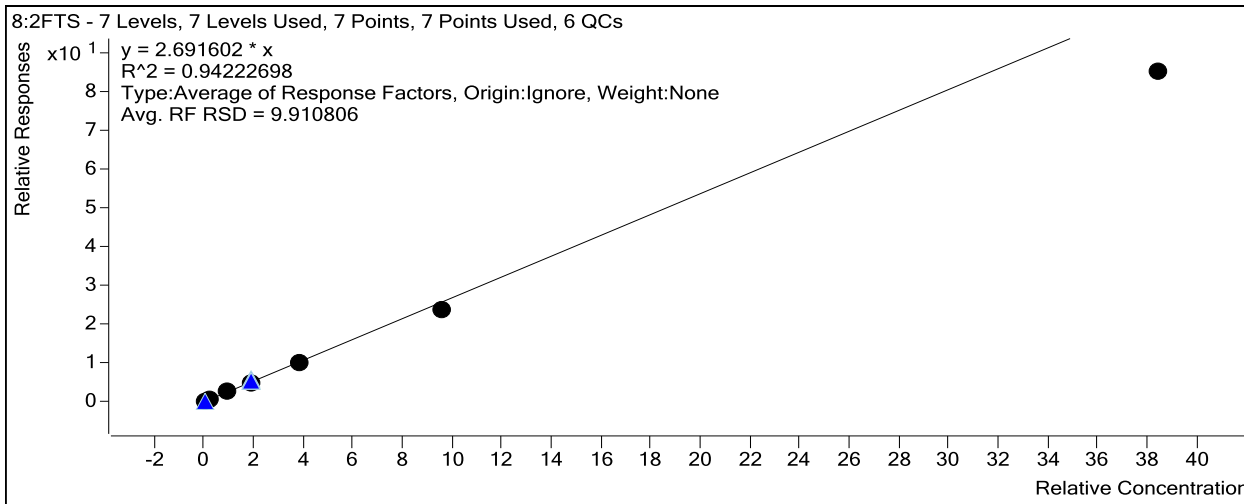


Target Compound

9CI-PF3ONS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	21079	0.4665	5.4411
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	53097	1.1663	5.9893
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	207075	4.6650	6.0050

Quantitative Analysis Calibration Report



Extracted *ISTD*

M6PFDA

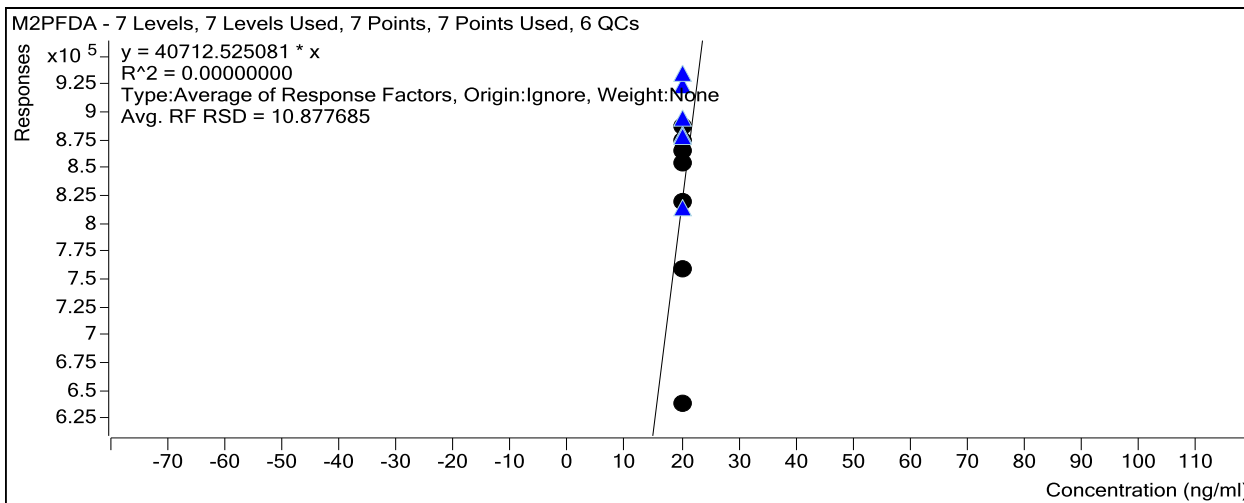
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	248347	5.0000	49669.4751
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	228036	5.0000	45607.1655
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	219674	5.0000	43934.7467
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	232375	5.0000	46475.0189
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	223158	5.0000	44631.5718
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	207197	5.0000	41439.3197
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	170931	5.0000	34186.1957

Instrument *ISTD*

M2PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	864664	20.0000	43233.2091
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	887076	20.0000	44353.7911
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	820182	20.0000	41009.1024
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	854972	20.0000	42748.6214
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	875045	20.0000	43752.2455
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	759019	20.0000	37950.9468
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	638795	20.0000	31939.7594

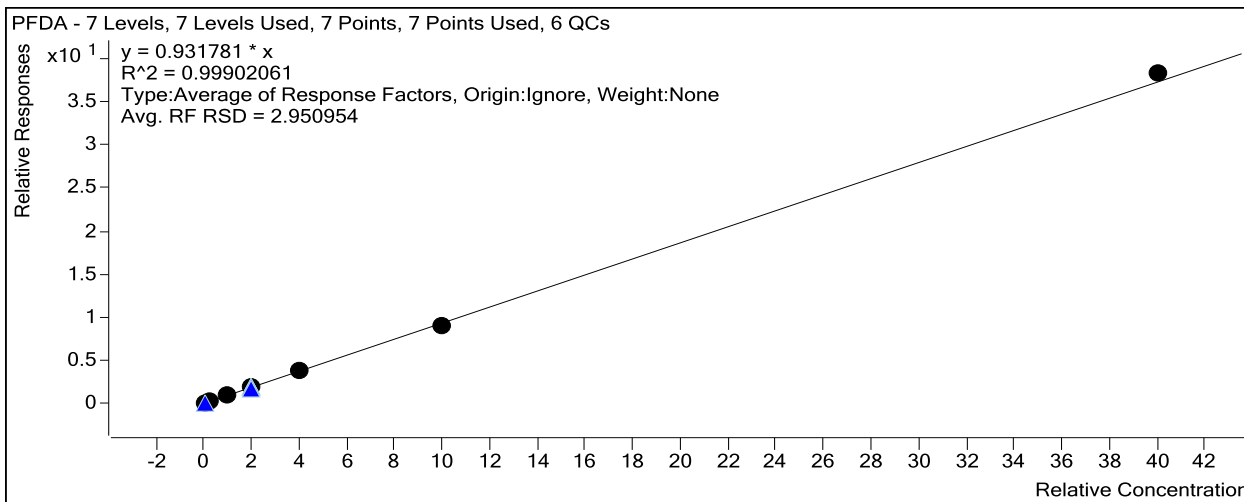
Quantitative Analysis Calibration Report



Target Compound

PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	21955	0.5000	0.8841
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	54266	1.2500	0.9519
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	208938	5.0000	0.9511
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	425729	10.0000	0.9160
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	845621	20.0000	0.9473
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1894122	50.0000	0.9142
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	6549119	200.0000	0.9579

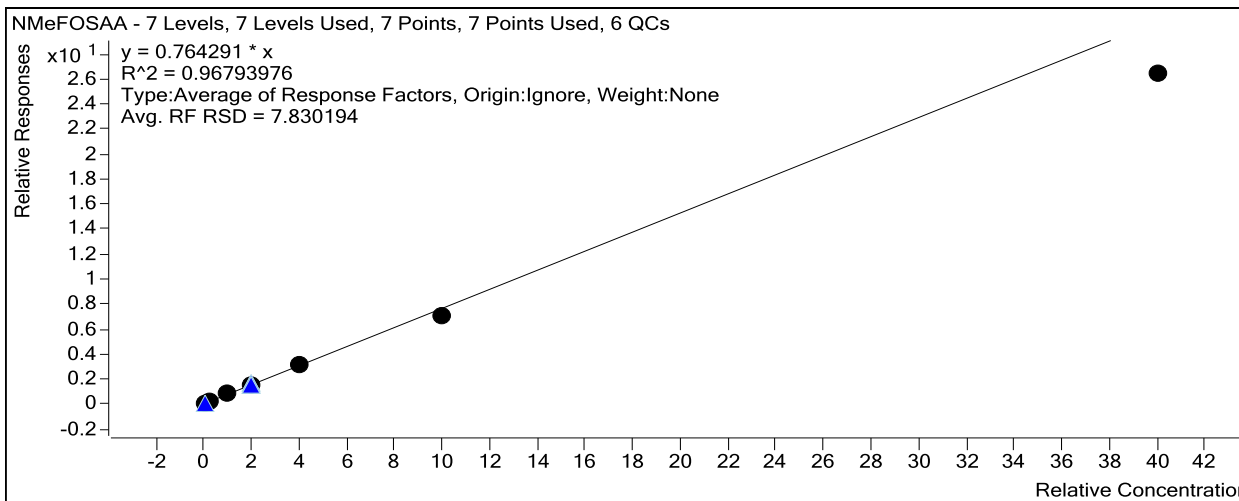


Target Compound

PFNS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3931	0.4810	0.9843
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	9383	1.2025	1.0265
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	37252	4.8100	1.0477
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	75411	9.6200	0.9988
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	145631	19.2400	1.0121

Quantitative Analysis Calibration Report



Extracted ISTD

M8FOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	80172	5.0000	16034.3080
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	72805	5.0000	14561.0242
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	70850	5.0000	14170.0232
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	75748	5.0000	15149.6956
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	72977	5.0000	14595.3781
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	72093	5.0000	14418.5288
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	66532	5.0000	13306.3099

Target Compound

PFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	8040	0.5000	1.0028
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	19133	1.2500	1.0512
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	76084	5.0000	1.0739
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	149531	10.0000	0.9870
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	300271	20.0000	1.0287
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	713866	50.0000	0.9902
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	2730917	200.0000	1.0262

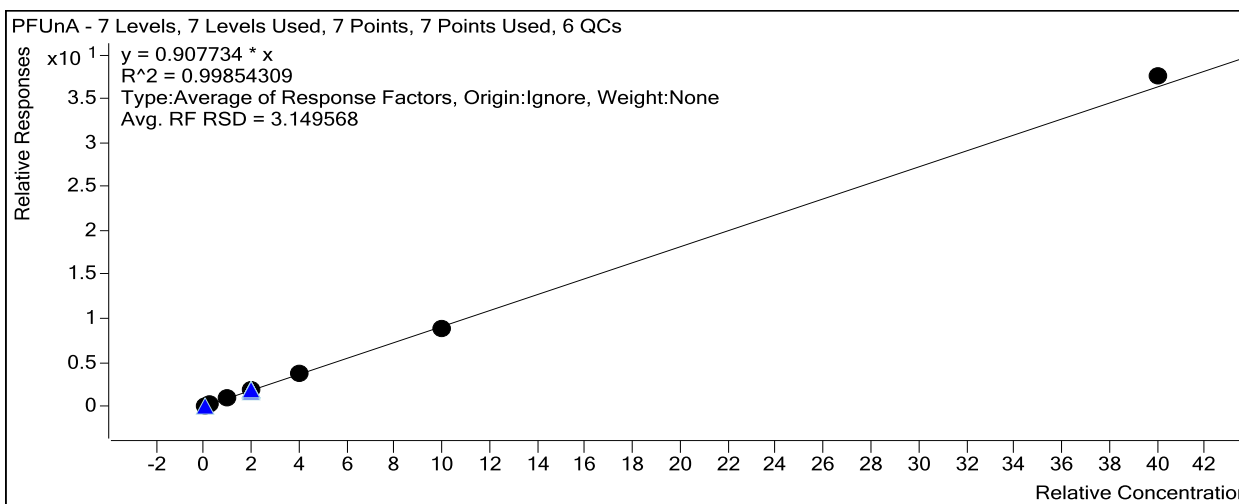
Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	233999	5.0000	46799.8360
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	183364	5.0000	36672.7000

Target Compound

PFUnA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	23967	0.5000	0.8609
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	58348	1.2500	0.8983
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	229803	5.0000	0.9287
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	473662	10.0000	0.9033
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	913195	20.0000	0.9360
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2078172	50.0000	0.8881
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	6886459	200.0000	0.9389



Extracted ISTD

d5-NEtFOSAA

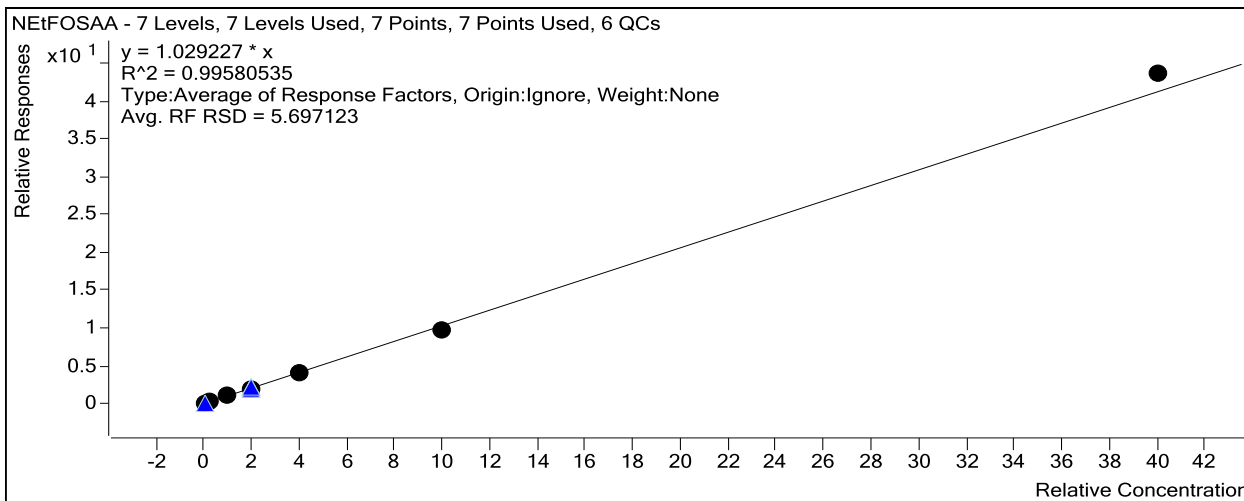
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	40561	5.0000	8112.2088
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	36381	5.0000	7276.1459
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	33401	5.0000	6680.1670
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	37313	5.0000	7462.6964
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	35224	5.0000	7044.8487
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	32393	5.0000	6478.5721
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	23568	5.0000	4713.5721

Target Compound

NEtFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	4087	0.5000	1.0077
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	9250	1.2500	1.0170
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	37709	5.0000	1.1290
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	72515	10.0000	0.9717
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	142630	20.0000	1.0123
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	316386	50.0000	0.9767
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1027728	200.0000	1.0902

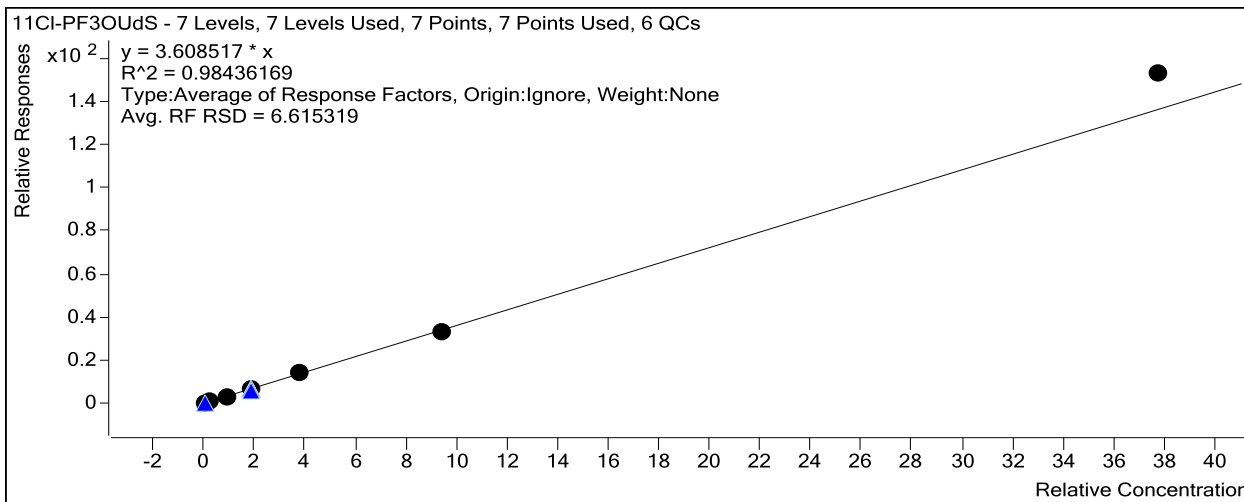
Quantitative Analysis Calibration Report



Target Compound

11CI-PF3OUdS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	12832	0.4715	3.2773
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	31912	1.1788	3.5615
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	127003	4.7150	3.6439
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	258564	9.4300	3.4937
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	521312	18.8600	3.6959
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1197990	47.1500	3.5298
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	4509161	188.6000	4.0576

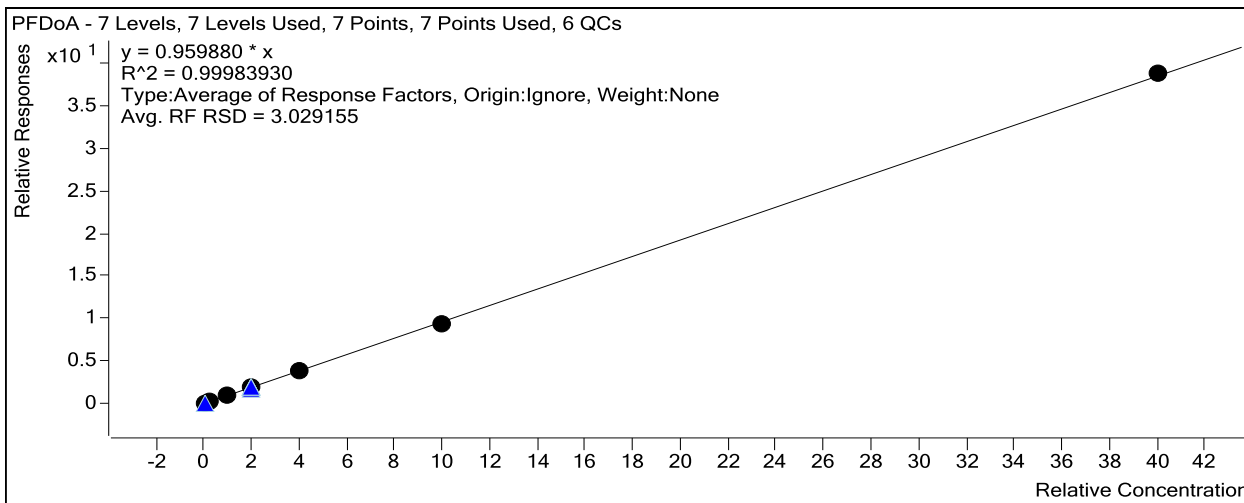


Target Compound

10:2F7S

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	4252	0.4820	3.0333
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	10084	1.2050	3.1535
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	38742	4.8200	3.0591
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	78920	9.6400	3.1353
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	148694	19.2800	3.1419

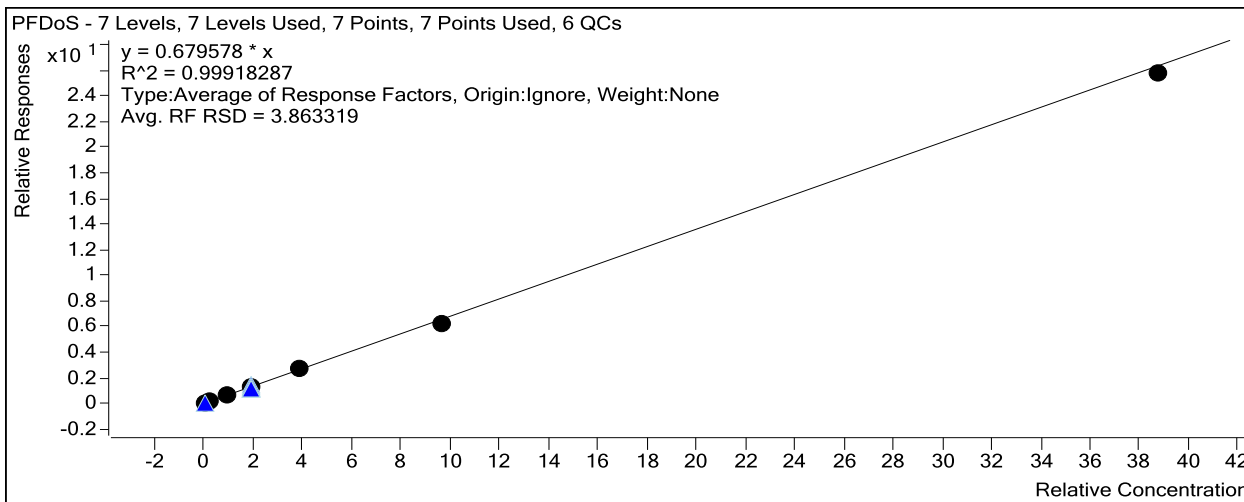
Quantitative Analysis Calibration Report



Target Compound

PFD_oS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2795	0.4840	0.6954
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	6312	1.2100	0.6863
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	25727	4.8400	0.7191
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	49596	9.6800	0.6528
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	100319	19.3600	0.6929
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	224786	48.4000	0.6452
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	758941	193.6000	0.6653



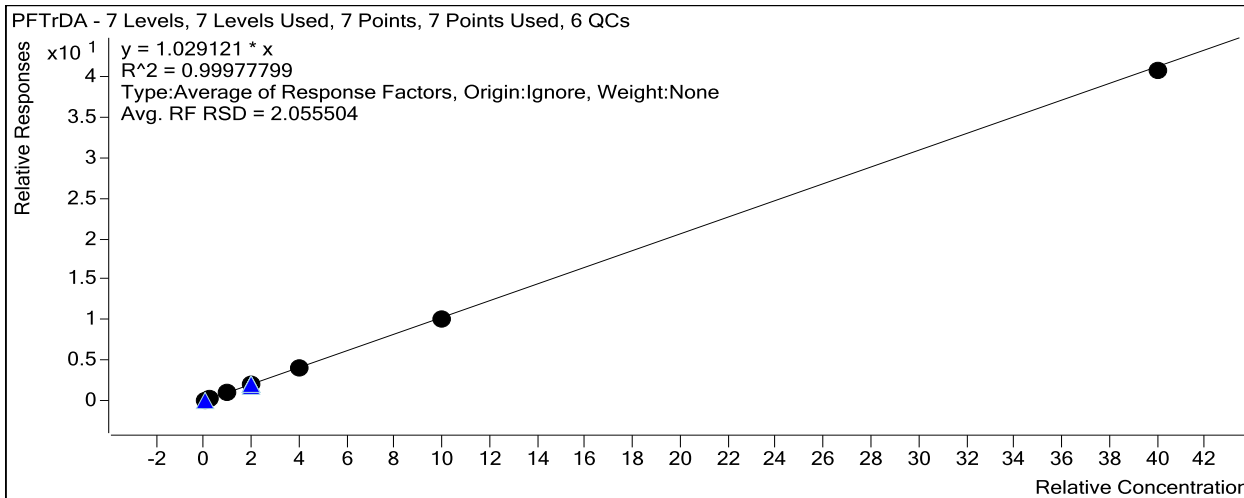
Target Compound

PFT_rDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	35034	0.5000	1.0206
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	82172	1.2500	1.0485
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	332120	5.0000	1.0653
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	656899	10.0000	1.0090
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1293167	20.0000	1.0335

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	3018313	50.0000	1.0103
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	10687169	200.0000	1.0167



Extracted *ISTD*

d-NMeFOSA

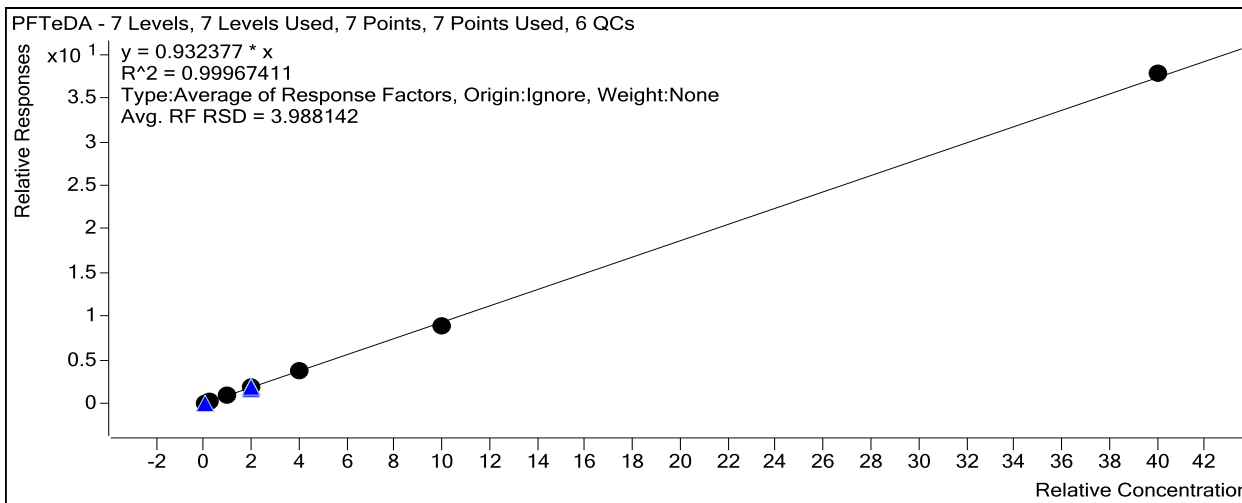
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	18366	5.0000	3673.1990
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	17314	5.0000	3462.8980
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	17045	5.0000	3408.9885
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	18002	5.0000	3600.4167
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	17408	5.0000	3481.5521
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	17548	5.0000	3509.6619
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	17013	5.0000	3402.6311

Target Compound

NMeFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1935	0.5000	1.0536
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4620	1.2500	1.0673
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	20095	5.0000	1.1789
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	39727	10.0000	1.1034
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	79633	20.0000	1.1436
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	184974	50.0000	1.0541
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	668426	200.0000	0.9822

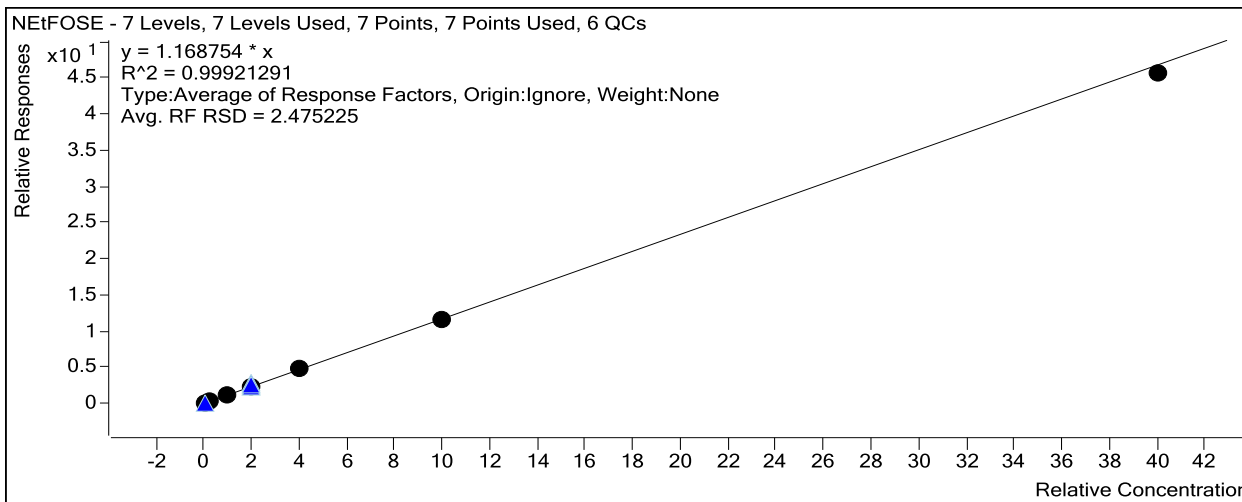
Quantitative Analysis Calibration Report



Target Compound

NETFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2317	0.5000	1.1736
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	5406	1.2500	1.1703
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	21676	5.0000	1.2031
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	42281	10.0000	1.1267
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	86666	20.0000	1.2039
D:\MassHunter\Data\2220425BCAL\2220425B_7.d	Calibration	6	<input checked="" type="checkbox"/>	202449	50.0000	1.1628
D:\MassHunter\Data\2220425BCAL\2220425B_8.d	Calibration	7	<input checked="" type="checkbox"/>	713476	200.0000	1.1408



Extracted ISTD

d-NETFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220425BCAL\2220425B_2.d	Calibration	1	<input checked="" type="checkbox"/>	18846	5.0000	3769.1379
D:\MassHunter\Data\2220425BCAL\2220425B_3.d	Calibration	2	<input checked="" type="checkbox"/>	16532	5.0000	3306.4653
D:\MassHunter\Data\2220425BCAL\2220425B_4.d	Calibration	3	<input checked="" type="checkbox"/>	16565	5.0000	3312.9537
D:\MassHunter\Data\2220425BCAL\2220425B_5.d	Calibration	4	<input checked="" type="checkbox"/>	17811	5.0000	3562.1110
D:\MassHunter\Data\2220425BCAL\2220425B_6.d	Calibration	5	<input checked="" type="checkbox"/>	17386	5.0000	3477.2823

Quantitative Analysis Calibration Report

Batch Data Path
Analysis Time
Report Time
Last Calib Update

D:\MassHunter\Data\QQQ4\2220423ACAL\QuantResults\2220423A.batch.bin
 4/24/2022 8:05 AM **Analyst Name** GCAL\lcms
 4/25/2022 12:08 PM **Reporter Name** GCAL\lcms
 4/24/2022 6:52 AM **Batch State** Processed

Calibration Info
Extracted ISTD

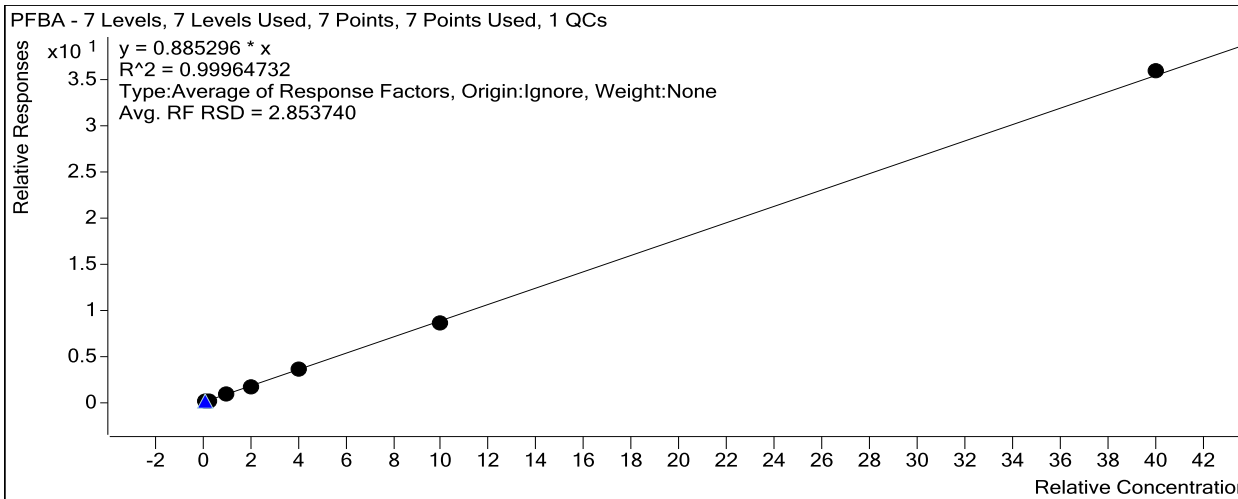
MPFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	113416	5.0000	22683.2835
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	106854	5.0000	21370.7567
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	101636	5.0000	20327.2826
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	111503	5.0000	22300.5726
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	103153	5.0000	20630.5321
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	106686	5.0000	21337.2299
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	100530	5.0000	20105.9261

Target Compound

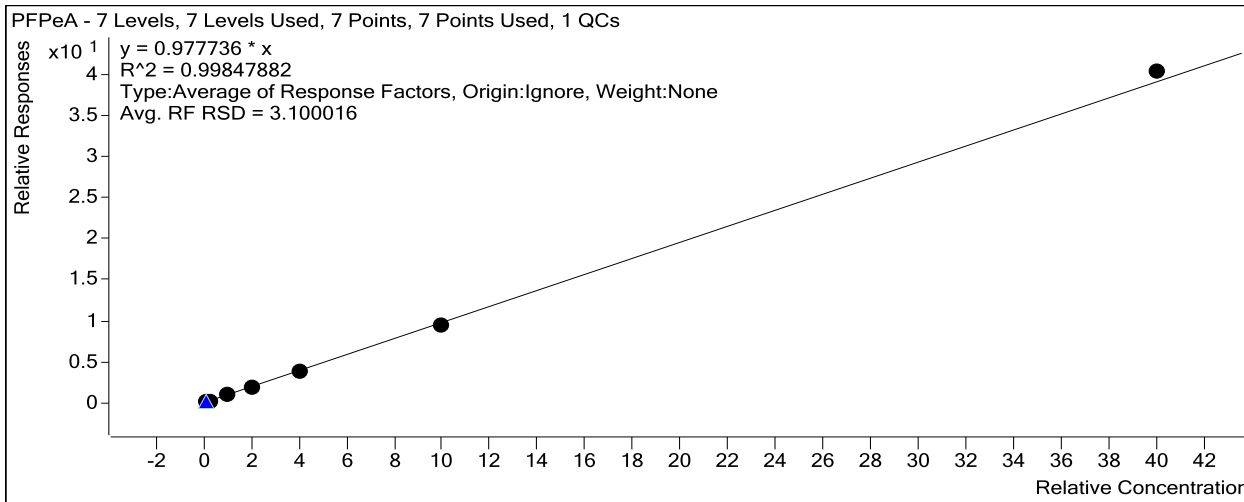
PFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	9606	0.5000	0.8470
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	23882	1.2500	0.8940
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	93837	5.0000	0.9233
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	194261	10.0000	0.8711
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	369480	20.0000	0.8955
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	924750	50.0000	0.8668
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	3616689	200.0000	0.8994



Quantitative Analysis Calibration Report

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	13515	0.5000	0.9402
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	33183	1.2500	0.9871
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	130444	5.0000	1.0148
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	269790	10.0000	0.9527
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	513054	20.0000	0.9872
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	1265763	50.0000	0.9503
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	4860211	200.0000	1.0119



Extracted ISTD

M3PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	44015	5.0000	8802.9624
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	40940	5.0000	8187.9056
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	39108	5.0000	7821.6887
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	43008	5.0000	8601.6975
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	39336	5.0000	7867.2330
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	39438	5.0000	7887.6923
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	35770	5.0000	7153.9670

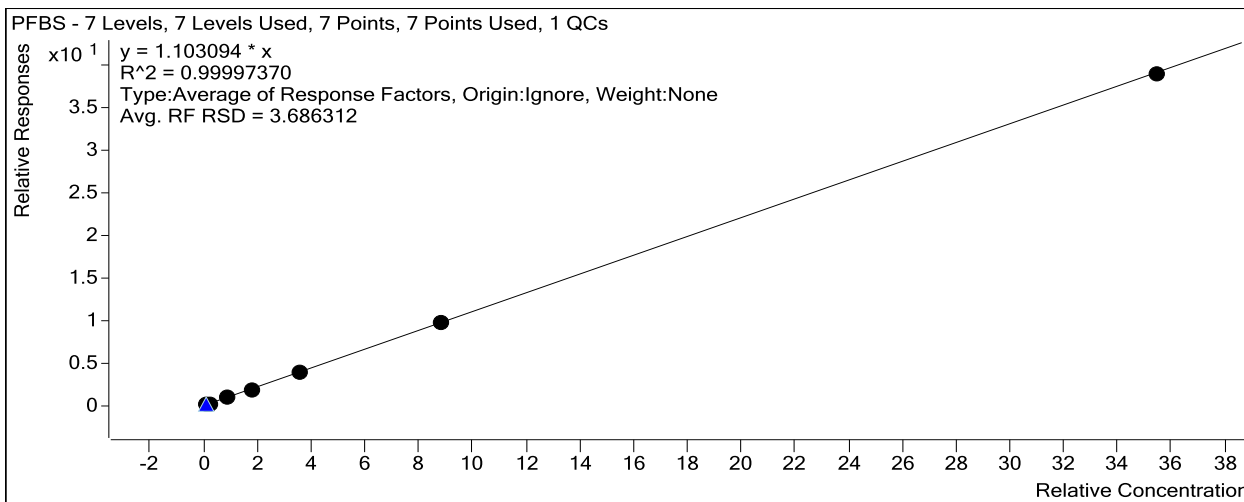
Target Compound

PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	4045	0.4435	1.0361

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	10399	1.1088	1.1455
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	40135	4.4350	1.1570
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	82475	8.8700	1.0810
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	155159	17.7400	1.1117
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	381541	44.3500	1.0907
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	1395678	177.4000	1.0997

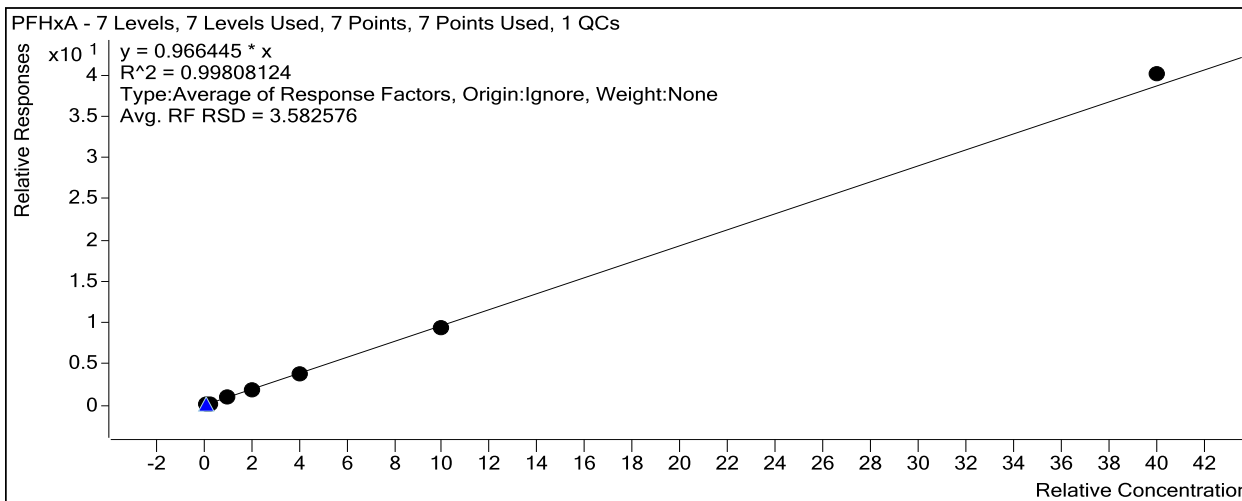


Target Compound

PFMBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	8299	0.5000	0.4772
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	20664	1.2500	0.5125
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	80351	5.0000	0.5175
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	167608	10.0000	0.4867
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	315464	20.0000	0.5030
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	781314	50.0000	0.4904
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	2873035	200.0000	0.4958

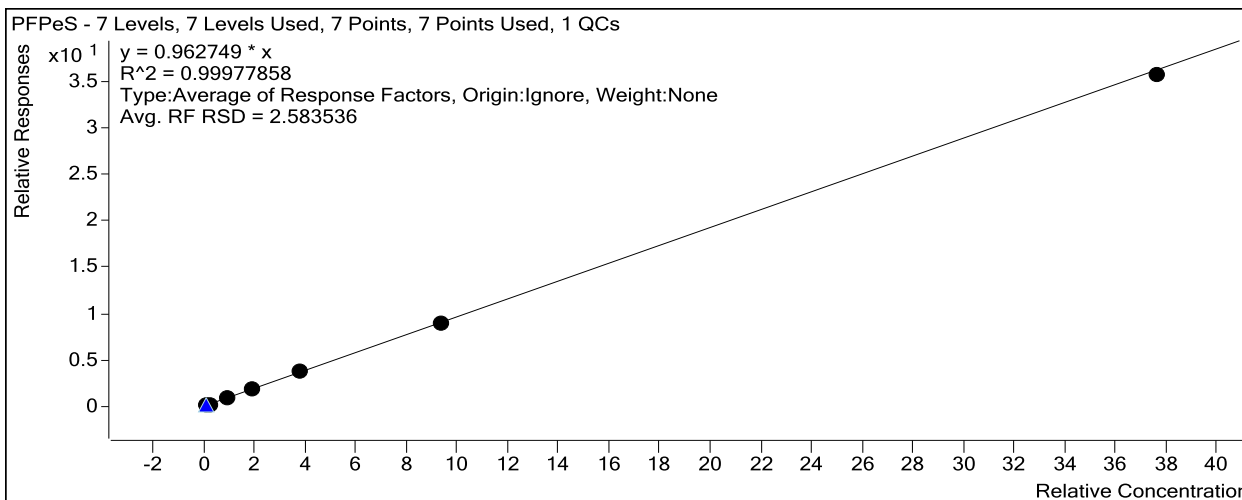
Quantitative Analysis Calibration Report



Target Compound

PFPeS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	3846	0.4705	0.9285
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	9489	1.1763	0.9852
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	36576	4.7050	0.9939
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	76732	9.4100	0.9480
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	145804	18.8200	0.9848
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	351753	47.0500	0.9478
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	1280496	188.2000	0.9511



Target Compound

HFPO-DA

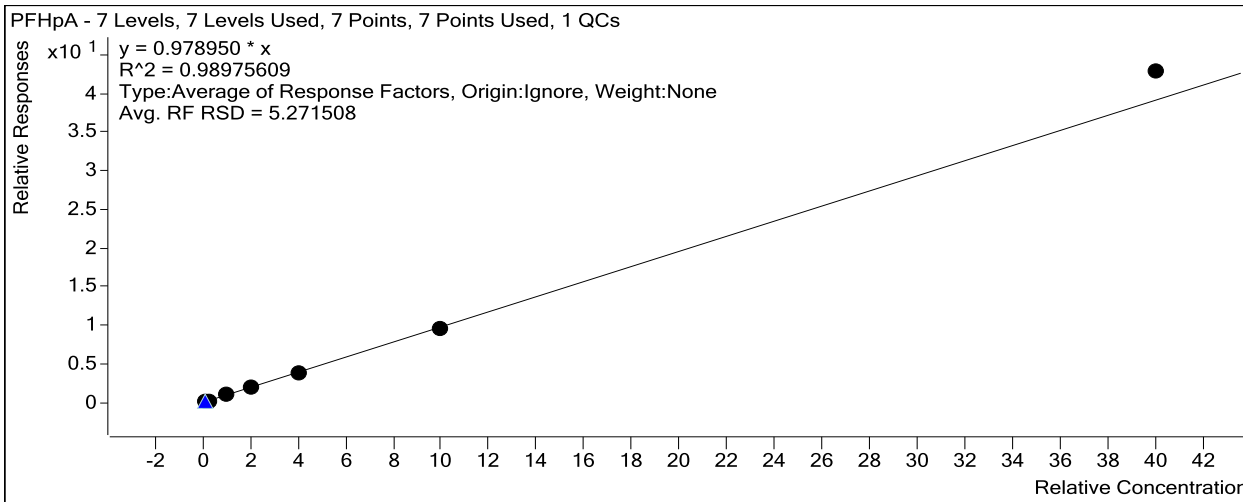
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	271603	5.0000	54320.6063
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	250530	5.0000	50106.0537
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	256568	5.0000	51313.6795
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	228859	5.0000	45771.8276

Target Compound *PFHpA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	25139	0.5000	0.9146
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	63236	1.2500	0.9752
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	249765	5.0000	1.0098
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	517158	10.0000	0.9520
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	979409	20.0000	0.9773
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	2433887	50.0000	0.9486
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	9841100	200.0000	1.0750



Extracted ISTD *M3PFHxS*

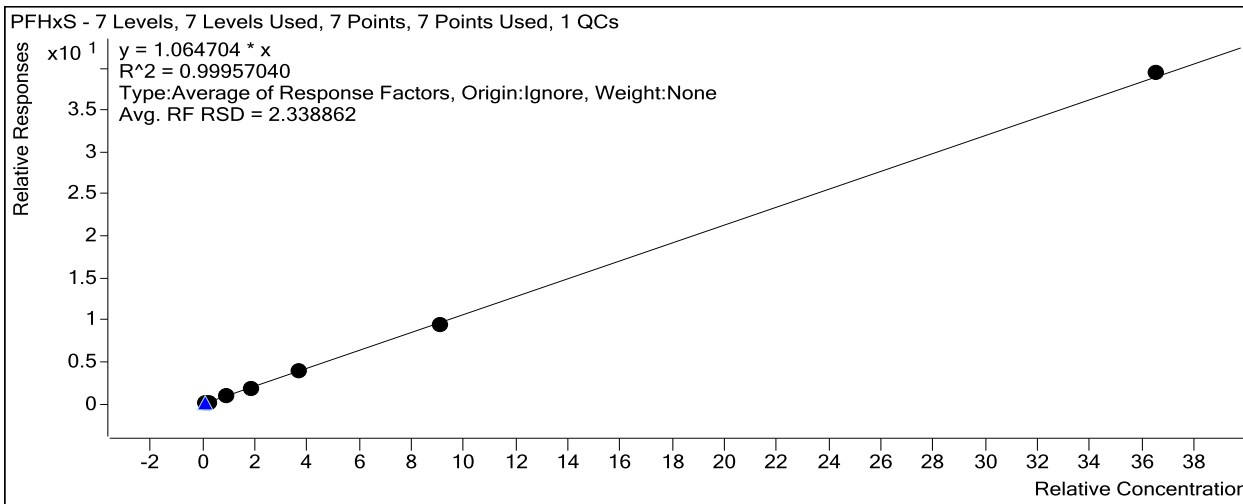
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	36831	5.0000	7366.2078
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	34307	5.0000	6861.3869
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	32618	5.0000	6523.5252
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	35801	5.0000	7160.1914
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	32450	5.0000	6489.9402
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	33474	5.0000	6694.8689

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220423ACAL\2220423A_07.d Calibration 7 29452 5.0000 5890.4826

Target Compound *PFHxS*

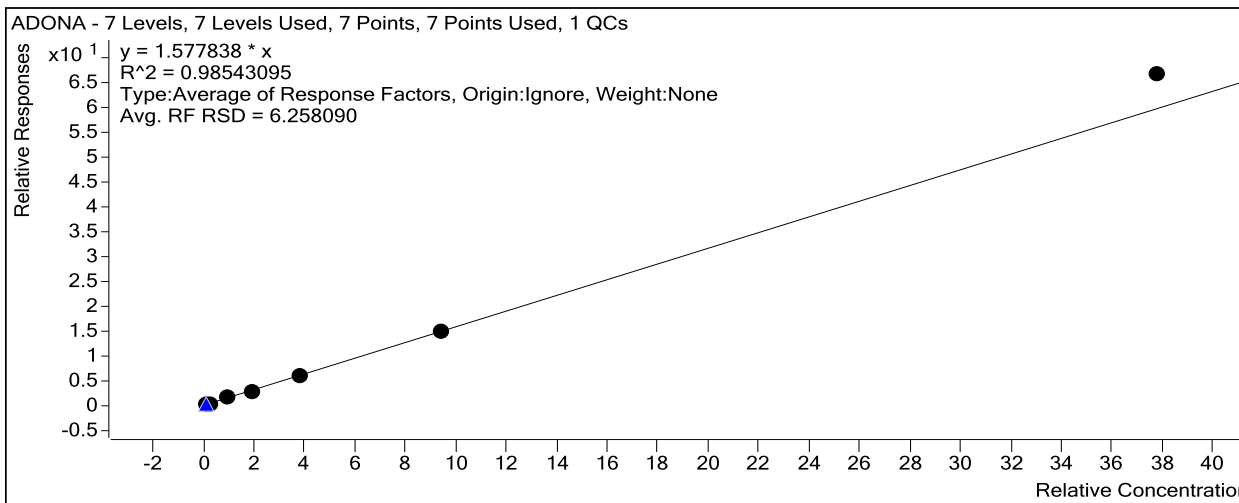
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	3572	0.4570	1.0611
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	8397	1.1425	1.0712
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	32602	4.5700	1.0936
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	68019	9.1400	1.0393
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	128315	18.2800	1.0816
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	313452	45.7000	1.0245
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	1164687	182.8000	1.0816



Target Compound *ADONA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	29391	0.4725	1.4457
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	75293	1.1813	1.5667
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	294986	4.7250	1.6093
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	613228	9.4500	1.5162
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	1160581	18.9000	1.5826
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	2926025	47.2500	1.5575
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	11768566	189.0000	1.7668

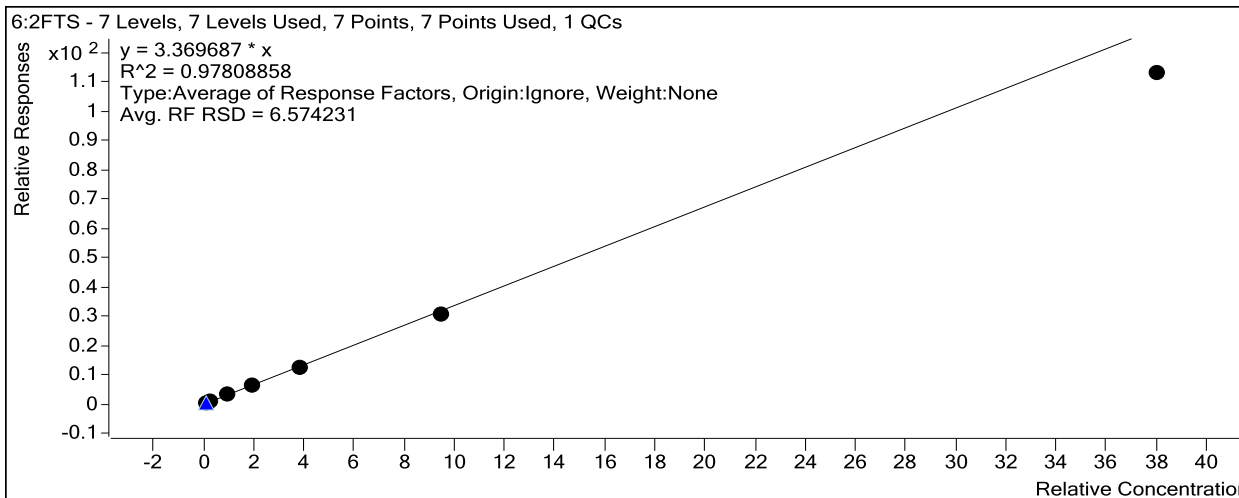
Quantitative Analysis Calibration Report



Target Compound

6:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	2980	0.4755	3.4285
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	7431	1.1888	3.6891
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	28787	4.7550	3.4894
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	58453	9.5100	3.4147
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	105173	19.0200	3.3643
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	245903	47.5500	3.2194
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	810267	190.2000	2.9824



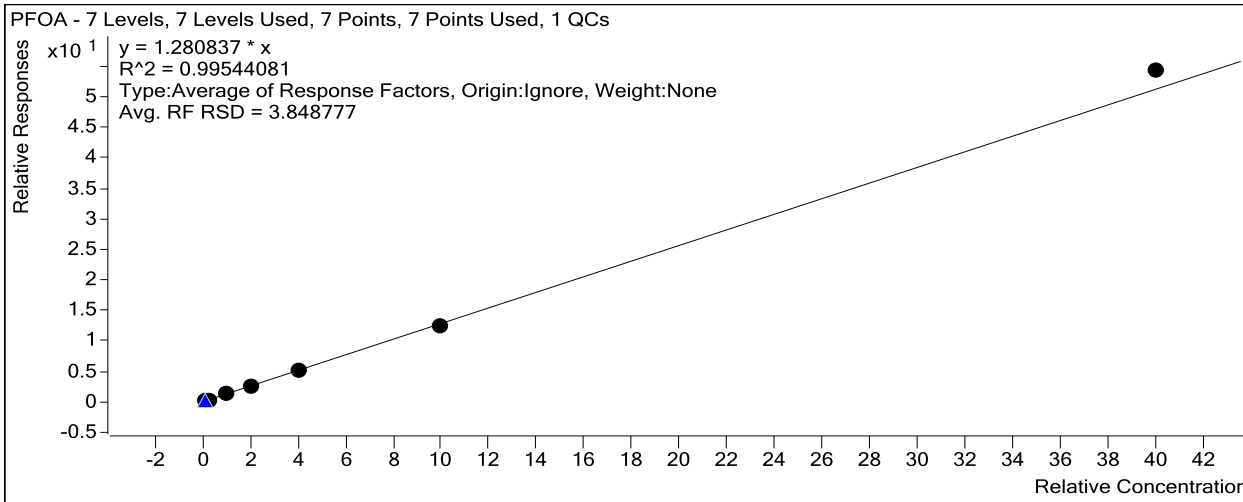
Extracted ISTD

M2 6:2 FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	26313	0.5000	1.2231
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	65683	1.2500	1.2917
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	256890	5.0000	1.3244
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	535038	10.0000	1.2501
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	990335	20.0000	1.2762
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	2462876	50.0000	1.2389
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	9596928	200.0000	1.3615

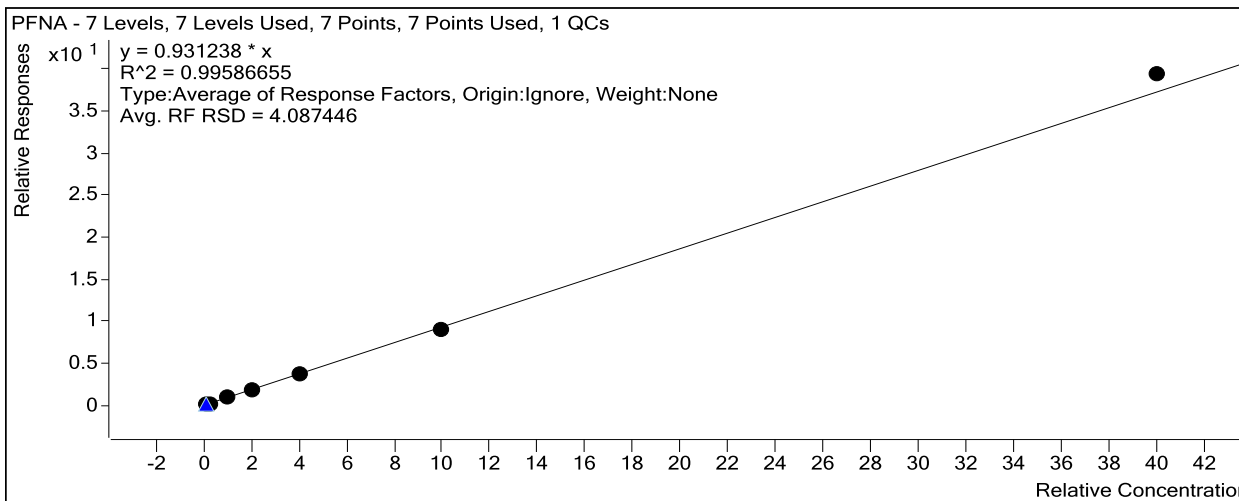


Target Compound

PFHpS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	3658	0.4765	1.0422
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	8848	1.1913	1.0825
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	34173	4.7650	1.0994
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	70284	9.5300	1.0300
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	130883	19.0600	1.0581
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	320534	47.6500	1.0048
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	1133189	190.6000	1.0093

Quantitative Analysis Calibration Report



Extracted ISTD

M8PFOS

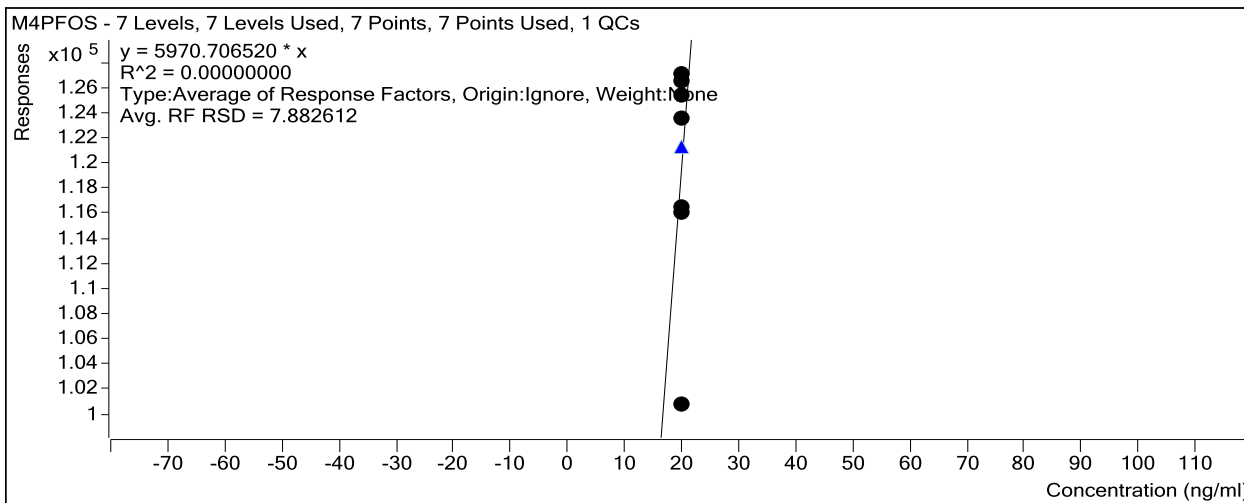
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	33493	5.0000	6698.6147
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	31019	5.0000	6203.7118
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	29897	5.0000	5979.4601
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	32656	5.0000	6531.2633
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	29977	5.0000	5995.4534
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	30032	5.0000	6006.3187
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	25058	5.0000	5011.5352

Instrument ISTD

M4PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	125471	20.0000	6273.5330
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	126471	20.0000	6323.5713
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	116439	20.0000	5821.9740
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	127144	20.0000	6357.2123
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	123539	20.0000	6176.9309
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	116087	20.0000	5804.3614
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	100747	20.0000	5037.3628

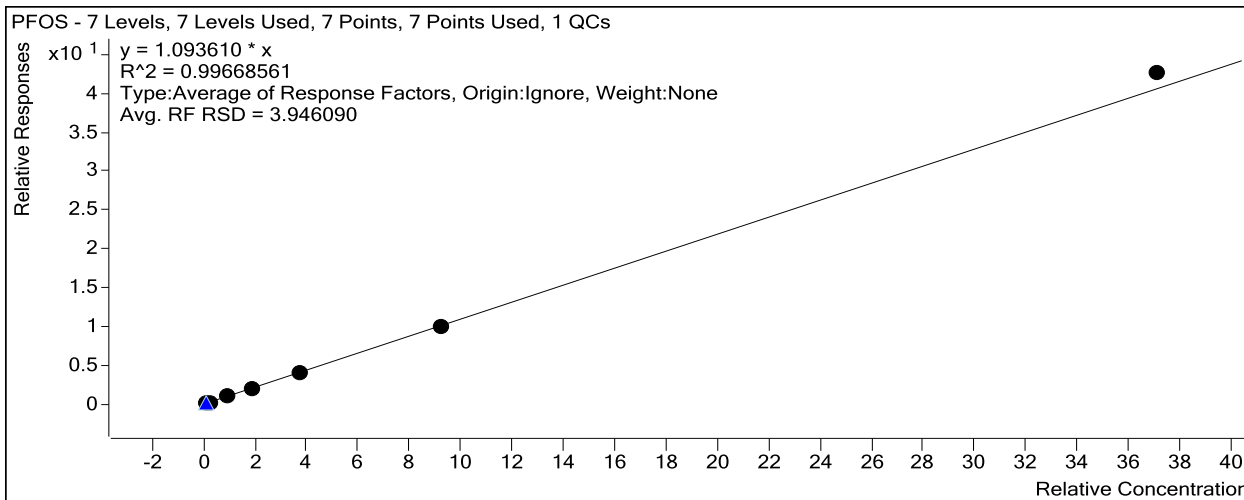
Quantitative Analysis Calibration Report



Target Compound

PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	3211	0.4640	1.0331
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	8049	1.1600	1.1185
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	31224	4.6400	1.1254
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	63744	9.2800	1.0517
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	122995	18.5600	1.1053
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	298009	46.4000	1.0693
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	1071457	185.6000	1.1519



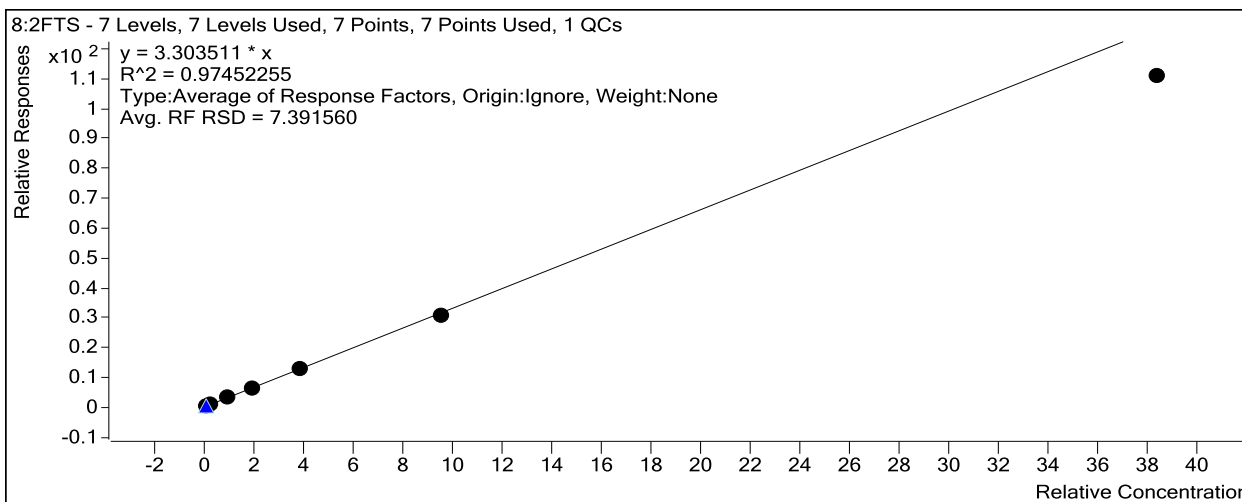
Target Compound

9CI-PF3ONS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	43352	9.6000	3.3787
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	80984	19.2000	3.4472
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	187007	48.0000	3.2057
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	579184	192.0000	2.8972

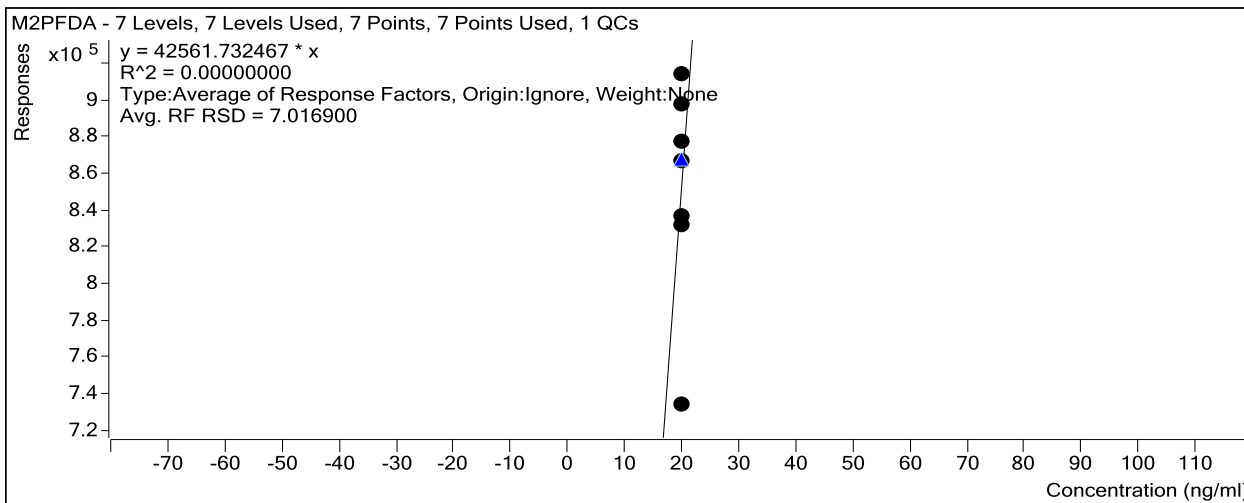


Target Compound

PFNS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	2888	0.4810	0.8963
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	7590	1.2025	1.0174
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	29699	4.8100	1.0326
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	60331	9.6200	0.9602
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	111637	19.2400	0.9678
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	266725	48.1000	0.9232
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	909921	192.4000	0.9437

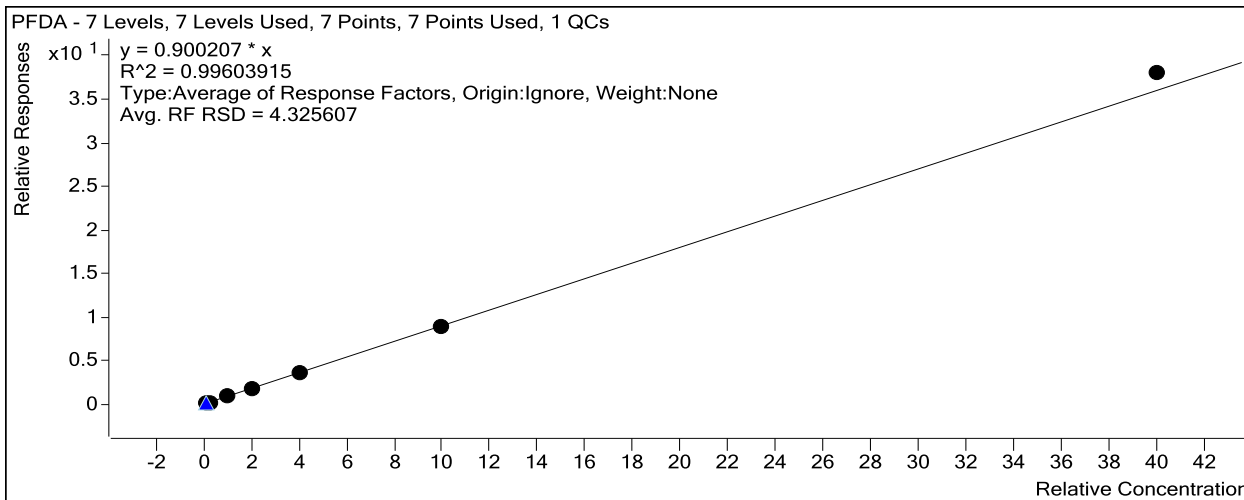
Quantitative Analysis Calibration Report



Target Compound

PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	21407	0.5000	0.8380
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	54070	1.2500	0.9089
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	217330	5.0000	0.9414
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	441946	10.0000	0.8811
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	829956	20.0000	0.8950
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	2021619	50.0000	0.8840
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	7481706	200.0000	0.9531



Extracted ISTD

d3-NMeFOSAA

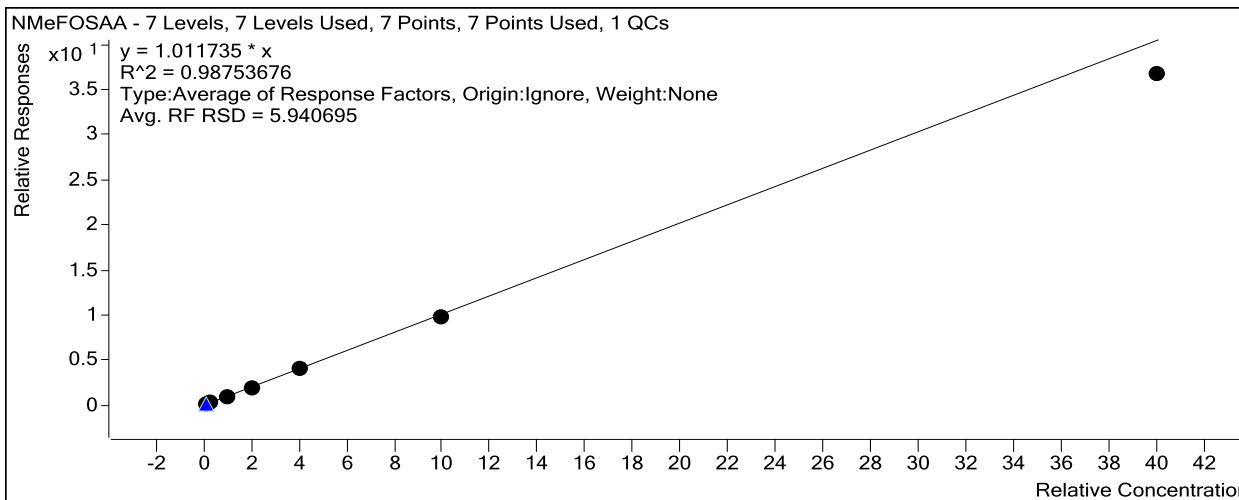
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

File Path	Calibration	Level	Enabled	Response	Exp Conc	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	21591	5.0000	4318.1006
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	20410	5.0000	4082.0811
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	20291	5.0000	4058.1984
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	21307	5.0000	4261.3458
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	20459	5.0000	4091.7213
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	21040	5.0000	4208.0706
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	21671	5.0000	4334.1045

Target Compound *NMeFOSAA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	2270	0.5000	1.0516
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	5670	1.2500	1.1112
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	20802	5.0000	1.0252
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	42050	10.0000	0.9868
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	82601	20.0000	1.0094
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	205491	50.0000	0.9767
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	798685	200.0000	0.9214

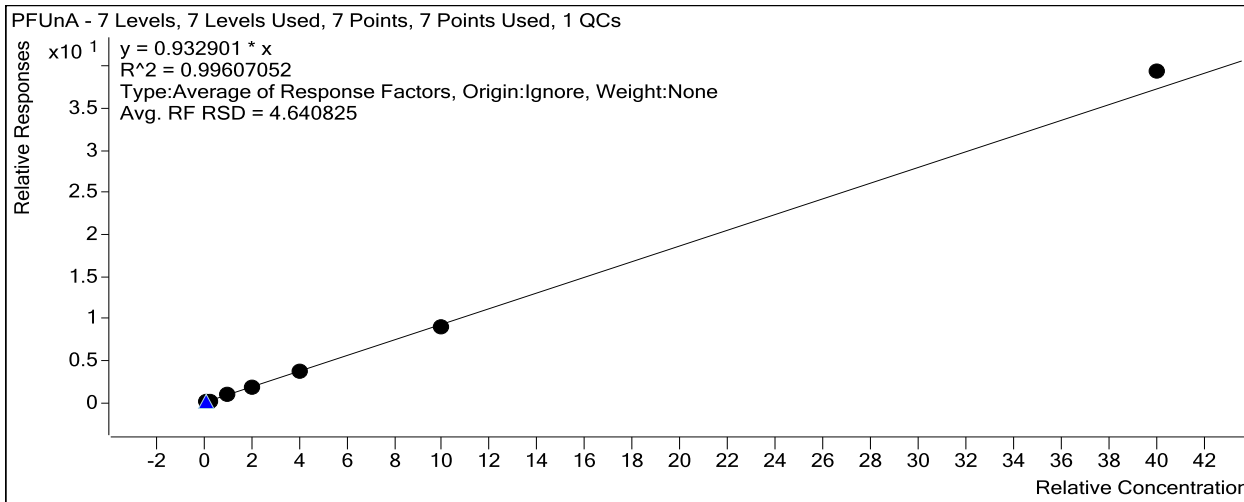


Extracted ISTD *M8FOSA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	76788	5.0000	15357.5943
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	70952	5.0000	14190.3832
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	67866	5.0000	13573.2547

Quantitative Analysis Calibration Report

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	21382	0.5000	0.8724
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	53411	1.2500	0.9140
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	215879	5.0000	0.9939
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	444817	10.0000	0.9258
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	825132	20.0000	0.9241
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	2003458	50.0000	0.9126
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	7383224	200.0000	0.9874

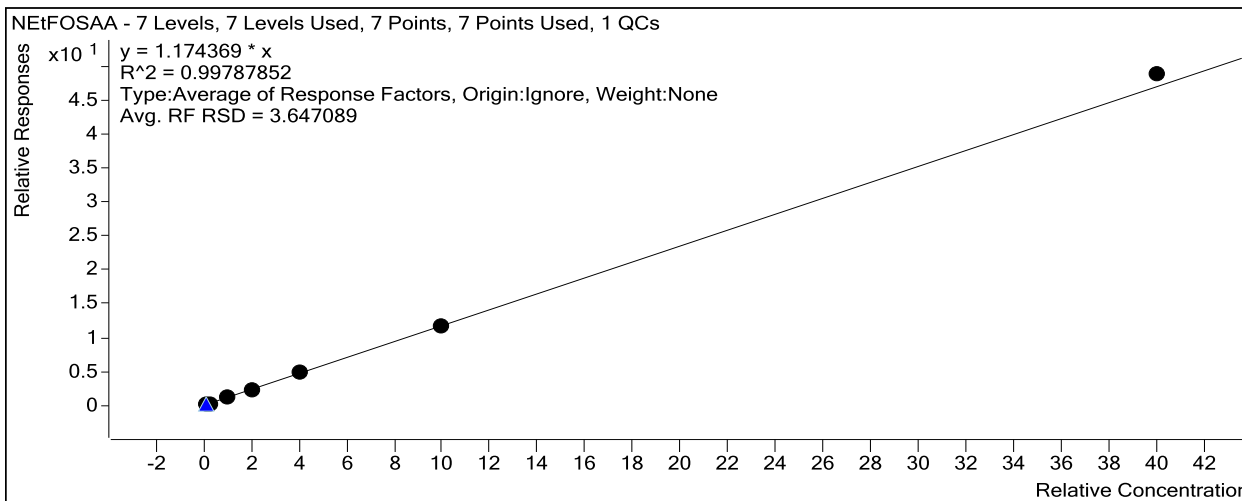


Target Compound

NETFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	4393	0.5000	1.1395
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	10403	1.2500	1.1045
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	42078	5.0000	1.2014
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	86147	10.0000	1.1630
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	164651	20.0000	1.2141
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	396768	50.0000	1.1740
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	1365053	200.0000	1.2241

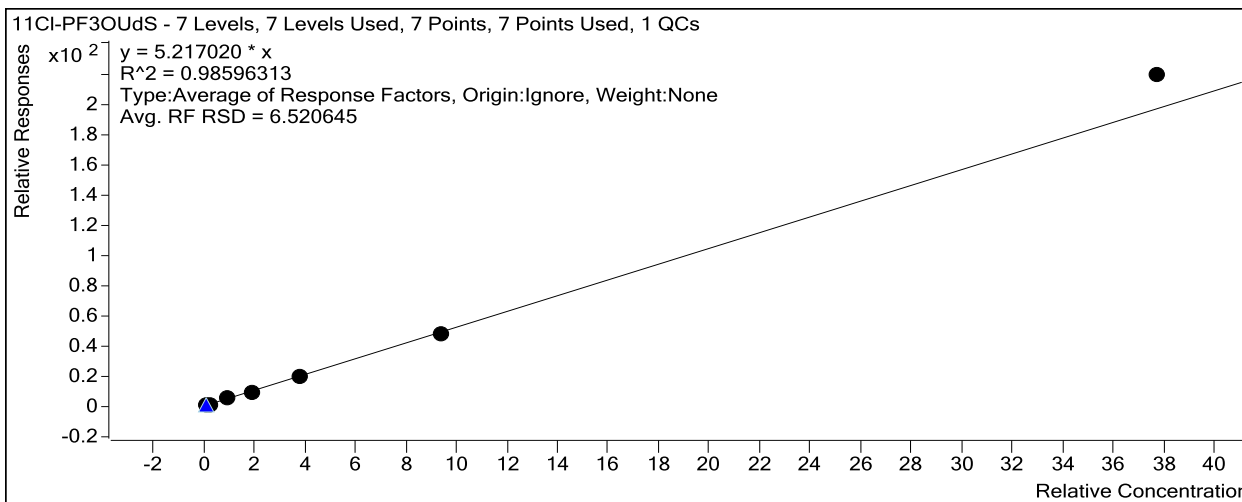
Quantitative Analysis Calibration Report



Target Compound

11CI-PF3OUdS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	14972	0.4715	4.7405
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	39259	1.1788	5.3685
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	149787	4.7150	5.3129
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	310066	9.4300	5.0344
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	586512	18.8600	5.1870
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	1429737	47.1500	5.0485
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	5507883	188.6000	5.8274



Extracted ISTD

MPFD0A

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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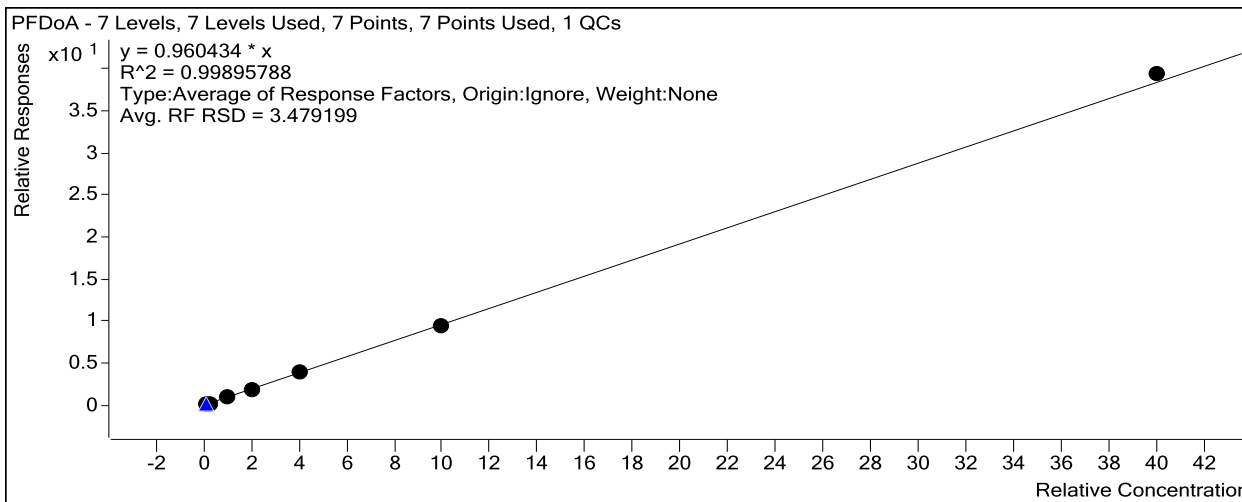
Quantitative Analysis Calibration Report

File Path	Type	Level	Enabled	Response	Exp Conc	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	280205	5.0000	56040.9637
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	262691	5.0000	52538.1865
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	252172	5.0000	50434.3939
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	272020	5.0000	54403.9055
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	251871	5.0000	50374.2577
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	257170	5.0000	51434.0567
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	238704	5.0000	47740.8847

Target Compound

PFD_oA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	25007	0.5000	0.8925
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	64622	1.2500	0.9840
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	245566	5.0000	0.9738
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	523020	10.0000	0.9614
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	985680	20.0000	0.9784
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	2429603	50.0000	0.9447
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	9436587	200.0000	0.9883

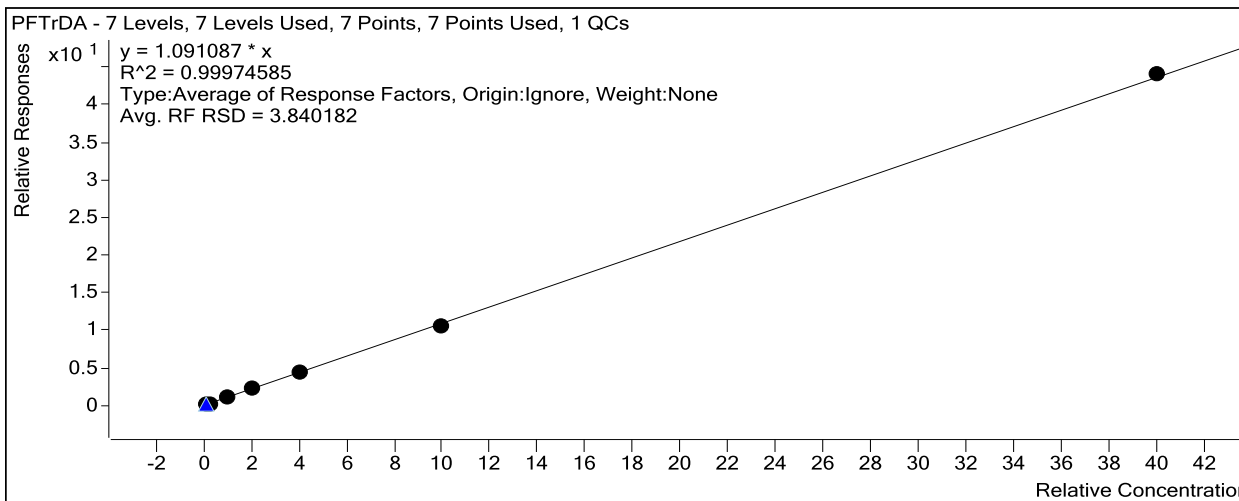


Target Compound

10:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	2605	0.4820	3.8240
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	6082	1.2050	3.9221
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	22596	4.8200	3.7753

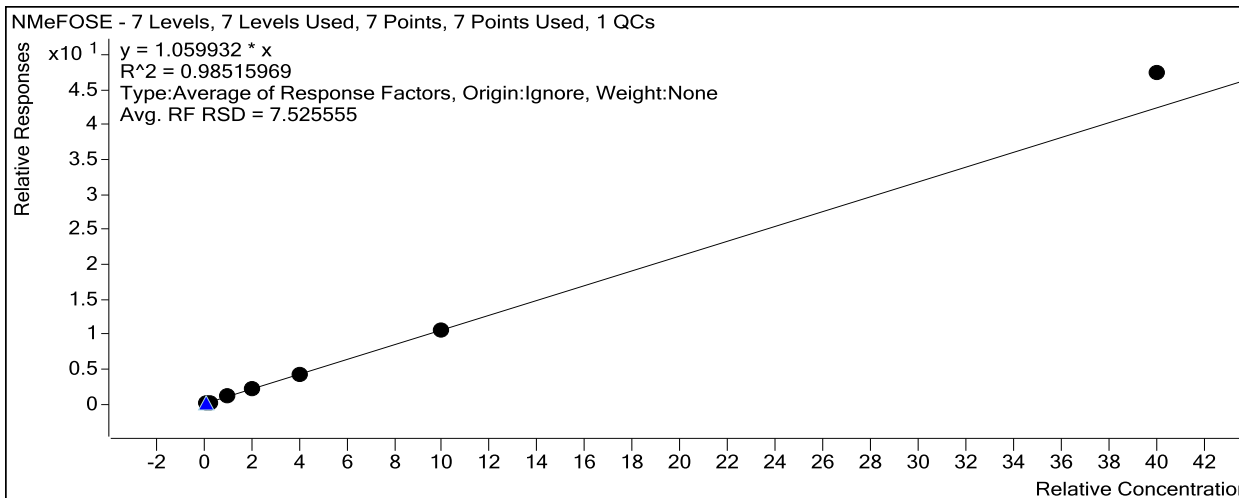
Quantitative Analysis Calibration Report



Target Compound

NMeFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	1759	0.5000	0.9471
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	4382	1.2500	0.9906
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	18327	5.0000	1.1172
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	37405	10.0000	1.0426
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	70599	20.0000	1.0834
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	175112	50.0000	1.0505
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	651358	200.0000	1.1881



Extracted ISTD

d9-NEtFOSE

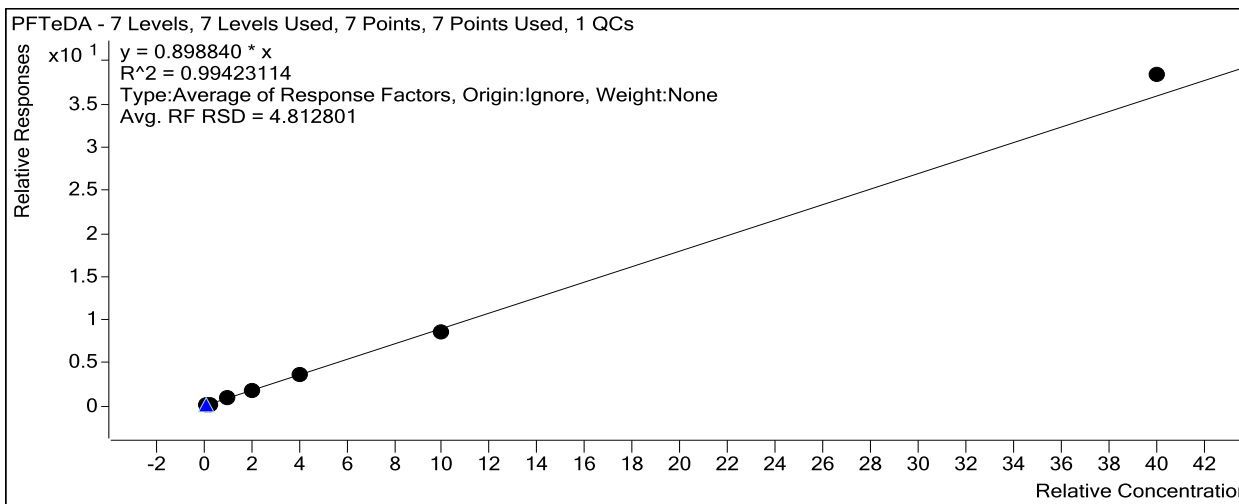
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220423ACAL\2220423A_07.d Calibration 7 315330 5.0000 63066.0244

Target Compound *PFTeDA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	30641	0.5000	0.8406
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	80038	1.2500	0.9156
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	310781	5.0000	0.9357
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	641514	10.0000	0.8691
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	1209008	20.0000	0.9034
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	2990845	50.0000	0.8645
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	12146341	200.0000	0.9630



Extracted ISTD *M2PFHxDA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	39347	5.0000	7869.4263
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	37189	5.0000	7437.7439
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	39339	5.0000	7867.7962
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	42813	5.0000	8562.5625
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	34550	5.0000	6909.9713
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	34207	5.0000	6841.4121
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	31323	5.0000	6264.5190

Target Compound *PFHxDA*

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040903</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/23/2022 21:59</u>	Lab File ID:	<u>2220423A_24.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739271</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	9530	100	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10200	106	70	130	
NEtFOSAA	ng/L	10000	9790	98	70	130	
NMeFOSAA	ng/L	10000	9890	99	70	130	
Perfluorobutanoic acid	ng/L	10000	9910	99	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	8690	98	70	130	
Perfluorodecanoic acid	ng/L	10000	9710	97	70	130	
Perfluorododecanoic acid	ng/L	10000	10100	101	70	130	
Perfluoroheptanoic acid	ng/L	10000	9750	98	70	130	
Perfluorohexanoic acid	ng/L	10000	9850	99	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	8850	97	70	130	
Perfluorononanoic acid	ng/L	10000	9720	97	70	130	
Perfluorooctanoic acid	ng/L	10000	9760	98	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	8960	97	70	130	
Perfluoropentanoic acid	ng/L	10000	9900	99	70	130	
Perfluorotetradecanoic acid	ng/L	10000	9720	97	70	130	
Perfluorotridecanoic acid	ng/L	10000	10100	101	70	130	
Perfluoroundecanoic acid	ng/L	10000	9730	97	70	130	

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040903</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/24/2022 00:13</u>	Lab File ID:	<u>2220423A_33.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739271</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	9330	98	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	9750	102	70	130	
NEtFOSAA	ng/L	10000	9790	98	70	130	
NMeFOSAA	ng/L	10000	9850	99	70	130	
Perfluorobutanoic acid	ng/L	10000	9820	98	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	8720	98	70	130	
Perfluorodecanoic acid	ng/L	10000	10000	100	70	130	
Perfluorododecanoic acid	ng/L	10000	9820	98	70	130	
Perfluoroheptanoic acid	ng/L	10000	9660	97	70	130	
Perfluorohexanoic acid	ng/L	10000	9860	99	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	8710	95	70	130	
Perfluorononanoic acid	ng/L	10000	9690	97	70	130	
Perfluorooctanoic acid	ng/L	10000	9660	97	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	8880	96	70	130	
Perfluoropentanoic acid	ng/L	10000	9790	98	70	130	
Perfluorotetradecanoic acid	ng/L	10000	9580	96	70	130	
Perfluorotridecanoic acid	ng/L	10000	9790	98	70	130	
Perfluoroundecanoic acid	ng/L	10000	9880	99	70	130	

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040903</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>04/26/2022 02:21</u>	Lab File ID:	<u>2220425B_26.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739406</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	10300	108	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10100	105	70	130	
NEtFOSAA	ng/L	10000	10100	101	70	130	
NMeFOSAA	ng/L	10000	9820	98	70	130	
Perfluorobutanoic acid	ng/L	10000	9880	99	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	8730	98	70	130	
Perfluorodecanoic acid	ng/L	10000	9630	96	70	130	
Perfluorododecanoic acid	ng/L	10000	9800	98	70	130	
Perfluoroheptanoic acid	ng/L	10000	9880	99	70	130	
Perfluorohexanoic acid	ng/L	10000	9740	97	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	8900	97	70	130	
Perfluorononanoic acid	ng/L	10000	9630	96	70	130	
Perfluorooctanoic acid	ng/L	10000	9740	97	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9100	98	70	130	
Perfluoropentanoic acid	ng/L	10000	9780	98	70	130	
Perfluorotetradecanoic acid	ng/L	10000	9620	96	70	130	
Perfluorotridecanoic acid	ng/L	10000	10000	100	70	130	
Perfluoroundecanoic acid	ng/L	10000	9880	99	70	130	

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040903</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>04/26/2022 05:03</u>	Lab File ID:	<u>2220425B_37.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739406</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	9830	103	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	9950	104	70	130	
NEtFOSAA	ng/L	10000	10300	103	70	130	
NMeFOSAA	ng/L	10000	9620	96	70	130	
Perfluorobutanoic acid	ng/L	10000	9890	99	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	8780	99	70	130	
Perfluorodecanoic acid	ng/L	10000	9560	96	70	130	
Perfluorododecanoic acid	ng/L	10000	9720	97	70	130	
Perfluoroheptanoic acid	ng/L	10000	9750	98	70	130	
Perfluorohexanoic acid	ng/L	10000	9850	98	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	8900	97	70	130	
Perfluorononanoic acid	ng/L	10000	9760	98	70	130	
Perfluorooctanoic acid	ng/L	10000	9810	98	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	8940	96	70	130	
Perfluoropentanoic acid	ng/L	10000	9860	99	70	130	
Perfluorotetradecanoic acid	ng/L	10000	9690	97	70	130	
Perfluorotridecanoic acid	ng/L	10000	9660	97	70	130	
Perfluoroundecanoic acid	ng/L	10000	10200	102	70	130	

8I - INTERNAL STANDARD AREA SUMMARY

Report No: 222040903 Standard ID: 1205 (ICAL Midpoint)
 Analyst: SXA Instrument ID: QQQ4
 Analysis Date: 04/23/22 17:17 Lab File ID: 2220423A_05.d
 Analytical Method: PFAS Isotope Dilution QSM B15 Analytical Batch: 739271

	M2PFDA Area	M2PFHxA Area	M2PFOA Area	M4PFOS Area
STANDARD	877313	632559	763838	123539

CLIENT SAMPLE ID	LAB SAMP ID	#	#	#	#
AOI01-01-GW	22204090301	776853	541942	669702	107594
AOI01-02-GW	22204090302	814029	558392	708772	112583
AOI02-01-GW	22204090303	779778	554556	686348	110314
AOI02-01-GW-MS	22204090304	766174	545161	670486	106489
AOI02-01-GW-MSD	22204090305	749150	541610	672132	106855
AOI02-02-GW	22204090307	778232	530443	674995	106674
AOI02-03-GW	22204090308	756921	524807	659435	105092
AOI02-04-GW	22204090309	792810	564504	702115	109441
WU-ERB-08	22204090311	778800	545784	680805	107874
MB2336115	2336115	745766	526347	657535	105809
LCS2336116	2336116	761468	543411	670717	107795
LCSD2336117	2336117	757954	547404	669351	107271

AREA UPPER LIMIT = +50% of internal standard area
 AREA LOWER LIMIT = -50% of internal standard area

Column used to flag values outside QC limits
 * Value outside QC limits

8I - INTERNAL STANDARD AREA SUMMARY

Report No:	<u>222040903</u>	Standard ID:	<u>1205 (ICAL Midpoint)</u>
Analyst:	<u>SXA</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>04/25/22 17:51</u>	Lab File ID:	<u>2220425B_6.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739406</u>

	M2PFDA <i>Area</i>	M2PFHxA <i>Area</i>	M2PFOA <i>Area</i>	M4PFOS <i>Area</i>
STANDARD	875045	726975	762284	156566

<i>CLIENT SAMPLE ID</i>	<i>LAB SAMP ID</i>	<i>#</i>	<i>#</i>	<i>#</i>	<i>#</i>
AOI02-01-GW-D	22204090306	952133	811613	861241	168093
WU-ERB-07	22204090310	930642	780008	836598	165072
MB2337443	2337443	978128	800722	852510	170878
LCS2337444	2337444	923953	787878	831708	166174
LCSD2337445	2337445	934540	777792	829587	166460

AREA UPPER LIMIT = +50% of internal standard area
 AREA LOWER LIMIT = -50% of internal standard area

Column used to flag values outside QC limits
 * Value outside QC limits

LC-QQQ Instrument Run Log

Instrument: QQQ 4
Instrument Batch: 2220413B.batch.bin
Current ICAL Batch: 2220412BCAL
ICAL Std (ID/Exp): 022-35-1 9/11/22
ICV Std (ID/Exp): 022-38-2 7/19/22

LIMS Batch (HBN): 738448
20mM NH4OAc (ID/Exp): 022-38-3 4/15/22 8:00AM
Methanol (ID/Exp): 2131452 11/30/26
EIS Mix (ID/Exp): 022-37-1 10/12/22
IIS Mix (ID/Exp): 022-35-9 9/30/22

Acquisition time	Data File	Name	Type	Dilution	Comment
04/12/22 15:19:50	2220412B_1.d	1400 Test	Sample	1	SXA,QQQ4,Test
04/12/22 15:34:47	2220412B_2.d	1201	Cal	1	SXA,QQQ4,ICAL
04/12/22 15:49:35	2220412B_3.d	1202	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:04:23	2220412B_4.d	1203	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:19:12	2220412B_5.d	1204	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:34:00	2220412B_6.d	1205	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:48:49	2220412B_7.d	1206	Cal	1	SXA,QQQ4,ICAL
04/12/22 17:03:40	2220412B_8.d	1207	Cal	1	SXA,QQQ4,ICAL
04/12/22 17:18:28	2220412B_9.d	1500	Blank	1	SXA,QQQ4,Instrument Blank
04/12/22 17:33:17	2220412B_10.d	1600	Sample	1	SXA,QQQ4,ICV
04/12/22 17:48:06	2220412B_11.d	1450	QC	1	SXA,QQQ4,CCV
04/13/22 20:16:35	2220413B_1.d	1500	Blank	1	SXA,QQQ4,Instrument Blank
04/13/22 20:31:26	2220413B_2.d	1450	QC	1	SXA,QQQ4,CCV
04/13/22 20:46:15	2220413B_3.d	2331063	Blank	1	SXA,QQQ4,738250
04/13/22 21:01:07	2220413B_4.d	2331064	QC	1	SXA,QQQ4,738250
04/13/22 21:15:56	2220413B_5.d	2331065	QC	1	SXA,QQQ4,738250
04/13/22 21:30:47	2220413B_6.d	22203257007	Sample	1	SXA,QQQ4,738250
04/13/22 21:45:37	2220413B_7.d	1400	QC	1	SXA,QQQ4,CCV
04/13/22 22:00:26	2220413B_8.d	2330617	Blank	1	SXA,QQQ4,738136
04/13/22 22:15:32	2220413B_9.d	2330618	QC	1	SXA,QQQ4,738136
04/13/22 22:30:22	2220413B_10.d	2330619	QC	1	SXA,QQQ4,738136
04/13/22 22:45:12	2220413B_11.d	22204013023	Sample	1	SXA,QQQ4,738136
04/13/22 23:00:05	2220413B_12.d	22204016203	Sample	1	SXA,QQQ4,738136
04/13/22 23:14:54	2220413B_13.d	22204016204	Sample	1	SXA,QQQ4,738136
04/13/22 23:29:46	2220413B_14.d	22204016205	Sample	1	SXA,QQQ4,738136
04/13/22 23:44:35	2220413B_15.d	22204016206	Sample	1	SXA,QQQ4,738136
04/13/22 23:59:25	2220413B_16.d	22204016207	Sample	1	SXA,QQQ4,738136
04/14/22 00:14:14	2220413B_17.d	22204016208	Sample	1	SXA,QQQ4,738136
04/14/22 00:29:04	2220413B_18.d	22204016209	Sample	1	SXA,QQQ4,738136
04/14/22 00:43:54	2220413B_19.d	22204016210	Sample	1	SXA,QQQ4,738136
04/14/22 00:58:43	2220413B_20.d	22204016211	Sample	1	SXA,QQQ4,738136
04/14/22 01:13:33	2220413B_21.d	1400	QC	1	SXA,QQQ4,CCV
04/14/22 01:28:40	2220413B_22.d	22204016212	Sample	1	SXA,QQQ4,738136
04/14/22 01:43:46	2220413B_23.d	22204016213	Sample	1	SXA,QQQ4,738136
04/14/22 01:58:38	2220413B_24.d	22204016601	Sample	1	SXA,QQQ4,738136
04/14/22 02:13:29	2220413B_25.d	22204016602	Sample	1	SXA,QQQ4,738136
04/14/22 02:28:18	2220413B_26.d	22204016603	Sample	1	SXA,QQQ4,738136
04/14/22 02:43:07	2220413B_27.d	22204016605	Sample	1	SXA,QQQ4,738136
04/14/22 02:57:56	2220413B_28.d	22204016606	Sample	1	SXA,QQQ4,738136
04/14/22 03:12:46	2220413B_29.d	22204016609	Sample	1	SXA,QQQ4,738136
04/14/22 03:27:36	2220413B_30.d	22204016610	Sample	1	SXA,QQQ4,738136
04/14/22 03:42:27	2220413B_31.d	22204016701	Sample	1	SXA,QQQ4,738136
04/14/22 03:57:16	2220413B_32.d	1400	QC	1	SXA,QQQ4,CCV

LC-QQQ Instrument Run Log

Instrument: QQQ 4
Instrument Batch: 2220415B.batch.bin
Current ICAL Batch: 2220412BCAL
ICAL Std (ID/Exp): 022-35-1 9/11/22
ICV Std (ID/Exp): 022-38-2 7/19/22

LIMS Batch (HBN): 738621
20mM NH4OAc (ID/Exp): 022-39-6 4/17/22 8:00AM
Methanol (ID/Exp): 2131452 11/30/26
EIS Mix (ID/Exp): 022-37-1 10/12/22
IIS Mix (ID/Exp): 022-35-9 9/30/22

Acquisition time	Data File	Name	Type	Dilution	Comment
04/12/22 15:19:50	2220412B_1.d	1400 Test	Sample	1	SXA,QQQ4,Test
04/12/22 15:34:47	2220412B_2.d	1201	Cal	1	SXA,QQQ4,ICAL
04/12/22 15:49:35	2220412B_3.d	1202	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:04:23	2220412B_4.d	1203	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:19:12	2220412B_5.d	1204	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:34:00	2220412B_6.d	1205	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:48:49	2220412B_7.d	1206	Cal	1	SXA,QQQ4,ICAL
04/12/22 17:03:40	2220412B_8.d	1207	Cal	1	SXA,QQQ4,ICAL
04/12/22 17:18:28	2220412B_9.d	1500	Blank	1	SXA,QQQ4,Instrument Blank
04/12/22 17:33:17	2220412B_10.d	1600	Sample	1	SXA,QQQ4,ICV
04/12/22 17:48:06	2220412B_11.d	1450	QC	1	SXA,QQQ4,CCV
04/15/22 21:08:28	2220415B_1.d	1500	Blank	1	SXA,QQQ4,Instrument Blank
04/15/22 21:23:18	2220415B_2.d	1450	QC	1	SXA,QQQ4,CCV
04/15/22 21:38:07	2220415B_3.d	22204050701	Sample	1	SXA,QQQ4,738250
04/15/22 21:53:16	2220415B_4.d	22204050708	QC	1	SXA,QQQ4,738250
04/15/22 22:08:06	2220415B_5.d	22204050709	QC	1	SXA,QQQ4,738250
04/15/22 22:22:55	2220415B_6.d	22204013006	Sample	5	SXA,QQQ4,738032
04/15/22 22:37:44	2220415B_7.d	22204013013	Sample	1	SXA,QQQ4,738032, double spiked with IIS
04/15/22 22:52:33	2220415B_8.d	1400	QC	1	SXA,QQQ4,CCV
04/15/22 23:07:39	2220415B_9.d	2332599	Blank	1	SXA,QQQ4,738494
04/15/22 23:22:45	2220415B_10.d	2332600	QC	1	SXA,QQQ4,738494
04/15/22 23:37:34	2220415B_11.d	2332601	QC	1	SXA,QQQ4,738494
04/15/22 23:52:23	2220415B_12.d	22203307315	Sample	1	SXA,QQQ4,738494
04/16/22 00:07:13	2220415B_13.d	22203307319	Sample	1	SXA,QQQ4,738494
04/16/22 00:22:05	2220415B_14.d	22203307328	Sample	1	SXA,QQQ4,738494
04/16/22 00:36:56	2220415B_15.d	22203307329	Sample	1	SXA,QQQ4,738494
04/16/22 00:51:45	2220415B_16.d	22203307330	Sample	1	SXA,QQQ4,738494
04/16/22 01:06:36	2220415B_17.d	22203307331	Sample	1	SXA,QQQ4,738494
04/16/22 01:21:26	2220415B_18.d	22203307338	Sample	1	SXA,QQQ4,738494
04/16/22 01:36:15	2220415B_19.d	22203307339	Sample	1	SXA,QQQ4,738494
04/16/22 01:51:05	2220415B_20.d	22203307340	Sample	1	SXA,QQQ4,738494
04/16/22 02:05:55	2220415B_21.d	22203317101	Sample	1	SXA,QQQ4,738494
04/16/22 02:20:44	2220415B_22.d	1400	QC	1	SXA,QQQ4,CCV
04/16/22 02:35:50	2220415B_23.d	22203309102	Sample	1	SXA,QQQ4,738494
04/16/22 02:51:00	2220415B_24.d	22203317103	Sample	1	SXA,QQQ4,738494
04/16/22 03:05:49	2220415B_25.d	22203317104	Sample	1	SXA,QQQ4,738494
04/16/22 03:20:40	2220415B_26.d	22203309101	Sample	1	SXA,QQQ4,738494
04/16/22 03:35:30	2220415B_27.d	22203317105	Sample	1	SXA,QQQ4,738494
04/16/22 03:50:21	2220415B_28.d	22203317106	Sample	1	SXA,QQQ4,738494
04/16/22 04:05:10	2220415B_29.d	22203317102	Sample	1	SXA,QQQ4,738494
04/16/22 04:20:00	2220415B_30.d	22203317107	Sample	1	SXA,QQQ4,738494
04/16/22 04:34:49	2220415B_31.d	22203317108	Sample	1	SXA,QQQ4,738494
04/16/22 04:49:40	2220415B_32.d	22203317109	Sample	1	SXA,QQQ4,738494
04/16/22 05:04:30	2220415B_33.d	1400	QC	1	SXA,QQQ4,CCV

LC-QQQ Instrument Run Log

Instrument: QQQ 4
Instrument Batch: 2220415C.batch.bin
Current ICAL Batch: 2220412BCAL
ICAL Std (ID/Exp): 022-35-1 9/11/22
ICV Std (ID/Exp): 022-38-2 7/19/22

LIMS Batch (HBN): 738661
20mM NH4OAc (ID/Exp): 022-39-6 4/17/22 8:00AM
Methanol (ID/Exp): 2131452 11/30/26
EIS Mix (ID/Exp): 022-37-1 10/12/22
IIS Mix (ID/Exp): 022-35-9 9/30/22

Acquisition time	Data File	Name	Type	Dilution	Comment
04/12/22 15:19:50	2220412B_1.d	1400 Test	Sample	1	SXA,QQQ4,Test
04/12/22 15:34:47	2220412B_2.d	1201	Cal	1	SXA,QQQ4,ICAL
04/12/22 15:49:35	2220412B_3.d	1202	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:04:23	2220412B_4.d	1203	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:19:12	2220412B_5.d	1204	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:34:00	2220412B_6.d	1205	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:48:49	2220412B_7.d	1206	Cal	1	SXA,QQQ4,ICAL
04/12/22 17:03:40	2220412B_8.d	1207	Cal	1	SXA,QQQ4,ICAL
04/12/22 17:18:28	2220412B_9.d	1500	Blank	1	SXA,QQQ4,Instrument Blank
04/12/22 17:33:17	2220412B_10.d	1600	Sample	1	SXA,QQQ4,ICV
04/12/22 17:48:06	2220412B_11.d	1450	QC	1	SXA,QQQ4,CCV
04/16/22 05:19:39	2220415C_1.d	1500	Blank	1	SXA,QQQ4,Instrument Blank
04/16/22 05:34:29	2220415C_2.d	1450	QC	1	SXA,QQQ4,CCV
04/16/22 05:49:19	2220415C_3.d	2332013	Blank	1	SXA,QQQ4,738397
04/16/22 06:04:25	2220415C_4.d	2332014	QC	1	SXA,QQQ4,738397
04/16/22 06:19:15	2220415C_5.d	2332015	QC	1	SXA,QQQ4,738397
04/16/22 06:34:04	2220415C_6.d	22204023201	Sample	1	SXA,QQQ4,738397
04/16/22 06:48:54	2220415C_7.d	22204050710	Sample	1	SXA,QQQ4,738397
04/16/22 07:03:44	2220415C_8.d	22204050711	Sample	1	SXA,QQQ4,738397
04/16/22 07:18:34	2220415C_9.d	22204050712	Sample	1	SXA,QQQ4,738397
04/16/22 07:33:25	2220415C_10.d	22204050713	Sample	1	SXA,QQQ4,738397
04/16/22 07:48:19	2220415C_11.d	22204050714	Sample	1	SXA,QQQ4,738397
04/16/22 08:03:09	2220415C_12.d	22204050715	Sample	1	SXA,QQQ4,738397
04/16/22 08:17:59	2220415C_13.d	22204050716	Sample	1	SXA,QQQ4,738397
04/16/22 08:32:49	2220415C_14.d	22204061001	Sample	1	SXA,QQQ4,738397
04/16/22 08:47:41	2220415C_15.d	22204061002	Sample	1	SXA,QQQ4,738397
04/16/22 09:02:32	2220415C_16.d	1400	QC	1	SXA,QQQ4,CCV
04/16/22 09:17:40	2220415C_17.d	22204061003	Sample	1	SXA,QQQ4,738397
04/16/22 09:32:48	2220415C_18.d	22204061004	Sample	1	SXA,QQQ4,738397
04/16/22 09:47:39	2220415C_19.d	22204061005	Sample	1	SXA,QQQ4,738397
04/16/22 10:02:30	2220415C_20.d	22204061006	Sample	1	SXA,QQQ4,738397
04/16/22 10:17:24	2220415C_21.d	22204061007	Sample	1	SXA,QQQ4,738397
04/16/22 10:32:15	2220415C_22.d	22204061008	Sample	1	SXA,QQQ4,738397
04/16/22 10:47:06	2220415C_23.d	22204061009	Sample	1	SXA,QQQ4,738397
04/16/22 11:01:56	2220415C_24.d	22204061010	Sample	1	SXA,QQQ4,738397
04/16/22 11:16:46	2220415C_25.d	22204061011	Sample	1	SXA,QQQ4,738397
04/16/22 11:31:36	2220415C_26.d	22204061012	Sample	1	SXA,QQQ4,738397
04/16/22 11:46:26	2220415C_27.d	1400	QC	1	SXA,QQQ4,CCV

LC-QQQ Instrument Run Log

Instrument: QQQ 4
Instrument Batch: 2220421A.batch.bin
Current ICAL Batch: 2220419CCAL
ICAL Std (ID/Exp): 022-35-1 9/11/22
ICV Std (ID/Exp): 022-38-2 7/19/22

LIMS Batch (HBN): 739037/739099
20mM NH4OAc (ID/Exp): 022-45-4 4/22/22 8:00AM
Methanol (ID/Exp): 2131452 11/30/26
EIS Mix (ID/Exp): 022-37-1 10/12/22
IIS Mix (ID/Exp): 022-35-9 9/30/22

Acquisition time	Data File	Name	Type	Dilution	Comment
04/19/22 16:49:27	2220419C_1.d	1201	Cal	1	SXA,QQQ4,ICAL
04/19/22 17:04:24	2220419C_2.d	1202	Cal	1	SXA,QQQ4,ICAL
04/19/22 17:19:11	2220419C_3.d	1203	Cal	1	SXA,QQQ4,ICAL
04/19/22 17:33:59	2220419C_4.d	1204	Cal	1	SXA,QQQ4,ICAL
04/19/22 17:48:49	2220419C_5.d	1205	Cal	1	SXA,QQQ4,ICAL
04/19/22 18:03:37	2220419C_6.d	1206	Cal	1	SXA,QQQ4,ICAL
04/19/22 18:18:25	2220419C_7.d	1207	Cal	1	SXA,QQQ4,ICAL
04/19/22 18:36:05	2220419C_8.d	1500	Blank	1	SXA,QQQ4,Instrument Blank
04/19/22 18:51:02	2220419C_9.d	1600	Sample	1	SXA,QQQ4,ICV
04/19/22 19:05:51	2220419C_10.d	1450	QC	1	SXA,QQQ4,CCV
04/21/22 08:21:26	2220421A_1.d	1400 RT Test	QC	1	SXA,QQQ4,RT TEST
04/21/22 08:46:01	2220421A_2.d	1500	Blank	1	SXA,QQQ4,INSTRUMENT BLANK
04/21/22 09:00:58	2220421A_3.d	1450	QC	1	SXA,QQQ4,CCV
04/21/22 09:18:45	2220421A_4.d	2334174	Blank	1	SXA,QQQ4,738671
04/21/22 09:33:41	2220421A_5.d	2334175	QC	1	SXA,QQQ4,738671
04/21/22 09:48:29	2220421A_6.d	2334176	QC	1	SXA,QQQ4,738671
04/21/22 10:03:17	2220421A_7.d	22204041206	Sample	1	SXA,QQQ4,738671
04/21/22 10:21:59	2220421A_8.d	15 ml Cent. Test	Sample	1	SXA,QQQ4,Cent.#20210717-058
04/21/22 10:36:50	2220421A_9.d	22204041207	Sample	1	SXA,QQQ4,738671
04/21/22 10:51:47	2220421A_10.d	IIS TEST	Sample	1	SXA,QQQ4,022-46-2
04/21/22 11:06:37	2220421A_11.d	22204041208	Sample	1	SXA,QQQ4,738671
04/21/22 11:21:27	2220421A_12.d	22204041209	Sample	1	SXA,QQQ4,738671
04/21/22 11:36:17	2220421A_13.d	22204041004	Sample	1	SXA,QQQ4,738671
04/21/22 11:51:06	2220421A_14.d	22204041005	Sample	1	SXA,QQQ4,738671
04/21/22 12:05:55	2220421A_15.d	22204050702	Sample	1	SXA,QQQ4,738671
04/21/22 12:20:43	2220421A_16.d	22204050703	Sample	1	SXA,QQQ4,738671
04/21/22 12:35:30	2220421A_17.d	22204050704	Sample	1	SXA,QQQ4,738671
04/21/22 12:50:18	2220421A_18.d	22204050705	Sample	1	SXA,QQQ4,738671
04/21/22 13:05:06	2220421A_19.d	1400	QC	1	SXA,QQQ4,CCV
04/21/22 13:20:11	2220421A_20.d	22204050706	Sample	1	SXA,QQQ4,738671
04/21/22 13:35:15	2220421A_21.d	22204050707	Sample	1	SXA,QQQ4,738671
04/21/22 13:50:05	2220421A_22.d	22204064506	Sample	1	SXA,QQQ4,738671
04/21/22 14:04:53	2220421A_23.d	22204068801	Sample	1	SXA,QQQ4,738671
04/21/22 14:22:21	2220421A_24.d	13 Comp. Test	Sample	1	SXA,QQQ4,13 comp.#022-46-5
04/21/22 14:37:13	2220421A_25.d	22204068802	Sample	1	SXA,QQQ4,738671
04/21/22 14:52:11	2220421A_26.d	22204068805	Sample	1	SXA,QQQ4,738671
04/21/22 15:06:59	2220421A_27.d	22204068901	Sample	1	SXA,QQQ4,738671
04/21/22 15:21:48	2220421A_28.d	22204068902	Sample	1	SXA,QQQ4,738671
04/21/22 15:36:36	2220421A_29.d	22204068903	Sample	1	SXA,QQQ4,738671
04/21/22 15:51:23	2220421A_30.d	22204068904	Sample	1	SXA,QQQ4,738671
04/21/22 16:06:12	2220421A_31.d	1400	QC	1	SXA,QQQ4,CCV
04/21/22 16:21:19	2220421A_32.d	2332008	Blank	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 16:36:24	2220421A_33.d	2332009	QC	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 16:51:12	2220421A_34.d	2332010	QC	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 17:06:00	2220421A_35.d	22204111201	Sample	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 17:20:48	2220421A_36.d	22204111202	Sample	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 17:35:36	2220421A_37.d	22204111203	Sample	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 17:50:25	2220421A_38.d	22204111204	Sample	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 18:05:13	2220421A_39.d	22204111205	Sample	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 18:20:01	2220421A_40.d	22204111206	Sample	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 18:34:49	2220421A_41.d	22204111207	Sample	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 18:49:40	2220421A_42.d	22204063507	Sample	5	SXA,QQQ4,738400
04/21/22 19:04:45	2220421A_43.d	1400	QC	1	SXA,QQQ4,CCV

LC-QQQ Instrument Run Log

Instrument: QQQ 4
Instrument Batch: 2220424B.batch.bin
Current ICAL Batch: 2220423ACAL
ICAL Std (ID/Exp): 022-47-1 10/21/22
ICV Std (ID/Exp): 022-49-1 7/19/22

LIMS Batch (HBN): 739285
20mM NH4OAc (ID/Exp): 022-50-1 4/26/22 8:00AM
Methanol (ID/Exp): 2131526 11/30/26
EIS Mix (ID/Exp): 022-45-2 10/12/22
IIS Mix (ID/Exp): 022-45-3 10/20/22

Acquisition time	Data File	Name	Type	Dilution	Comment
04/23/22 16:18:32	2220423A_01.d	1201	Cal	1	SXA,QQQ4,ICAL#022-47-5
04/23/22 16:33:20	2220423A_02.d	1202	Cal	1	SXA,QQQ4,ICAL#022-47-6
04/23/22 16:48:08	2220423A_03.d	1203	Cal	1	SXA,QQQ4,ICAL#022-48-1
04/23/22 17:02:56	2220423A_04.d	1204	Cal	1	SXA,QQQ4,ICAL#022-48-2
04/23/22 17:17:44	2220423A_05.d	1205	Cal	1	SXA,QQQ4,ICAL#022-48-3
04/23/22 17:32:32	2220423A_06.d	1206	Cal	1	SXA,QQQ4,ICAL#022-48-4
04/23/22 17:47:23	2220423A_07.d	1207	Cal	1	SXA,QQQ4,ICAL#022-48-5
04/23/22 18:02:11	2220423A_08.d	1500	Blank	1	SXA,QQQ4,Instrument Blank
04/23/22 18:17:01	2220423A_09.d	1600	Sample	1	SXA,QQQ4,ICV#022-49-1
04/23/22 18:31:49	2220423A_10.d	1450	QC	1	SXA,QQQ4,CCV
04/24/22 21:23:08	2220424B_1.d	1500	Blank	1	SXA,QQQ4,Instrument Blank
04/24/22 21:37:58	2220424B_2.d	1450	QC	1	SXA,QQQ4,CCV
04/24/22 21:52:46	2220424B_3.d	2337269	Blank	1	SXA,QQQ4,739244
04/24/22 22:07:35	2220424B_4.d	2337270	QC	1	SXA,QQQ4,739244
04/24/22 22:22:24	2220424B_5.d	2337271	QC	1	SXA,QQQ4,739244
04/24/22 22:37:13	2220424B_6.d	22204197001	Sample	1	SXA,QQQ4,739244
04/24/22 22:52:02	2220424B_7.d	22204197002	Sample	1	SXA,QQQ4,739244
04/24/22 23:06:51	2220424B_8.d	22204050704	Sample	1	SXA,QQQ4,739244
04/24/22 23:21:40	2220424B_9.d	2337230	Blank	1	SXA,QQQ4,739236
04/24/22 23:36:31	2220424B_10.d	2337231	QC	1	SXA,QQQ4,739236
04/24/22 23:51:20	2220424B_11.d	2337232	QC	1	SXA,QQQ4,739236
04/25/22 00:06:08	2220424B_12.d	22204082711	Sample	1	SXA,QQQ4,739236
04/25/22 00:20:57	2220424B_13.d	22204082712	Sample	1	SXA,QQQ4,739236
04/25/22 00:35:46	2220424B_14.d	1400	QC	1	SXA,QQQ4,CCV

ORGANICS INSTRUMENT SENSITIVITY CHECK

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/13/2022 20:31</u>	Lab File ID:	<u>2220413B_2.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738448</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.81	3.66	96	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	3.84	3.34	87	70	130	
NEtFOSAA	ng/L	4.00	3.81	95	70	130	
NMeFOSAA	ng/L	4.00	3.82	96	70	130	
Perfluorobutanoic acid	ng/L	4.00	3.84	96	70	130	
Perfluorobutanesulfonic acid	ng/L	3.55	3.55	100	70	130	
Perfluorodecanoic acid	ng/L	4.00	3.77	94	70	130	
Perfluorododecanoic acid	ng/L	4.00	3.78	95	70	130	
Perfluoroheptanoic acid	ng/L	4.00	3.83	96	70	130	
Perfluorohexanoic acid	ng/L	4.00	3.86	96	70	130	
Perfluorohexanesulfonic acid	ng/L	3.66	3.89	106	70	130	
Perfluorononanoic acid	ng/L	4.00	3.81	95	70	130	
Perfluorooctanoic acid	ng/L	4.00	3.82	95	70	130	
Perfluorooctanesulfonic acid	ng/L	3.71	4.15	112	70	130	
Perfluoropentanoic acid	ng/L	4.00	3.89	97	70	130	
Perfluorotetradecanoic acid	ng/L	4.00	3.71	93	70	130	
Perfluorotridecanoic acid	ng/L	4.00	3.82	95	70	130	
Perfluoroundecanoic acid	ng/L	4.00	3.78	95	70	130	

ORGANICS INSTRUMENT SENSITIVITY CHECK

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/15/2022 21:23</u>	Lab File ID:	<u>2220415B_2.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738621</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.81	3.70	97	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	3.84	3.64	95	70	130	
NEtFOSAA	ng/L	4.00	3.98	99	70	130	
NMeFOSAA	ng/L	4.00	4.05	101	70	130	
Perfluorobutanoic acid	ng/L	4.00	3.83	96	70	130	
Perfluorobutanesulfonic acid	ng/L	3.55	3.46	97	70	130	
Perfluorodecanoic acid	ng/L	4.00	3.72	93	70	130	
Perfluorododecanoic acid	ng/L	4.00	3.86	97	70	130	
Perfluoroheptanoic acid	ng/L	4.00	3.74	94	70	130	
Perfluorohexanoic acid	ng/L	4.00	3.90	98	70	130	
Perfluorohexanesulfonic acid	ng/L	3.66	3.92	107	70	130	
Perfluorononanoic acid	ng/L	4.00	3.73	93	70	130	
Perfluorooctanoic acid	ng/L	4.00	3.85	96	70	130	
Perfluorooctanesulfonic acid	ng/L	3.71	4.04	109	70	130	
Perfluoropentanoic acid	ng/L	4.00	3.87	97	70	130	
Perfluorotetradecanoic acid	ng/L	4.00	3.84	96	70	130	
Perfluorotridecanoic acid	ng/L	4.00	4.27	107	70	130	
Perfluoroundecanoic acid	ng/L	4.00	3.74	94	70	130	

ORGANICS INSTRUMENT SENSITIVITY CHECK

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/16/2022 05:34</u>	Lab File ID:	<u>2220415C_2.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738661</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.81	3.65	96	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	3.84	4.16	108	70	130	
NEtFOSAA	ng/L	4.00	3.95	99	70	130	
NMeFOSAA	ng/L	4.00	4.32	108	70	130	
Perfluorobutanoic acid	ng/L	4.00	3.78	95	70	130	
Perfluorobutanesulfonic acid	ng/L	3.55	3.40	96	70	130	
Perfluorodecanoic acid	ng/L	4.00	3.89	97	70	130	
Perfluorododecanoic acid	ng/L	4.00	3.75	94	70	130	
Perfluoroheptanoic acid	ng/L	4.00	3.76	94	70	130	
Perfluorohexanoic acid	ng/L	4.00	3.86	97	70	130	
Perfluorohexanesulfonic acid	ng/L	3.66	3.94	108	70	130	
Perfluorononanoic acid	ng/L	4.00	3.69	92	70	130	
Perfluorooctanoic acid	ng/L	4.00	3.90	97	70	130	
Perfluorooctanesulfonic acid	ng/L	3.71	4.11	111	70	130	
Perfluoropentanoic acid	ng/L	4.00	3.83	96	70	130	
Perfluorotetradecanoic acid	ng/L	4.00	3.95	99	70	130	
Perfluorotridecanoic acid	ng/L	4.00	4.14	104	70	130	
Perfluoroundecanoic acid	ng/L	4.00	3.82	96	70	130	

ORGANICS INSTRUMENT SENSITIVITY CHECK

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/21/2022 09:00</u>	Lab File ID:	<u>2220421A_3.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739037</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.81	3.76	99	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	3.84	3.80	99	70	130	
NEtFOSAA	ng/L	4.00	3.89	97	70	130	
NMeFOSAA	ng/L	4.00	4.49	112	70	130	
Perfluorobutanoic acid	ng/L	4.00	3.81	95	70	130	
Perfluorobutanesulfonic acid	ng/L	3.55	3.50	99	70	130	
Perfluorodecanoic acid	ng/L	4.00	3.78	95	70	130	
Perfluorododecanoic acid	ng/L	4.00	3.85	96	70	130	
Perfluoroheptanoic acid	ng/L	4.00	3.86	96	70	130	
Perfluorohexanoic acid	ng/L	4.00	4.05	101	70	130	
Perfluorohexanesulfonic acid	ng/L	3.66	3.82	105	70	130	
Perfluorononanoic acid	ng/L	4.00	3.77	94	70	130	
Perfluorooctanoic acid	ng/L	4.00	3.90	98	70	130	
Perfluorooctanesulfonic acid	ng/L	3.71	4.03	109	70	130	
Perfluoropentanoic acid	ng/L	4.00	3.78	95	70	130	
Perfluorotetradecanoic acid	ng/L	4.00	3.83	96	70	130	
Perfluorotridecanoic acid	ng/L	4.00	3.73	93	70	130	
Perfluoroundecanoic acid	ng/L	4.00	3.74	93	70	130	

ORGANICS INSTRUMENT SENSITIVITY CHECK

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/24/2022 21:37</u>	Lab File ID:	<u>2220424B_2.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739285</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.81	3.69	97	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	3.84	3.89	101	70	130	
NEtFOSAA	ng/L	4.00	3.81	95	70	130	
NMeFOSAA	ng/L	4.00	3.92	98	70	130	
Perfluorobutanoic acid	ng/L	4.00	3.76	94	70	130	
Perfluorobutanesulfonic acid	ng/L	3.55	3.34	94	70	130	
Perfluorodecanoic acid	ng/L	4.00	3.82	95	70	130	
Perfluorododecanoic acid	ng/L	4.00	3.90	97	70	130	
Perfluoroheptanoic acid	ng/L	4.00	3.74	94	70	130	
Perfluorohexanoic acid	ng/L	4.00	3.84	96	70	130	
Perfluorohexanesulfonic acid	ng/L	3.66	3.43	94	70	130	
Perfluorononanoic acid	ng/L	4.00	3.77	94	70	130	
Perfluorooctanoic acid	ng/L	4.00	3.82	96	70	130	
Perfluorooctanesulfonic acid	ng/L	3.71	3.74	101	70	130	
Perfluoropentanoic acid	ng/L	4.00	3.82	95	70	130	
Perfluorotetradecanoic acid	ng/L	4.00	3.75	94	70	130	
Perfluorotridecanoic acid	ng/L	4.00	3.77	94	70	130	
Perfluoroundecanoic acid	ng/L	4.00	3.69	92	70	130	

ORGANICS INITIAL CALIBRATION VERIFICATION

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/12/2022 17:33</u>	Lab File ID:	<u>2220412B_10.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738370</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	10000	10300	103	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	10100	10100	100	70	130	
NEtFOSAA	ng/L	10000	10100	101	70	130	
NMeFOSAA	ng/L	10000	9880	99	70	130	
Perfluorobutanoic acid	ng/L	10000	9990	100	70	130	
Perfluorobutanesulfonic acid	ng/L	10000	10600	106	70	130	
Perfluorodecanoic acid	ng/L	10000	10200	102	70	130	
Perfluorododecanoic acid	ng/L	10000	8940	89	70	130	
Perfluoroheptanoic acid	ng/L	10000	10100	101	70	130	
Perfluorohexanoic acid	ng/L	10100	10700	105	70	130	
Perfluorohexanesulfonic acid	ng/L	10000	10500	105	70	130	
Perfluorononanoic acid	ng/L	10000	10300	103	70	130	
Perfluorooctanoic acid	ng/L	10100	9480	94	70	130	
Perfluorooctanesulfonic acid	ng/L	10000	8780	88	70	130	
Perfluoropentanoic acid	ng/L	10100	10100	100	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorotridecanoic acid	ng/L	10000	9300	93	70	130	
Perfluoroundecanoic acid	ng/L	10000	9570	96	70	130	

ORGANICS INITIAL CALIBRATION VERIFICATION

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/19/2022 18:51</u>	Lab File ID:	<u>2220419C_9.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738889</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	10000	10400	104	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	10100	10500	104	70	130	
NEtFOSAA	ng/L	10000	9580	96	70	130	
NMeFOSAA	ng/L	10000	10100	101	70	130	
Perfluorobutanoic acid	ng/L	10000	9700	97	70	130	
Perfluorobutanesulfonic acid	ng/L	10000	10300	103	70	130	
Perfluorodecanoic acid	ng/L	10000	9930	99	70	130	
Perfluorododecanoic acid	ng/L	10000	8830	88	70	130	
Perfluoroheptanoic acid	ng/L	10000	9940	99	70	130	
Perfluorohexanoic acid	ng/L	10100	10400	103	70	130	
Perfluorohexanesulfonic acid	ng/L	10000	10200	102	70	130	
Perfluorononanoic acid	ng/L	10000	10100	101	70	130	
Perfluorooctanoic acid	ng/L	10100	9430	93	70	130	
Perfluorooctanesulfonic acid	ng/L	10000	8520	85	70	130	
Perfluoropentanoic acid	ng/L	10100	9950	99	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10100	101	70	130	
Perfluorotridecanoic acid	ng/L	10000	9190	92	70	130	
Perfluoroundecanoic acid	ng/L	10000	9310	93	70	130	

ORGANICS INITIAL CALIBRATION VERIFICATION

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/23/2022 18:17</u>	Lab File ID:	<u>2220423A_09.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739271</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	10000	10600	106	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	10100	10900	108	70	130	
NEtFOSAA	ng/L	10000	10400	104	70	130	
NMeFOSAA	ng/L	10000	9880	99	70	130	
Perfluorobutanoic acid	ng/L	10000	10100	101	70	130	
Perfluorobutanesulfonic acid	ng/L	10000	10900	109	70	130	
Perfluorodecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorododecanoic acid	ng/L	10000	9350	94	70	130	
Perfluoroheptanoic acid	ng/L	10000	10400	104	70	130	
Perfluorohexanoic acid	ng/L	10100	11000	109	70	130	
Perfluorohexanesulfonic acid	ng/L	10000	10700	107	70	130	
Perfluorononanoic acid	ng/L	10000	10700	107	70	130	
Perfluorooctanoic acid	ng/L	10100	9910	98	70	130	
Perfluorooctanesulfonic acid	ng/L	10000	9150	92	70	130	
Perfluoropentanoic acid	ng/L	10100	10400	103	70	130	
Perfluorotetradecanoic acid	ng/L	10000	11000	110	70	130	
Perfluorotridecanoic acid	ng/L	10000	9540	95	70	130	
Perfluoroundecanoic acid	ng/L	10000	9660	97	70	130	

4I - ORGANICS INSTRUMENT BLANK

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/13/2022 20:16</u>	Lab File ID:	<u>2220413B_1.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>738448</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>RESULT</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>	<i>#</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.50	3.00	4.00	
8:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.06	3.00	4.00	
NEtFOSAA	ng/L	4.00	U	1.58	4.00	8.00	
NMeFOSAA	ng/L	4.00	U	0.90	4.00	8.00	
Perfluorobutanesulfonic acid	ng/L	2.00	U	0.62	2.00	4.00	
Perfluorobutanoic acid	ng/L	3.50	U	1.52	3.50	4.00	
Perfluorodecanoic acid	ng/L	3.00	U	1.44	3.00	4.00	
Perfluorododecanoic acid	ng/L	3.00	U	1.30	3.00	4.00	
Perfluoroheptanoic acid	ng/L	3.00	U	1.16	3.00	4.00	
Perfluorohexanesulfonic acid	ng/L	3.00	U	1.24	3.00	4.00	
Perfluorohexanoic acid	ng/L	2.00	U	0.94	2.00	4.00	
Perfluorononanoic acid	ng/L	2.00	U	0.98	2.00	4.00	
Perfluorooctanesulfonic acid	ng/L	0.828	J	0.76	2.00	4.00	
Perfluorooctanoic acid	ng/L	2.00	U	0.84	2.00	4.00	
Perfluoropentanoic acid	ng/L	2.00	U	0.88	2.00	4.00	
Perfluorotetradecanoic acid	ng/L	3.00	U	1.14	3.00	4.00	
Perfluorotridecanoic acid	ng/L	3.00	U	1.23	3.00	4.00	
Perfluoroundecanoic acid	ng/L	3.00	U	1.24	3.00	4.00	

* - Result greater than 1/2 LOQ

4I - ORGANICS INSTRUMENT BLANK

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/15/2022 21:08</u>	Lab File ID:	<u>2220415B_1.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>738621</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>RESULT</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>	<i>#</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.50	3.00	4.00	
8:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.06	3.00	4.00	
NEtFOSAA	ng/L	4.00	U	1.58	4.00	8.00	
NMeFOSAA	ng/L	4.00	U	0.90	4.00	8.00	
Perfluorobutanesulfonic acid	ng/L	2.00	U	0.62	2.00	4.00	
Perfluorobutanoic acid	ng/L	3.50	U	1.52	3.50	4.00	
Perfluorodecanoic acid	ng/L	3.00	U	1.44	3.00	4.00	
Perfluorododecanoic acid	ng/L	3.00	U	1.30	3.00	4.00	
Perfluoroheptanoic acid	ng/L	3.00	U	1.16	3.00	4.00	
Perfluorohexanesulfonic acid	ng/L	3.00	U	1.24	3.00	4.00	
Perfluorohexanoic acid	ng/L	2.00	U	0.94	2.00	4.00	
Perfluorononanoic acid	ng/L	2.00	U	0.98	2.00	4.00	
Perfluorooctanesulfonic acid	ng/L	0.76	J	0.76	2.00	4.00	
Perfluorooctanoic acid	ng/L	2.00	U	0.84	2.00	4.00	
Perfluoropentanoic acid	ng/L	2.00	U	0.88	2.00	4.00	
Perfluorotetradecanoic acid	ng/L	3.00	U	1.14	3.00	4.00	
Perfluorotridecanoic acid	ng/L	3.00	U	1.23	3.00	4.00	
Perfluoroundecanoic acid	ng/L	3.00	U	1.24	3.00	4.00	

* - Result greater than 1/2 LOQ

4I - ORGANICS INSTRUMENT BLANK

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/16/2022 05:19</u>	Lab File ID:	<u>2220415C_1.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>738661</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>RESULT</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>	<i>#</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.50	3.00	4.00	
8:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.06	3.00	4.00	
NEtFOSAA	ng/L	4.00	U	1.58	4.00	8.00	
NMeFOSAA	ng/L	4.00	U	0.90	4.00	8.00	
Perfluorobutanesulfonic acid	ng/L	2.00	U	0.62	2.00	4.00	
Perfluorobutanoic acid	ng/L	3.50	U	1.52	3.50	4.00	
Perfluorodecanoic acid	ng/L	3.00	U	1.44	3.00	4.00	
Perfluorododecanoic acid	ng/L	3.00	U	1.30	3.00	4.00	
Perfluoroheptanoic acid	ng/L	3.00	U	1.16	3.00	4.00	
Perfluorohexanesulfonic acid	ng/L	3.00	U	1.24	3.00	4.00	
Perfluorohexanoic acid	ng/L	2.00	U	0.94	2.00	4.00	
Perfluorononanoic acid	ng/L	2.00	U	0.98	2.00	4.00	
Perfluorooctanesulfonic acid	ng/L	0.836	J	0.76	2.00	4.00	
Perfluorooctanoic acid	ng/L	2.00	U	0.84	2.00	4.00	
Perfluoropentanoic acid	ng/L	2.00	U	0.88	2.00	4.00	
Perfluorotetradecanoic acid	ng/L	3.00	U	1.14	3.00	4.00	
Perfluorotridecanoic acid	ng/L	3.00	U	1.23	3.00	4.00	
Perfluoroundecanoic acid	ng/L	3.00	U	1.24	3.00	4.00	

* - Result greater than 1/2 LOQ

4I - ORGANICS INSTRUMENT BLANK

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/21/2022 08:46</u>	Lab File ID:	<u>2220421A_2.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>739037</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>RESULT</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>	<i>#</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.50	3.00	4.00	
8:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.06	3.00	4.00	
NEtFOSAA	ng/L	4.00	U	1.58	4.00	8.00	
NMeFOSAA	ng/L	4.00	U	0.90	4.00	8.00	
Perfluorobutanesulfonic acid	ng/L	2.00	U	0.62	2.00	4.00	
Perfluorobutanoic acid	ng/L	3.50	U	1.52	3.50	4.00	
Perfluorodecanoic acid	ng/L	3.00	U	1.44	3.00	4.00	
Perfluorododecanoic acid	ng/L	3.00	U	1.30	3.00	4.00	
Perfluoroheptanoic acid	ng/L	3.00	U	1.16	3.00	4.00	
Perfluorohexanesulfonic acid	ng/L	3.00	U	1.24	3.00	4.00	
Perfluorohexanoic acid	ng/L	2.00	U	0.94	2.00	4.00	
Perfluorononanoic acid	ng/L	2.00	U	0.98	2.00	4.00	
Perfluorooctanesulfonic acid	ng/L	2.00	U	0.76	2.00	4.00	
Perfluorooctanoic acid	ng/L	2.00	U	0.84	2.00	4.00	
Perfluoropentanoic acid	ng/L	2.00	U	0.88	2.00	4.00	
Perfluorotetradecanoic acid	ng/L	3.00	U	1.14	3.00	4.00	
Perfluorotridecanoic acid	ng/L	3.00	U	1.23	3.00	4.00	
Perfluoroundecanoic acid	ng/L	3.00	U	1.24	3.00	4.00	

* - Result greater than 1/2 LOQ

4I - ORGANICS INSTRUMENT BLANK

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/24/2022 21:23</u>	Lab File ID:	<u>2220424B_1.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>739285</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>RESULT</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>	<i>#</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.50	3.00	4.00	
8:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.06	3.00	4.00	
NEtFOSAA	ng/L	4.00	U	1.58	4.00	8.00	
NMeFOSAA	ng/L	4.00	U	0.90	4.00	8.00	
Perfluorobutanesulfonic acid	ng/L	2.00	U	0.62	2.00	4.00	
Perfluorobutanoic acid	ng/L	3.50	U	1.52	3.50	4.00	
Perfluorodecanoic acid	ng/L	3.00	U	1.44	3.00	4.00	
Perfluorododecanoic acid	ng/L	3.00	U	1.30	3.00	4.00	
Perfluoroheptanoic acid	ng/L	3.00	U	1.16	3.00	4.00	
Perfluorohexanesulfonic acid	ng/L	3.00	U	1.24	3.00	4.00	
Perfluorohexanoic acid	ng/L	2.00	U	0.94	2.00	4.00	
Perfluorononanoic acid	ng/L	2.00	U	0.98	2.00	4.00	
Perfluorooctanesulfonic acid	ng/L	2.00	U	0.76	2.00	4.00	
Perfluorooctanoic acid	ng/L	2.00	U	0.84	2.00	4.00	
Perfluoropentanoic acid	ng/L	2.00	U	0.88	2.00	4.00	
Perfluorotetradecanoic acid	ng/L	3.00	U	1.14	3.00	4.00	
Perfluorotridecanoic acid	ng/L	3.00	U	1.23	3.00	4.00	
Perfluoroundecanoic acid	ng/L	3.00	U	1.24	3.00	4.00	

* - Result greater than 1/2 LOQ

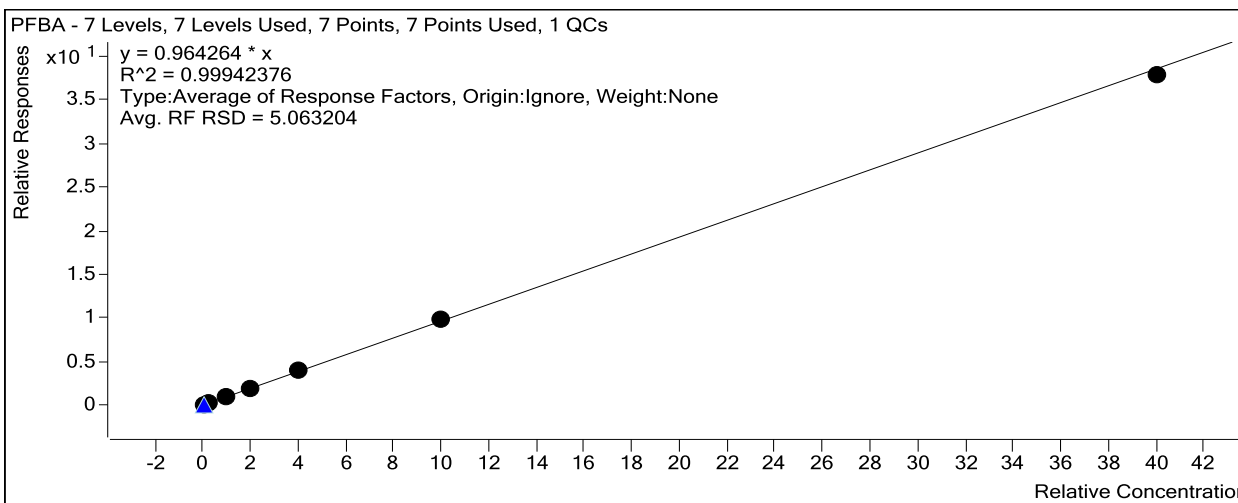
Quantitative Analysis Calibration Report

Batch Data Path	C:\MassHunter\Data\QQQ4\2220412BCAL\QuantResults\2220413B.batch.bin		
Analysis Time	4/15/2022 1:47 PM	Analyst Name	GCAL\jcms
Report Time	4/15/2022 1:56 PM	Reporter Name	GCAL\jcms
Last Calib Update	4/13/2022 9:39 AM	Batch State	Processed

Calibration Info

Target Compound PFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	9253	0.5000	0.9252
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	23259	1.2500	0.9109
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	96924	5.0000	0.9254
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	203327	10.0000	1.0166
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	422714	20.0000	1.0317
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1034877	50.0000	0.9930
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	3674143	200.0000	0.9470



Extracted ISTD

MPFBA

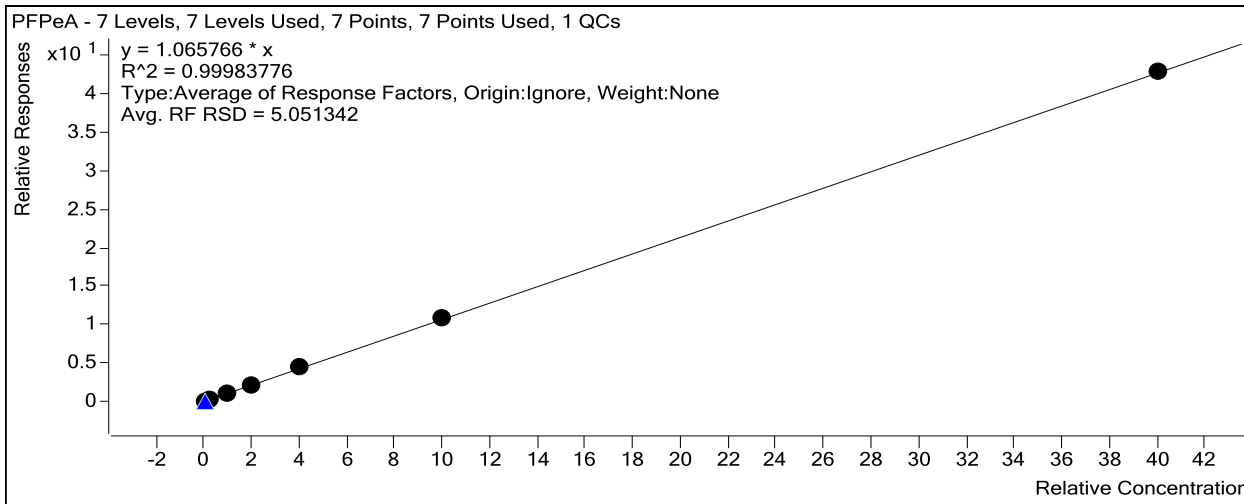
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	100011	5.0000	20002.2128
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	102141	5.0000	20428.2966
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	104739	5.0000	20947.7597
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	100004	5.0000	20000.8618
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	102429	5.0000	20485.7396
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	104212	5.0000	20842.4858
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	96995	5.0000	19398.9391

Target Compound

PFMPA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1454	0.5000	0.1135
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	3758	1.2500	0.1135
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	14822	5.0000	0.1110
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	31144	10.0000	0.1225

Quantitative Analysis Calibration Report



Extracted ISTD

M3PFBS

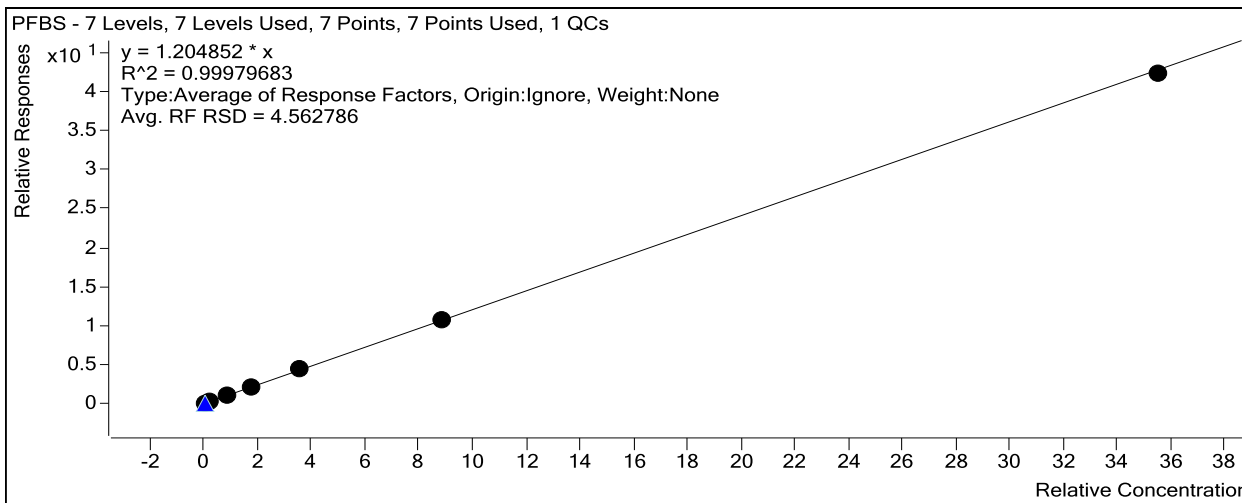
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	42029	5.0000	8405.7706
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	42986	5.0000	8597.2450
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	43420	5.0000	8683.9831
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	41175	5.0000	8235.0330
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	42361	5.0000	8472.2841
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	41929	5.0000	8385.7303
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	36600	5.0000	7320.0804

Target Compound

PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	4454	0.4435	1.1948
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	10704	1.1088	1.1228
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	44643	4.4350	1.1592
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	92581	8.8700	1.2675
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	191544	17.7400	1.2744
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	454675	44.3500	1.2225
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1548893	177.4000	1.1928

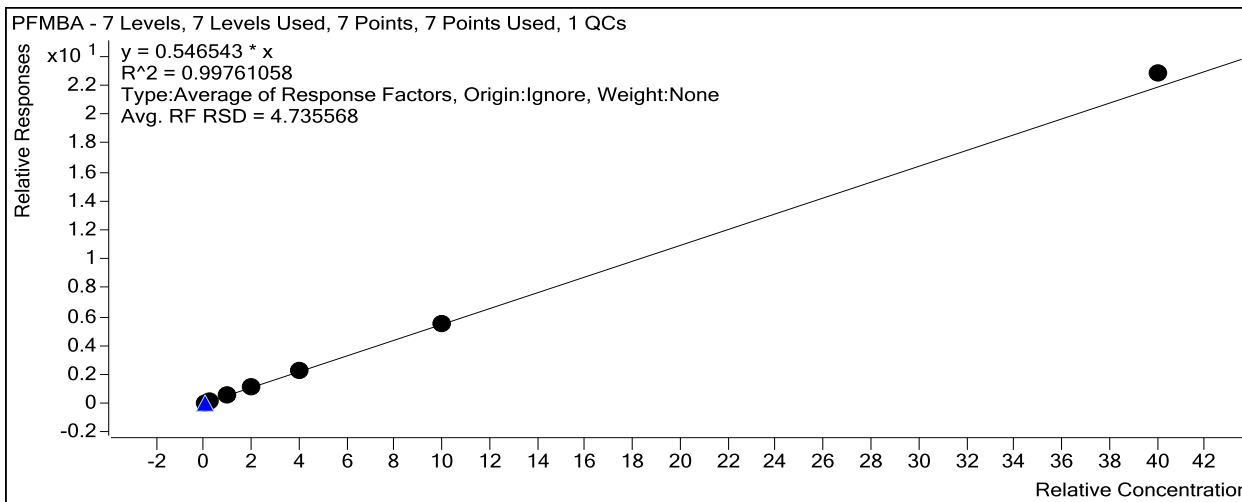
Quantitative Analysis Calibration Report



Target Compound

PFMBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	7889	0.5000	0.5204
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	20153	1.2500	0.5169
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	83650	5.0000	0.5218
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	172898	10.0000	0.5637
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	360705	20.0000	0.5761
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	867336	50.0000	0.5559
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	3240737	200.0000	0.5709



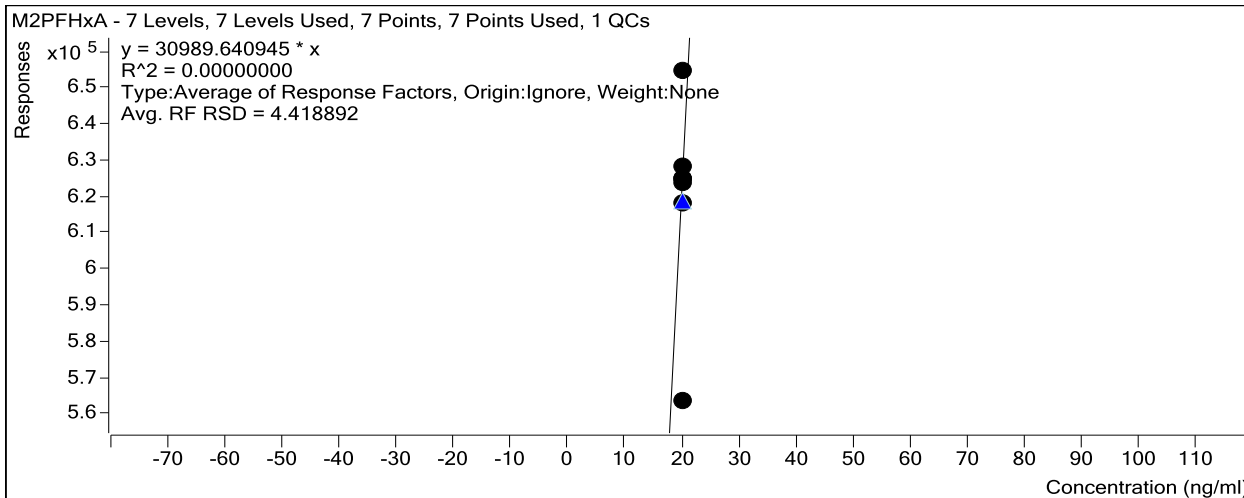
Target Compound

PFEESA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	12715	0.4450	4.2364
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	31812	1.1125	4.1420
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	131655	4.4500	4.2119
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	277652	8.9000	4.6069
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	568170	17.8000	4.7096

Quantitative Analysis Calibration Report

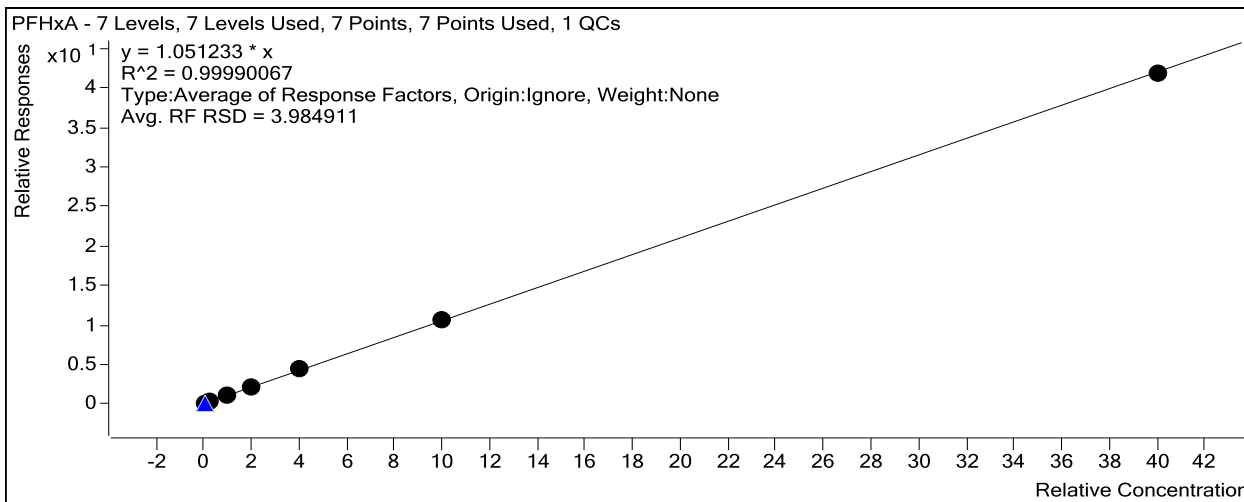
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	623889	20.0000	31194.4333
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	563692	20.0000	28184.6157



Target Compound

PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	15671	0.5000	1.0337
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	38676	1.2500	0.9920
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	162398	5.0000	1.0131
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	336150	10.0000	1.0960
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	691036	20.0000	1.1036
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1674790	50.0000	1.0734
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5941361	200.0000	1.0467

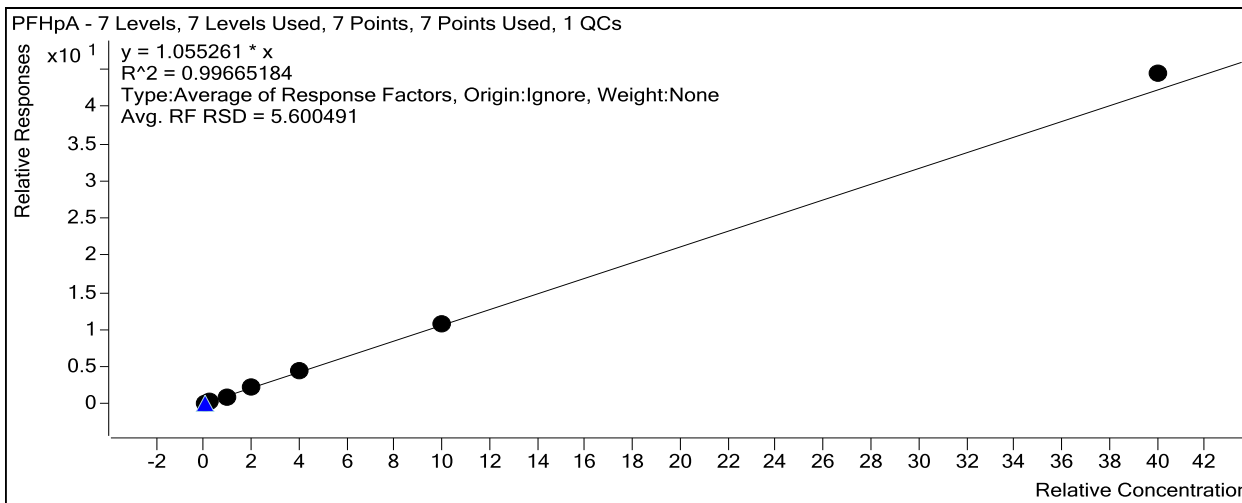


Target Compound

PFPeS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3826	0.4705	0.9675
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	10426	1.1763	1.0309
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	41793	4.7050	1.0229

Quantitative Analysis Calibration Report



Extracted ISTD

M3PFHXS

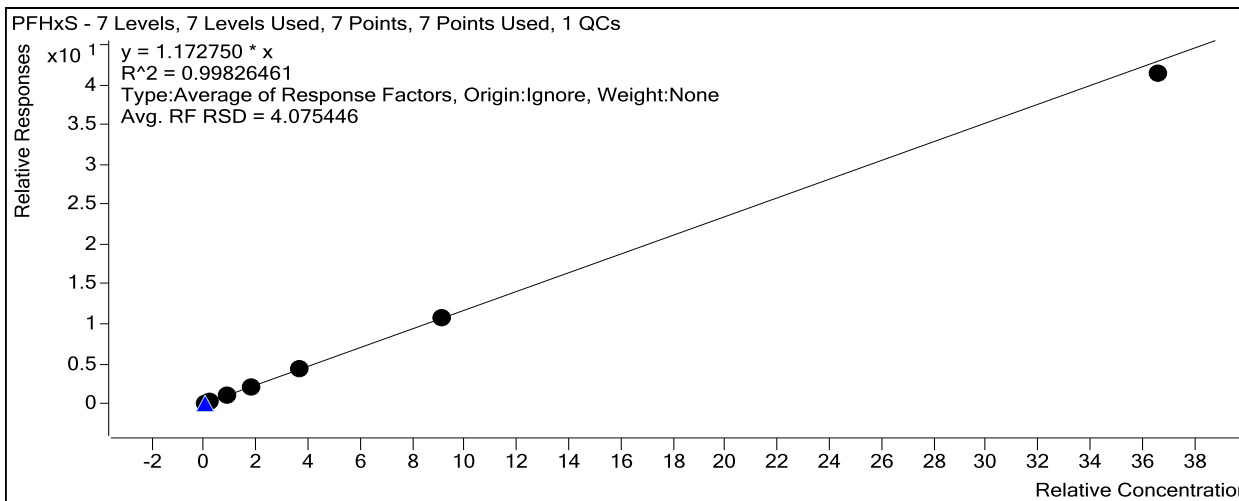
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	33722	5.0000	6744.4753
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	34519	5.0000	6903.7246
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	35121	5.0000	7024.2097
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	33859	5.0000	6771.8178
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	33888	5.0000	6777.5628
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	33519	5.0000	6703.7593
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	29731	5.0000	5946.1925

Target Compound

PFHXS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3797	0.4570	1.2319
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	9013	1.1425	1.1427
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	35487	4.5700	1.1055
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	73232	9.1400	1.1832
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	151730	18.2800	1.2247
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	364438	45.7000	1.1896
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1230080	182.8000	1.1317

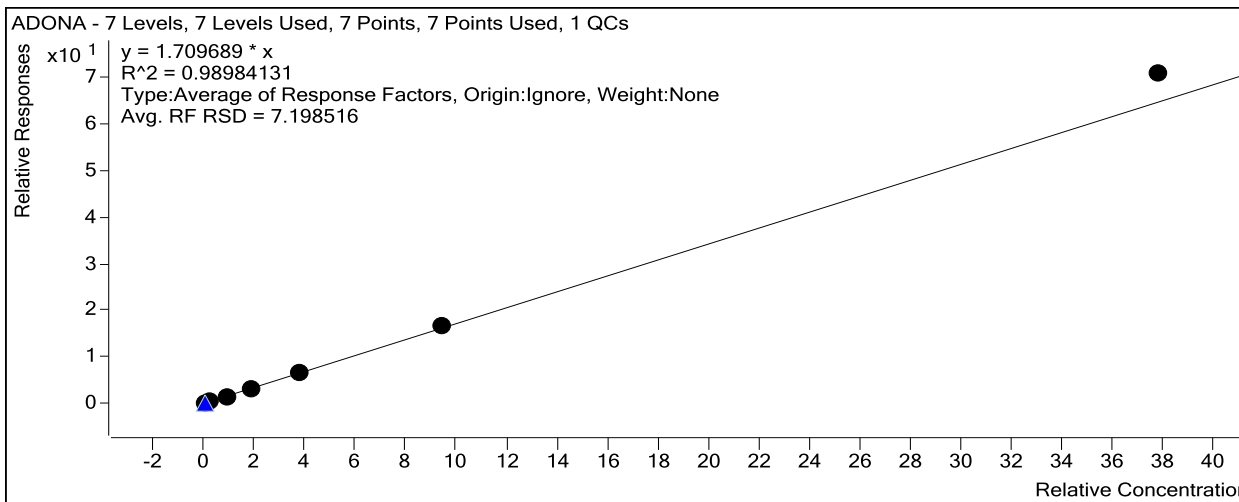
Quantitative Analysis Calibration Report



Target Compound

ADONA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	28980	0.4725	1.5725
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	73699	1.1813	1.5718
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	309297	4.7250	1.6086
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	643290	9.4500	1.7611
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1332142	18.9000	1.7907
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	3315259	47.2500	1.7874
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	12415155	189.0000	1.8758



Extracted ISTD

M2 6:2 FTS

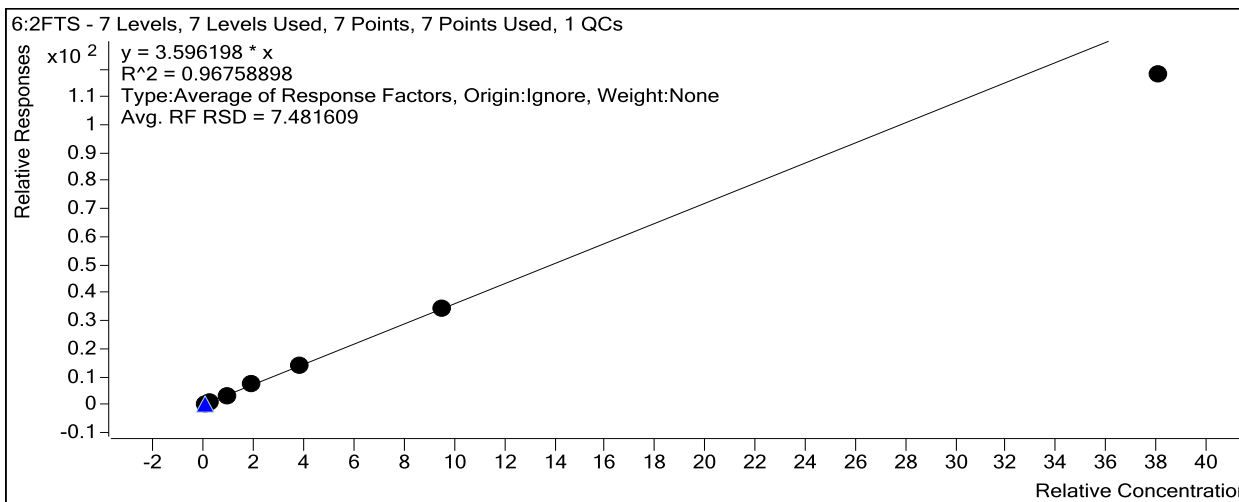
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	8908	5.0000	1781.6614
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	8686	5.0000	1737.2151
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	8901	5.0000	1780.2649
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	8199	5.0000	1639.7658
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	8629	5.0000	1725.8529

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	8369	5.0000	1673.8530
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	7324	5.0000	1464.7487

Target Compound 6:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3083	0.4755	3.6386
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	7156	1.1888	3.4649
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	30459	4.7550	3.5982
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	62017	9.5100	3.9769
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	123483	19.0200	3.7618
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	288807	47.5500	3.6286
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	864869	190.2000	3.1044



Extracted ISTD M8PFOA

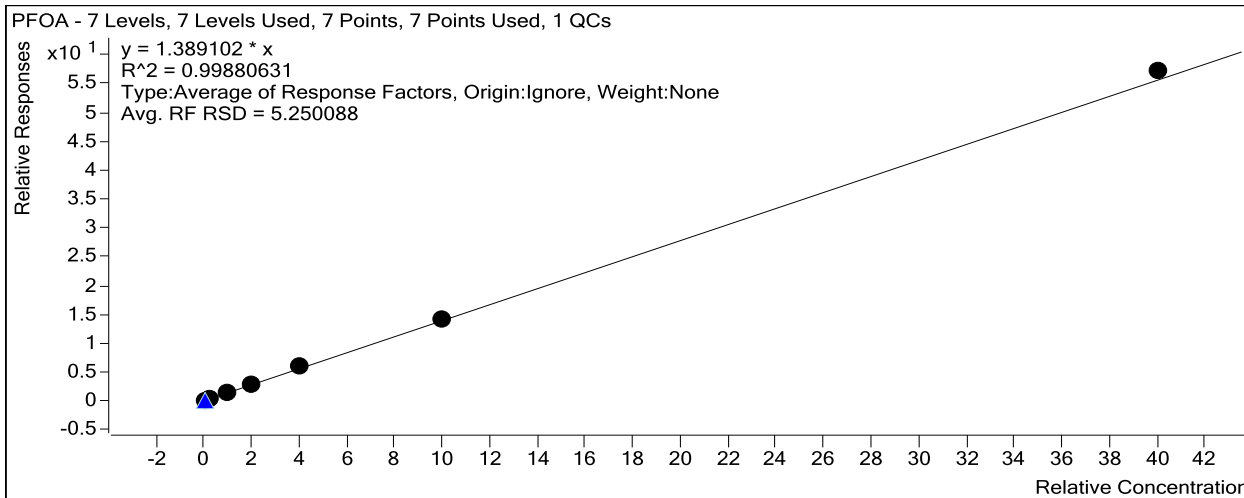
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	195016	5.0000	39003.1458
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	198460	5.0000	39692.0985
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	203471	5.0000	40694.2280
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	193272	5.0000	38654.3547
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	196805	5.0000	39361.0846
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	196280	5.0000	39255.9963
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	175094	5.0000	35018.8531

Instrument ISTD MPFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1332011	25.0000	53280.4408
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	1320598	25.0000	52823.9029
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	1367361	25.0000	54694.4584
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	1349269	25.0000	53970.7650
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1348694	25.0000	53947.7573
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1290257	25.0000	51610.2611
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1174327	25.0000	46973.0945

Quantitative Analysis Calibration Report

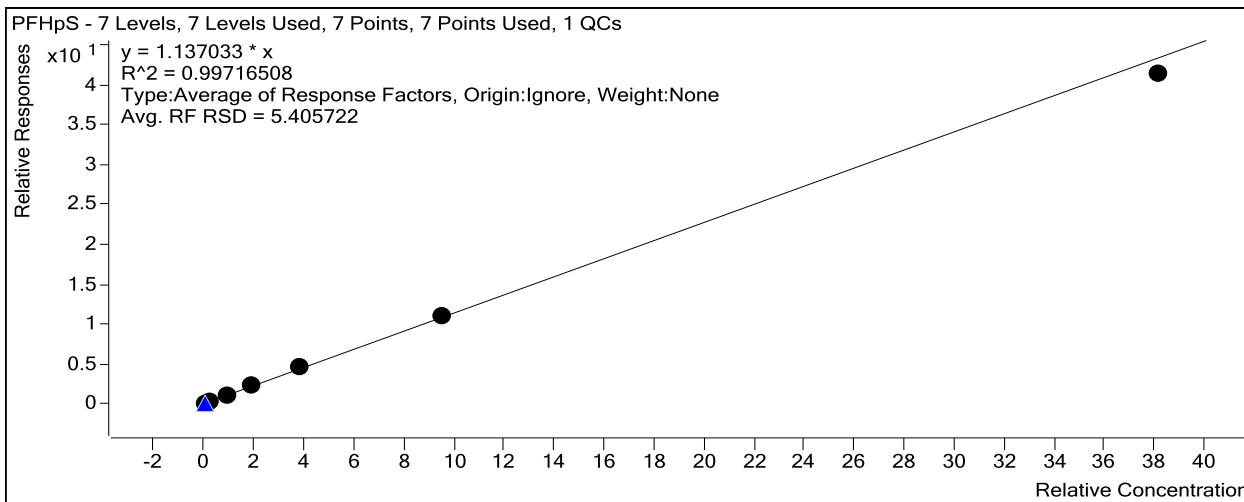
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2791083	50.0000	1.4220
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	10021638	200.0000	1.4309



Target Compound

PFHpS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3543	0.4765	1.1024
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	8829	1.1913	1.0736
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	36779	4.7650	1.0988
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	77939	9.5300	1.2077
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	158276	19.0600	1.2252
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	371881	47.6500	1.1642
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1232268	190.6000	1.0873



Extracted ISTD

M9PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	239155	5.0000	47831.0083
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	240281	5.0000	48056.2176
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	246747	5.0000	49349.4280

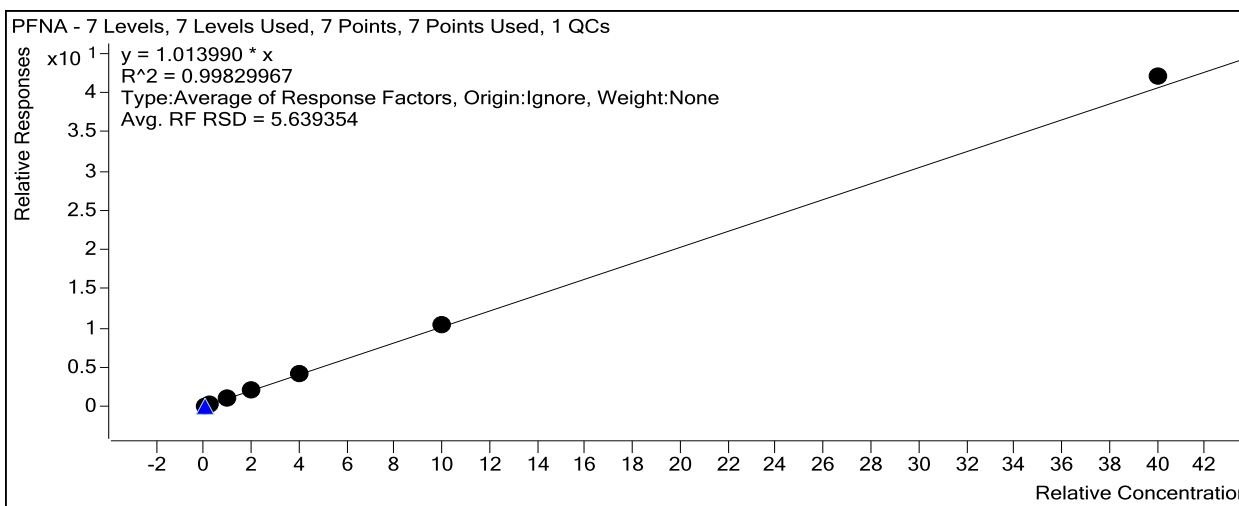
Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	233815	5.0000	46763.0292
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	241084	5.0000	48216.7290
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	239324	5.0000	47864.8157
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	208117	5.0000	41623.4094

Target Compound

PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	22664	0.5000	0.9477
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	56694	1.2500	0.9438
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	240070	5.0000	0.9729
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	502165	10.0000	1.0738
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1030245	20.0000	1.0683
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2489216	50.0000	1.0401
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	8751208	200.0000	1.0512

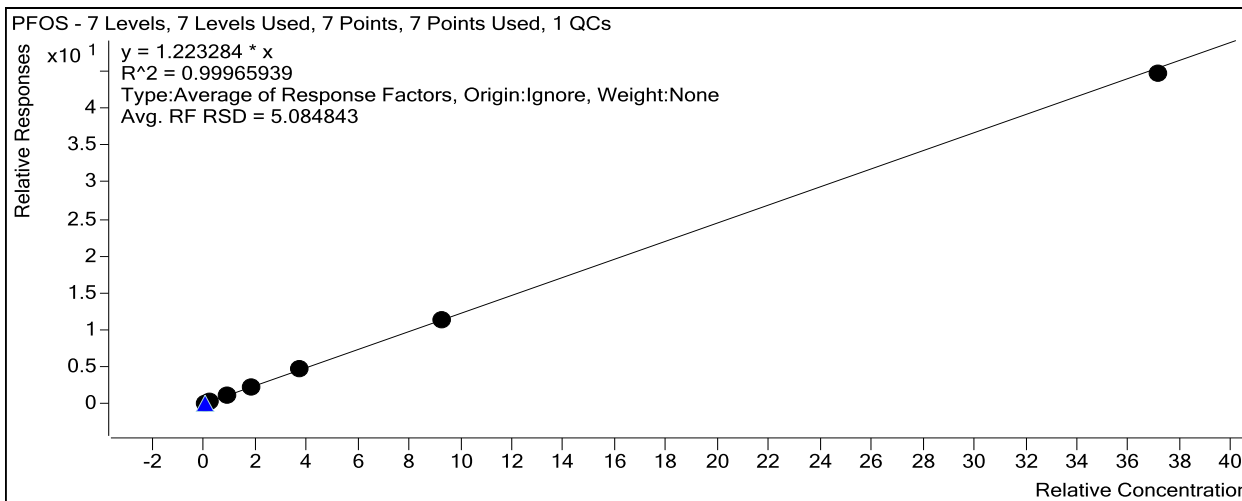


Target Compound

PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3850	0.4640	1.3270
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	8736	1.1600	1.1831
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	33870	4.6400	1.1309
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	70866	9.2800	1.2440
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	145514	18.5600	1.2608
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	348129	46.4000	1.2127
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1157687	185.6000	1.2044

Quantitative Analysis Calibration Report



Extracted ISTD

M8PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	31267	5.0000	6253.3879
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	31827	5.0000	6365.4808
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	32272	5.0000	6454.4055
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	30692	5.0000	6138.4129
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	31092	5.0000	6218.3245
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	30934	5.0000	6186.8648
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	25896	5.0000	5179.1510

Instrument ISTD

M4PFOS

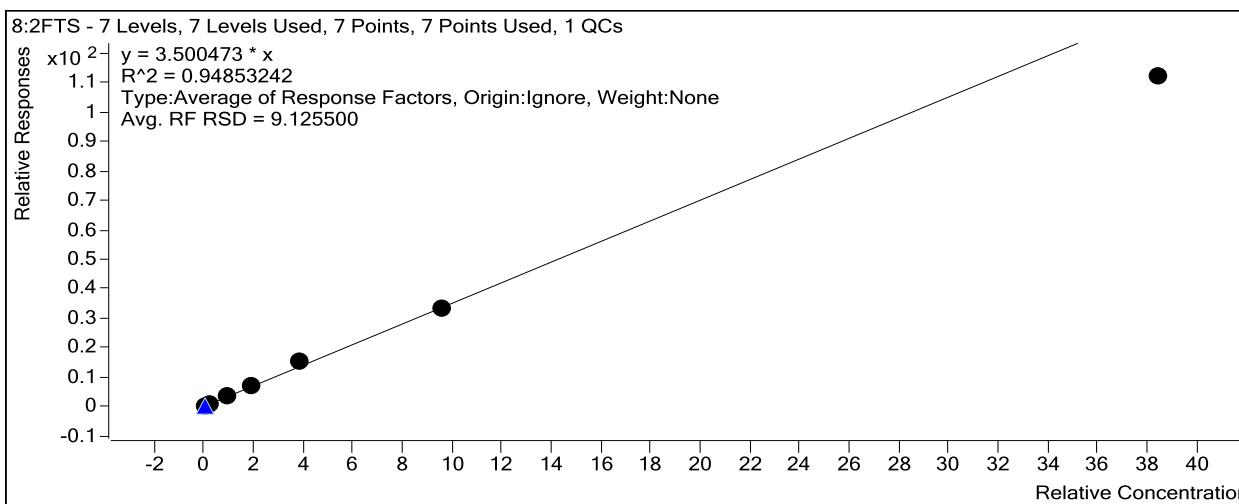
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	125019	20.0000	6250.9427
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	126663	20.0000	6333.1407
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	126096	20.0000	6304.7775
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	123092	20.0000	6154.5751
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	129493	20.0000	6474.6326
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	121900	20.0000	6095.0044
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	104578	20.0000	5228.9245

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	6864	5.0000	1372.8405
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5871	5.0000	1174.2222

Target Compound 8:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2584	0.4800	3.4717
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	6092	1.2000	3.3470
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	26068	4.8000	3.6043
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	50368	9.6000	3.7322
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	105294	19.2000	3.9313
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	230465	48.0000	3.4974
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	658163	192.0000	2.9193



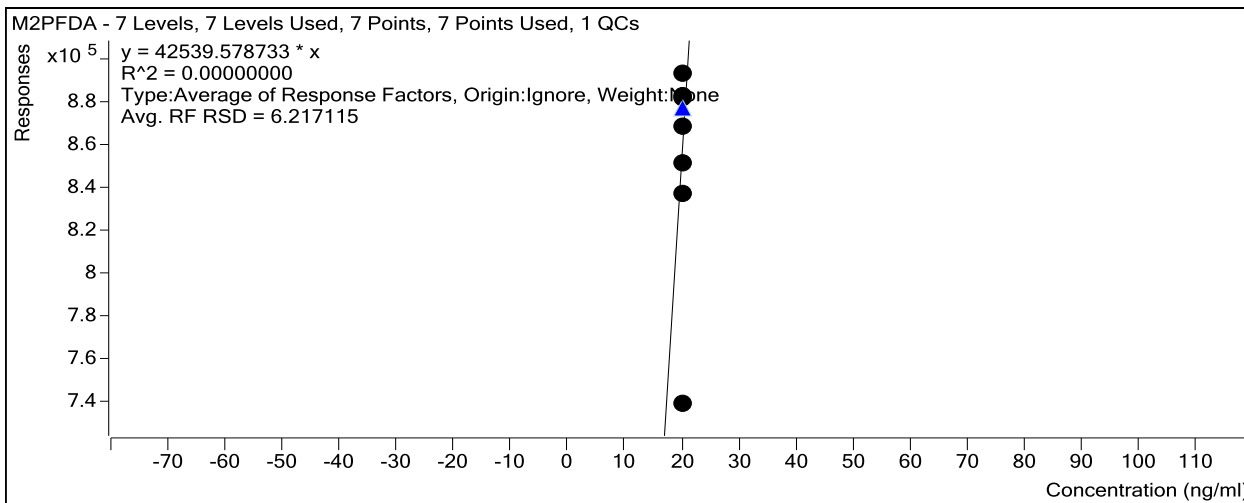
Extracted ISTD M6PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	231683	5.0000	46336.6962
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	237826	5.0000	47565.2317
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	242150	5.0000	48429.9165
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	229091	5.0000	45818.2577
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	233179	5.0000	46635.7574
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	230373	5.0000	46074.6473
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	197605	5.0000	39520.9962

Instrument ISTD M2PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	882032	20.0000	44101.5876
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	868829	20.0000	43441.4709
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	883235	20.0000	44161.7268
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	837626	20.0000	41881.3143
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	893216	20.0000	44660.8202
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	851434	20.0000	42571.6872
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	739169	20.0000	36958.4441

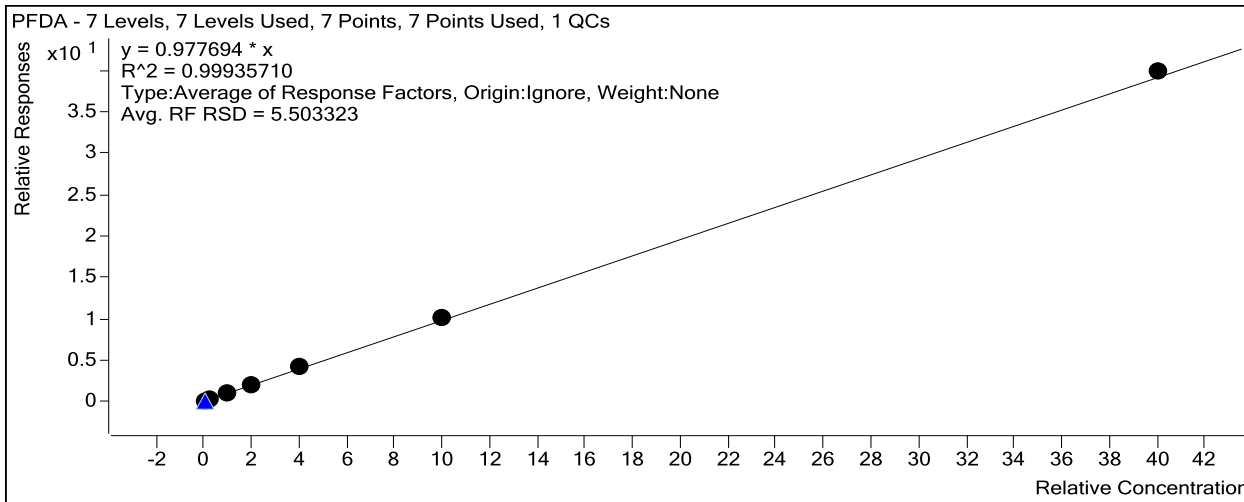
Quantitative Analysis Calibration Report



Target Compound

PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	21293	0.5000	0.9191
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	53831	1.2500	0.9054
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	228953	5.0000	0.9455
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	470895	10.0000	1.0277
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	968915	20.0000	1.0388
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2326508	50.0000	1.0099
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	7884136	200.0000	0.9975

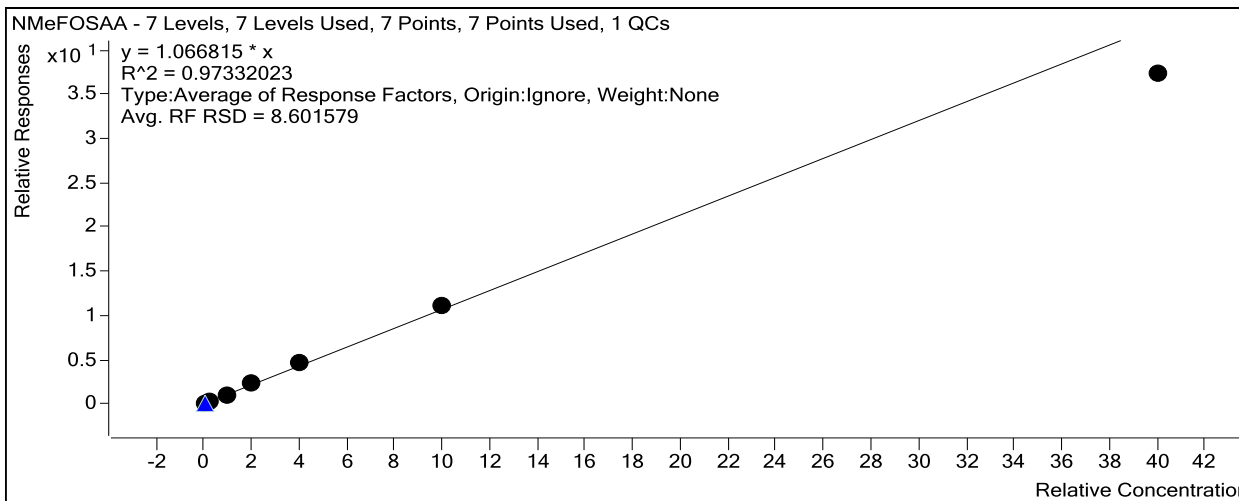


Target Compound

PFNS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3100	0.4810	1.0307
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	7475	1.2025	0.9766
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	31953	4.8100	1.0292
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	65231	9.6200	1.1046
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	132722	19.2400	1.1093

Quantitative Analysis Calibration Report



Extracted ISTD

M8FOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	68968	5.0000	13793.6639
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	70184	5.0000	14036.8706
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	71361	5.0000	14272.2200
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	67753	5.0000	13550.6883
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	70264	5.0000	14052.7657
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	70636	5.0000	14127.1881
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	66135	5.0000	13227.0100

Target Compound

PFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	7219	0.5000	1.0467
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	17713	1.2500	1.0095
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	76689	5.0000	1.0747
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	156263	10.0000	1.1532
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	325091	20.0000	1.1567
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	791565	50.0000	1.1206
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	2876408	200.0000	1.0873

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	34906	5.0000	6981.2452
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	29052	5.0000	5810.3979

Extracted ISTD

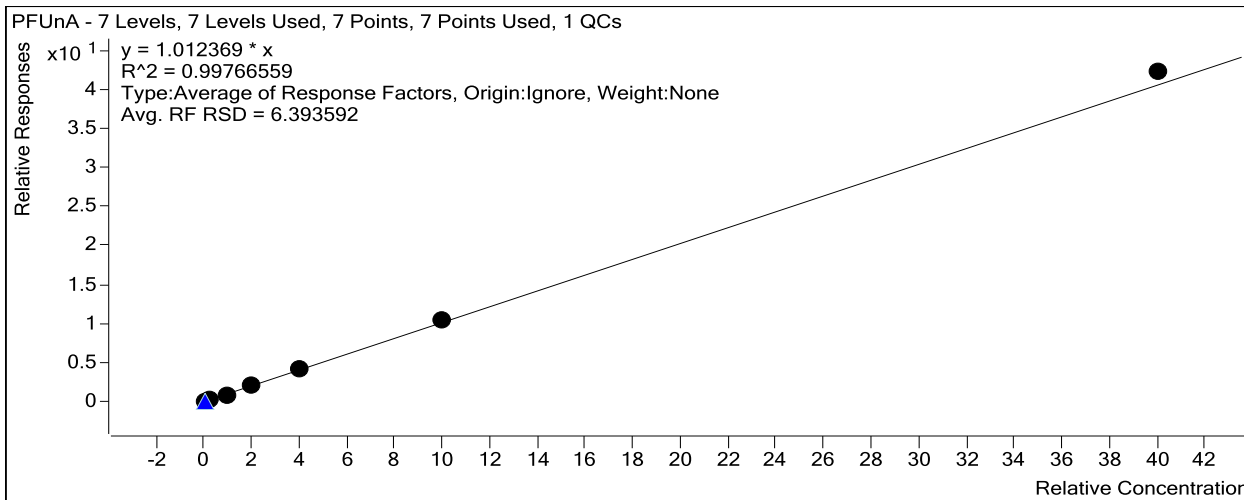
M7PFUnA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	217908	5.0000	43581.5544
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	224184	5.0000	44836.8285
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	228060	5.0000	45611.9457
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	215458	5.0000	43091.5630
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	219045	5.0000	43808.9167
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	217989	5.0000	43597.8899
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	183758	5.0000	36751.6456

Target Compound

PFUnA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	20663	0.5000	0.9483
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	52768	1.2500	0.9415
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	215178	5.0000	0.9435
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	462522	10.0000	1.0733
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	947069	20.0000	1.0809
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2273326	50.0000	1.0429
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	7763299	200.0000	1.0562

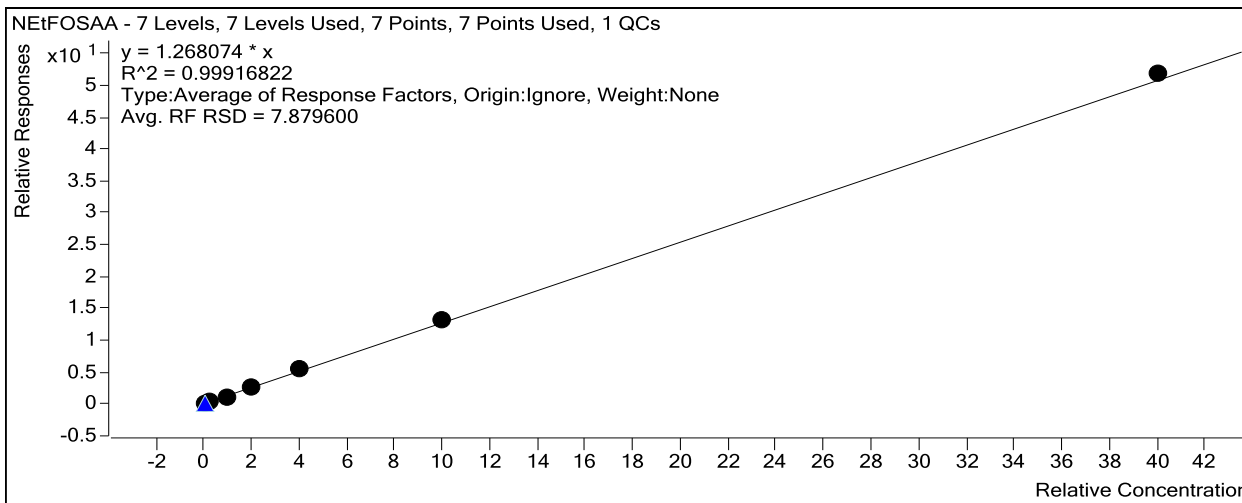


Target Compound

NETFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	4407	0.5000	1.2110
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	10773	1.2500	1.1327
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	45387	5.0000	1.1639
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	95968	10.0000	1.3843
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	196672	20.0000	1.3723
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	459343	50.0000	1.3159
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1506455	200.0000	1.2963

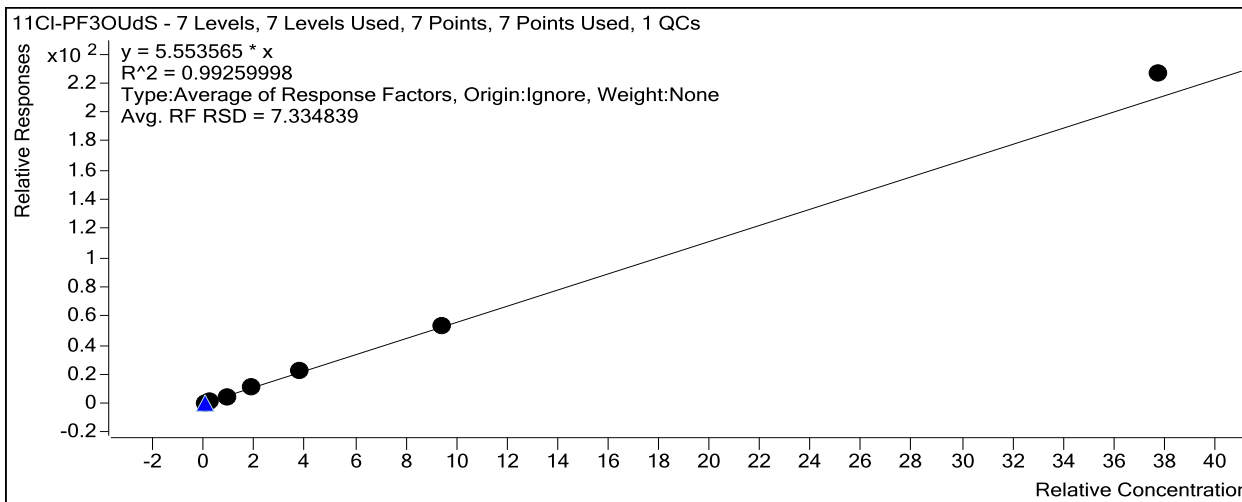
Quantitative Analysis Calibration Report



Target Compound

11CI-PF3OUdS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	15174	0.4715	5.1463
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	37527	1.1788	5.0012
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	160176	4.7150	5.2633
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	335478	9.4300	5.7956
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	696240	18.8600	5.9367
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1669967	47.1500	5.7247
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5867683	188.6000	6.0071



Extracted ISTD

MPFDoA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	256993	5.0000	51398.5359
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	261920	5.0000	52383.9758
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	263677	5.0000	52735.3005
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	251322	5.0000	50264.3603
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	257099	5.0000	51419.7898

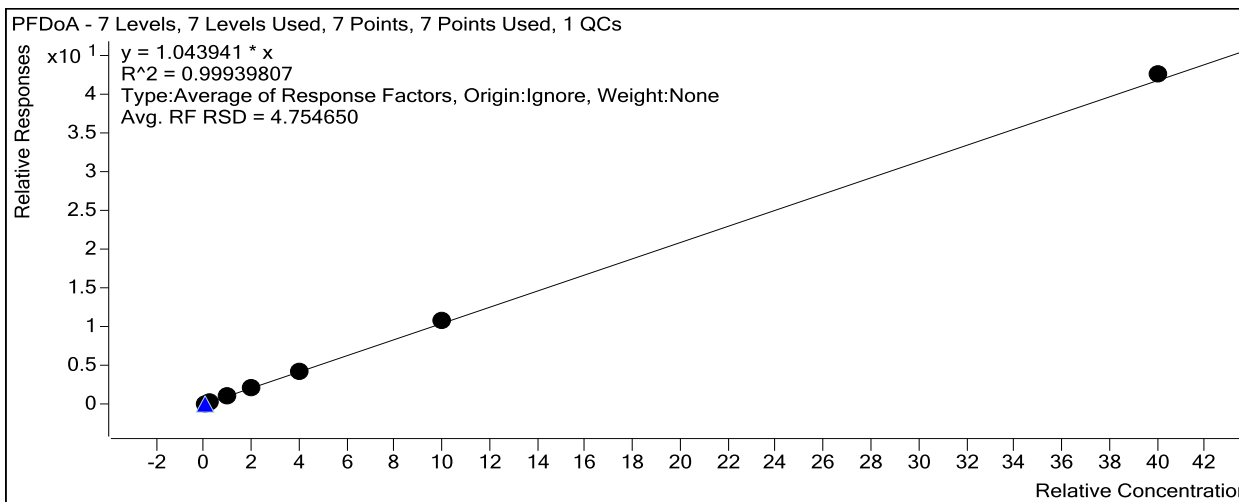
Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	262183	5.0000	52436.6053
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	234205	5.0000	46840.9257

Target Compound

PFD_oA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	25567	0.5000	0.9948
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	64504	1.2500	0.9851
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	263061	5.0000	0.9977
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	551399	10.0000	1.0970
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1127405	20.0000	1.0963
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2809427	50.0000	1.0716
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	9978657	200.0000	1.0652



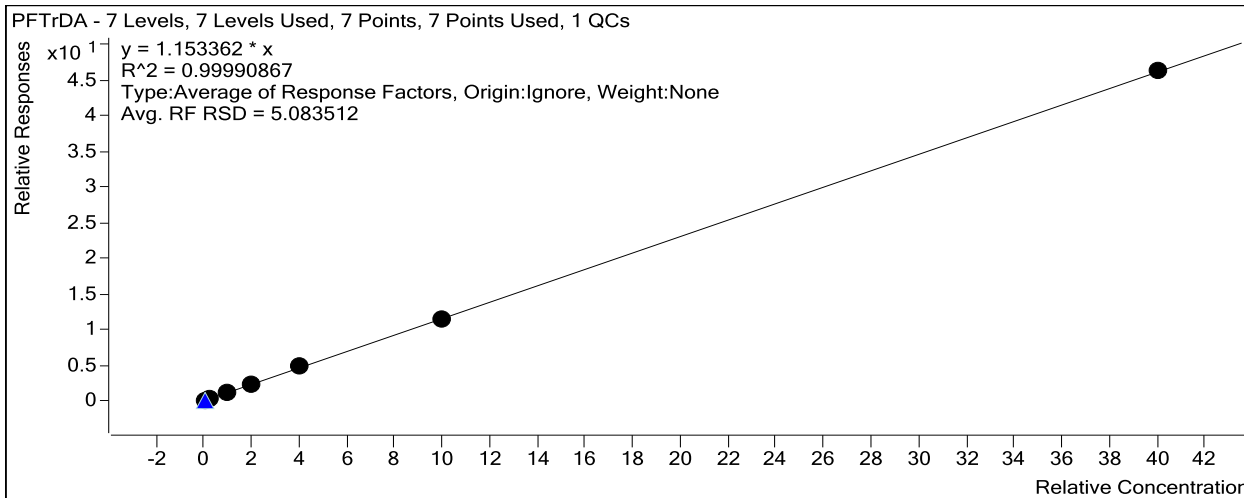
Target Compound

10:2F_{TS}

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2417	0.4820	3.2346
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	6374	1.2050	3.4873
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	25851	4.8200	3.5595
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	55275	9.6400	4.0789
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	108781	19.2800	4.0446
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	245980	48.2000	3.7173
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	763493	192.8000	3.3725

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	3051346	50.0000	1.1638
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	10853168	200.0000	1.1585



Extracted ISTD

d-NMeFOSA

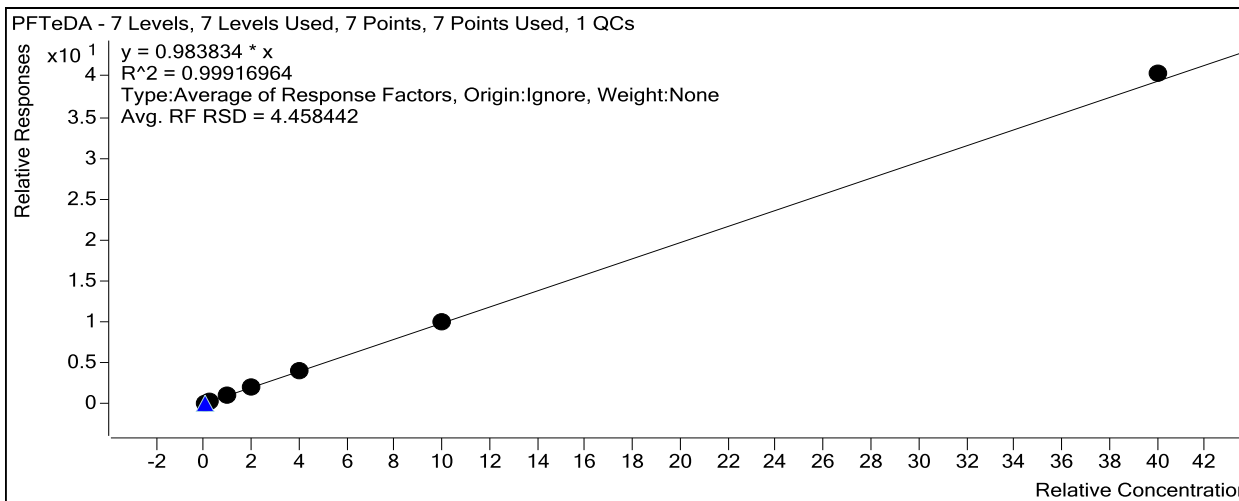
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	16869	5.0000	3373.7638
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	16463	5.0000	3292.6839
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	17243	5.0000	3448.6356
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	16689	5.0000	3337.8883
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	17192	5.0000	3438.3630
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	17299	5.0000	3459.8927
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	18496	5.0000	3699.1412

Target Compound

NMeFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1949	0.5000	1.1555
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4817	1.2500	1.1703
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	19061	5.0000	1.1054
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	39363	10.0000	1.1793
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	82605	20.0000	1.2012
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	201247	50.0000	1.1633
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	756759	200.0000	1.0229

Quantitative Analysis Calibration Report



Extracted ISTD

d9-NEtFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	16910	5.0000	3381.9360
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	17031	5.0000	3406.2199
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	17098	5.0000	3419.5692
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	16557	5.0000	3311.4341
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	16500	5.0000	3299.9232
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	16632	5.0000	3326.3168
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	15148	5.0000	3029.5586

Extracted ISTD

d-NEtFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	17713	5.0000	3542.6043
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	17778	5.0000	3555.6324
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	19098	5.0000	3819.5703
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	17409	5.0000	3481.7105
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	17991	5.0000	3598.1808
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	18425	5.0000	3685.0992
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	17115	5.0000	3423.0415

Target Compound

NEtFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1881	0.5000	1.1125
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4634	1.2500	1.0883
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	19102	5.0000	1.1172
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	39862	10.0000	1.2038
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	82680	20.0000	1.2528
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	200353	50.0000	1.2047
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	742750	200.0000	1.2258

Quantitative Analysis Calibration Report

Batch Data Path
Analysis Time
Report Time
Last Calib Update

C:\MassHunter\Data\QQQ4\2220419CCAL\QuantResults\2220421A.batch.bin
 4/22/2022 10:29 AM **Analyst Name** GCAL\lcms
 4/25/2022 12:25 PM **Reporter Name** GCAL\lcms
 4/20/2022 7:10 AM **Batch State** Processed

Calibration Info
Extracted ISTD

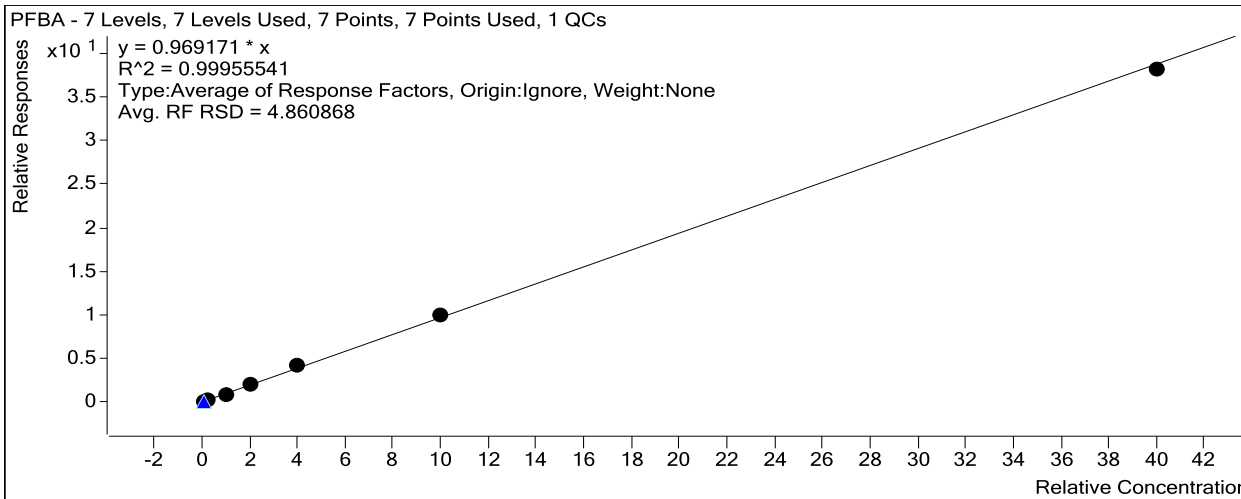
MPFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	92611	5.0000	18522.1608
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	95457	5.0000	19091.4296
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	94859	5.0000	18971.8508
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	92036	5.0000	18407.1601
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	96361	5.0000	19272.1797
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	98021	5.0000	19604.1980
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	89697	5.0000	17939.4917

Target Compound

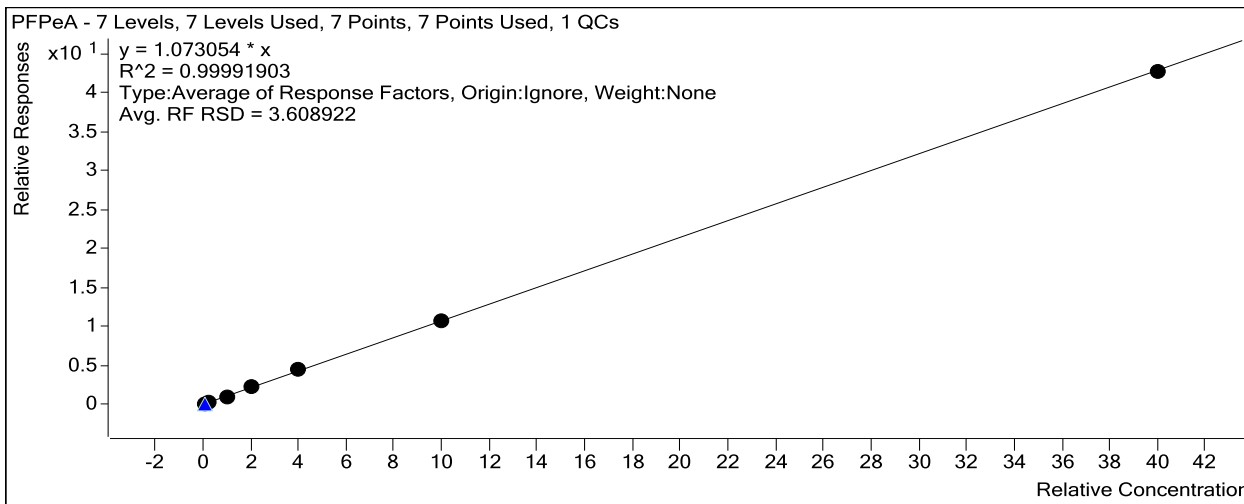
PFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	8666	0.5000	0.9358
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	21816	1.2500	0.9142
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	88569	5.0000	0.9337
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	186493	10.0000	1.0132
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	401498	20.0000	1.0417
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	971986	50.0000	0.9916
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	3423334	200.0000	0.9541



Quantitative Analysis Calibration Report

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	12104	0.5000	1.0424
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	31466	1.2500	1.0428
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	123921	5.0000	1.0307
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	260236	10.0000	1.1076
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	556584	20.0000	1.1366
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	1338673	50.0000	1.0829
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	4634631	200.0000	1.0684



Extracted ISTD

M3PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	39455	5.0000	7891.0657
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	40722	5.0000	8144.3733
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	39935	5.0000	7987.0348
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	39098	5.0000	7819.6104
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	40378	5.0000	8075.6670
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	40069	5.0000	8013.8729
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	34046	5.0000	6809.2610

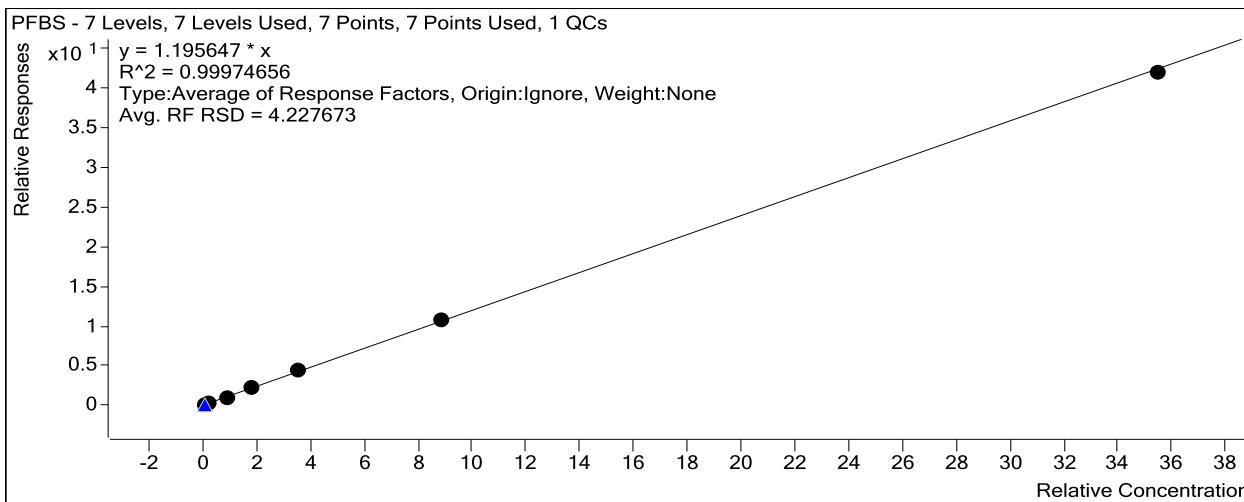
Target Compound

PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	4074	0.4435	1.1641

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	10195	1.1088	1.1290
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	41142	4.4350	1.1615
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	85647	8.8700	1.2348
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	182685	17.7400	1.2752
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	434365	44.3500	1.2221
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1428780	177.4000	1.1828



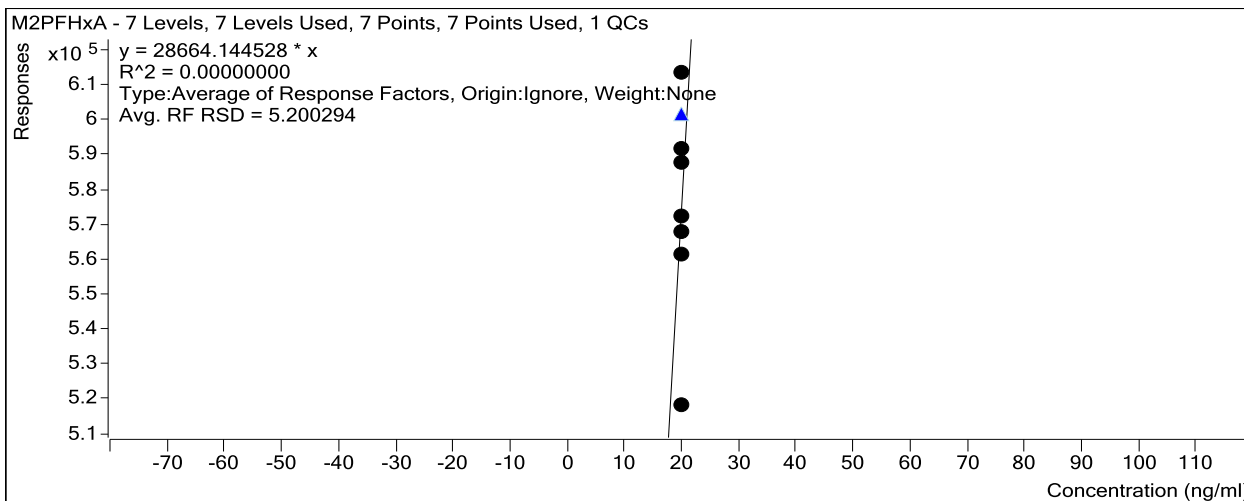
Target Compound

PFMBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	7536	0.5000	0.5305
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	19293	1.2500	0.5231
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	77304	5.0000	0.5220
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	163127	10.0000	0.5791
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	347599	20.0000	0.5843
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	836929	50.0000	0.5617
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	3062476	200.0000	0.5829

Quantitative Analysis Calibration Report

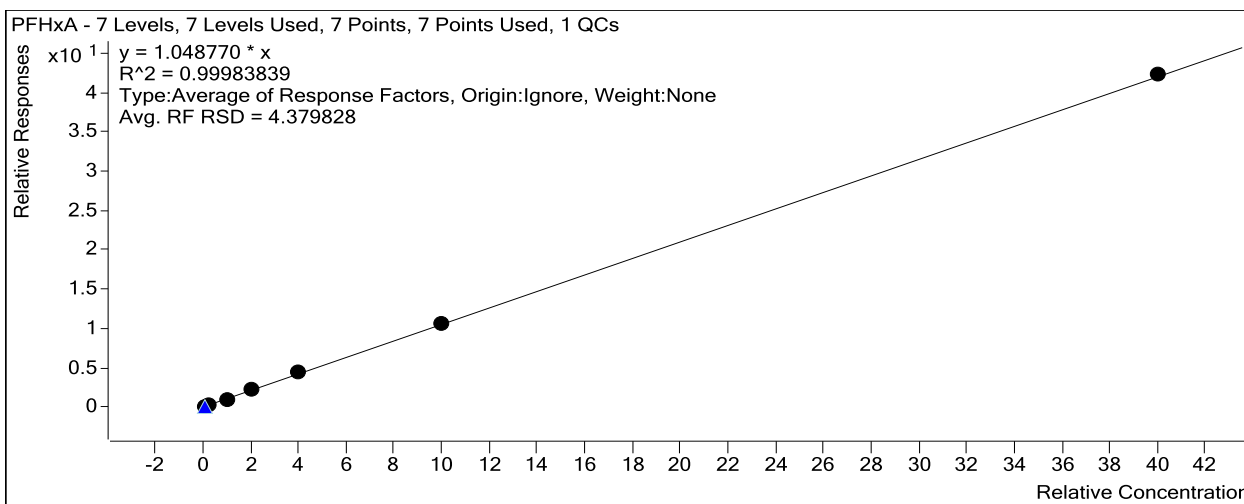
D:\MassHunter\Data\2220419CCAL\2220419C_7.d Calibration 7 518327 20.0000 25916.3623



Target Compound

PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	14548	0.5000	1.0242
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	36754	1.2500	0.9965
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	147165	5.0000	0.9938
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	306077	10.0000	1.0865
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	663499	20.0000	1.1154
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	1591377	50.0000	1.0680
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	5553003	200.0000	1.0570

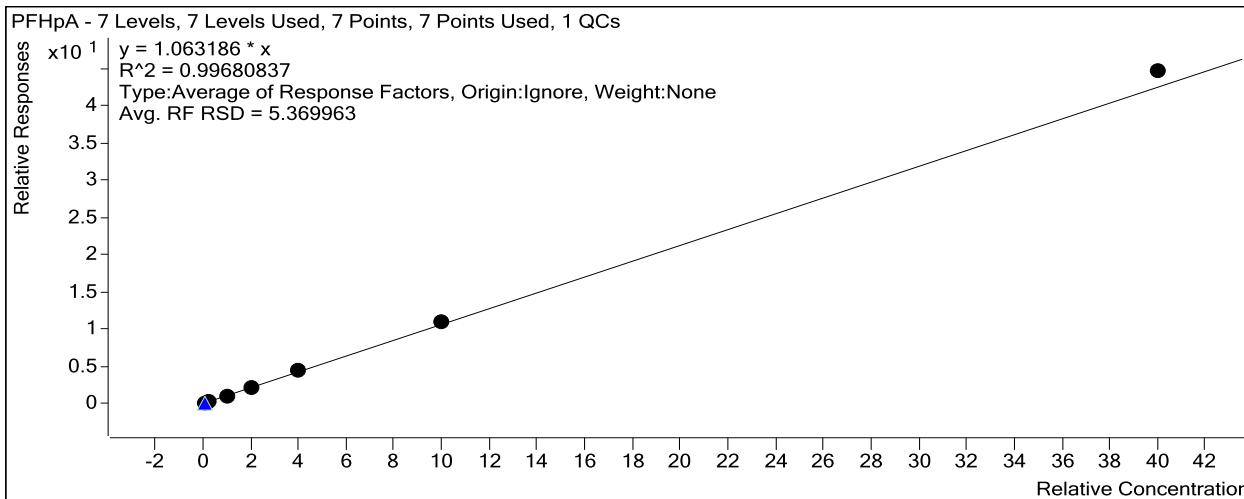


Target Compound

PFPeS

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1055787	20.0000	1.1218
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2591386	50.0000	1.0915
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	9349567	200.0000	1.1183



Extracted ISTD

M3PFHxS

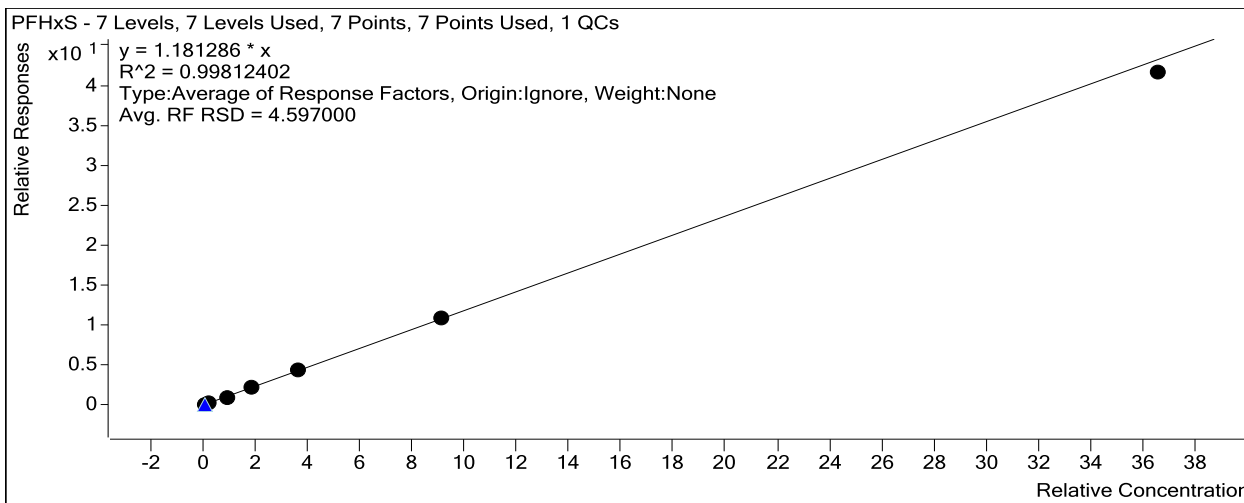
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	32336	5.0000	6467.1344
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	32927	5.0000	6585.3063
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	32879	5.0000	6575.7524
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	31498	5.0000	6299.6760
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	33158	5.0000	6631.6631
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	32606	5.0000	6521.1910
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	28254	5.0000	5650.8259

Target Compound

PFHxS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	3717	0.4570	1.2575
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	8672	1.1425	1.1526
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	33122	4.5700	1.1022
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	69483	9.1400	1.2067
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	149004	18.2800	1.2291
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	352477	45.7000	1.1827
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1175590	182.8000	1.1381

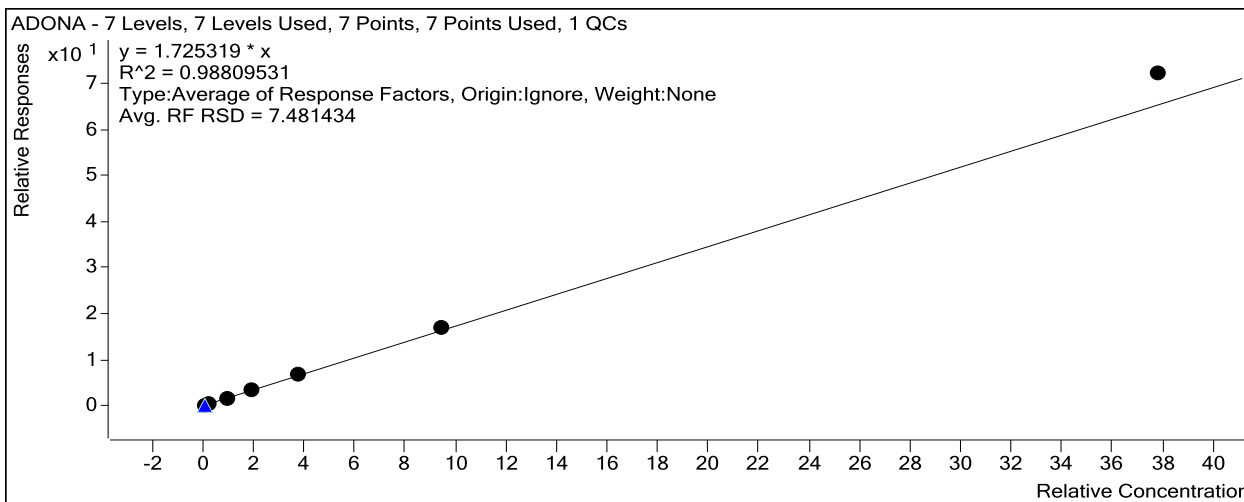
Quantitative Analysis Calibration Report



Target Compound

ADONA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	27814	0.4725	1.6309
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	69953	1.1813	1.5595
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	282249	4.7250	1.6008
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	600439	9.4500	1.7719
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1286473	18.9000	1.8144
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	3162746	47.2500	1.7907
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	11547943	189.0000	1.9089



Extracted ISTD

M2 6:2 FTS

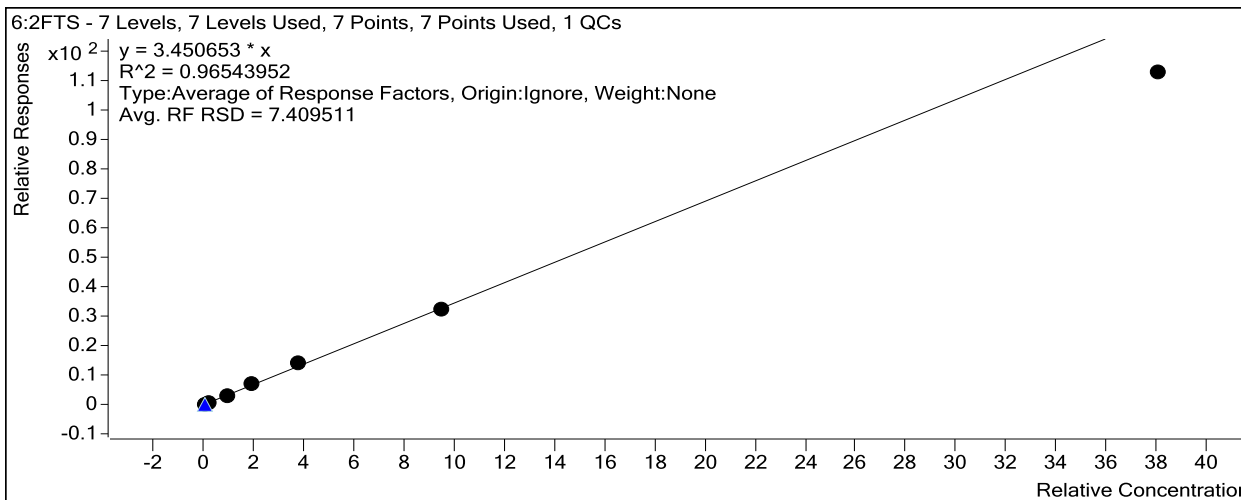
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	9399	5.0000	1879.7798
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	9350	5.0000	1869.9532
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	9136	5.0000	1827.2275
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	8810	5.0000	1761.9490
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	10163	5.0000	2032.5324
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	9330	5.0000	1866.0877
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	7648	5.0000	1529.5508

Target Compound *6:2FTS*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	3041	0.4755	3.4022
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	7639	1.1888	3.4363
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	30131	4.7550	3.4679
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	62042	9.5100	3.7026
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	145037	19.0200	3.7517
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	304146	47.5500	3.4277
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	862927	190.2000	2.9662

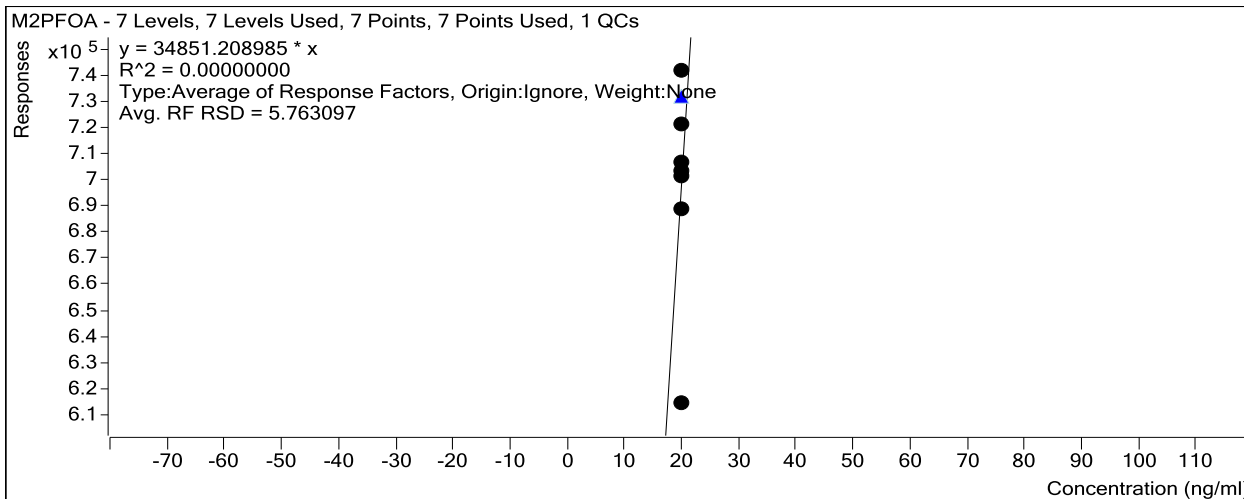


Extracted ISTD *M8PFOA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	180467	5.0000	36093.3479
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	189858	5.0000	37971.5443
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	186574	5.0000	37314.8346

Quantitative Analysis Calibration Report

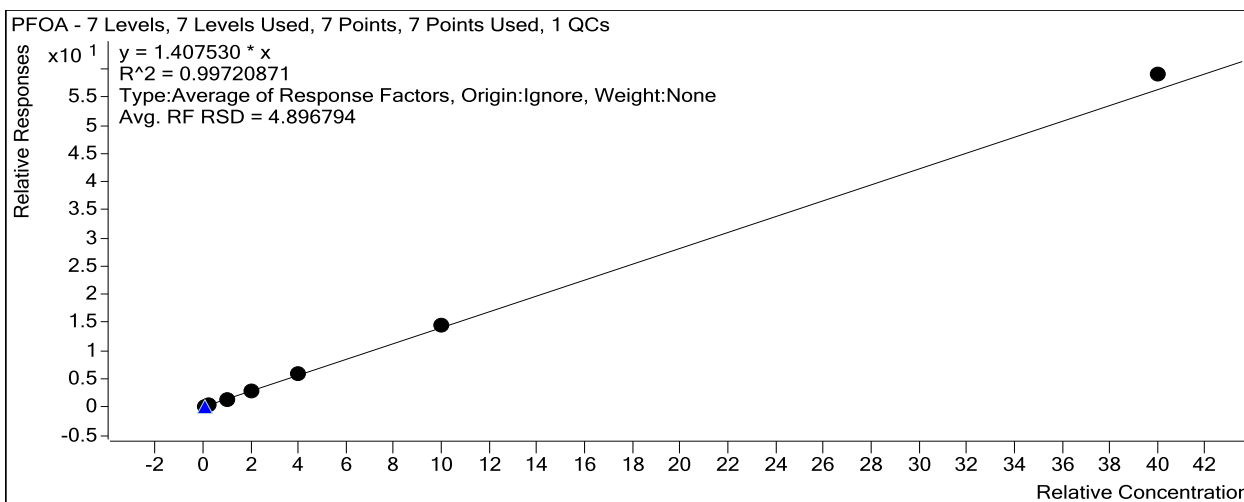
D:\MassHunter\Data\2220419CCAL\2220419C_7.d Calibration 7 614483 20.0000 30724.1385



Target Compound

PFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	24722	0.5000	1.3699
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	62111	1.2500	1.3086
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	248764	5.0000	1.3333
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	521370	10.0000	1.4540
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1102301	20.0000	1.4692
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2695346	50.0000	1.4422
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	9446597	200.0000	1.4756

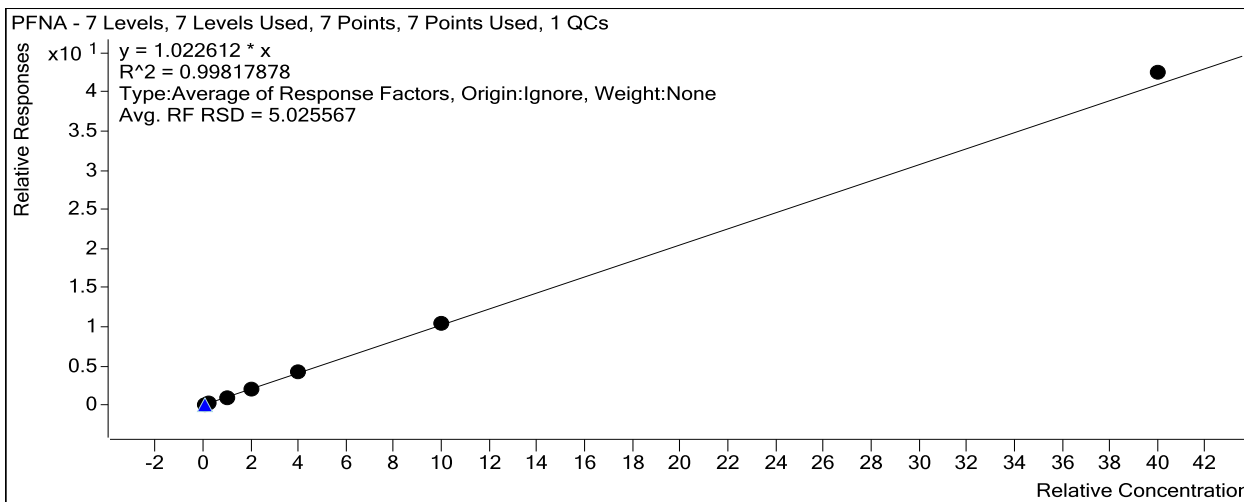


Target Compound

PFHpS

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	57510	1.2500	0.9665
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	231673	5.0000	0.9745
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	469835	10.0000	1.0454
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1022791	20.0000	1.0902
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2449602	50.0000	1.0518
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	8466113	200.0000	1.0614



Extracted *ISTD*

M8PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	29867	5.0000	5973.4299
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	31677	5.0000	6335.4171
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	30768	5.0000	6153.6074
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	28922	5.0000	5784.4729
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	30548	5.0000	6109.6443
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	29172	5.0000	5834.4134
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	26263	5.0000	5252.5288

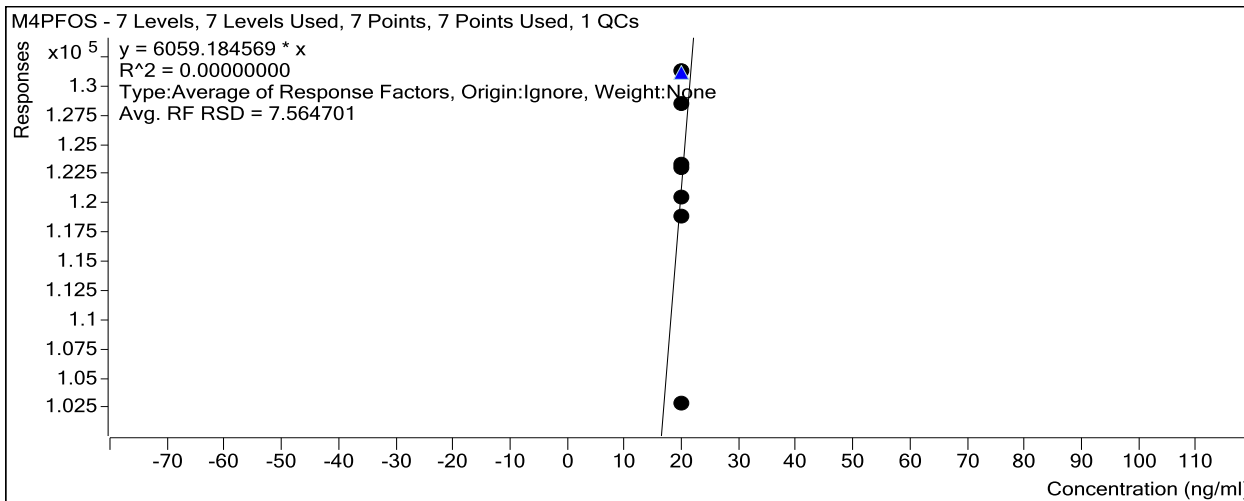
Instrument *ISTD*

M4PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	123261	20.0000	6163.0425
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	128546	20.0000	6427.3158
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	122960	20.0000	6147.9971
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	118889	20.0000	5944.4463

Quantitative Analysis Calibration Report

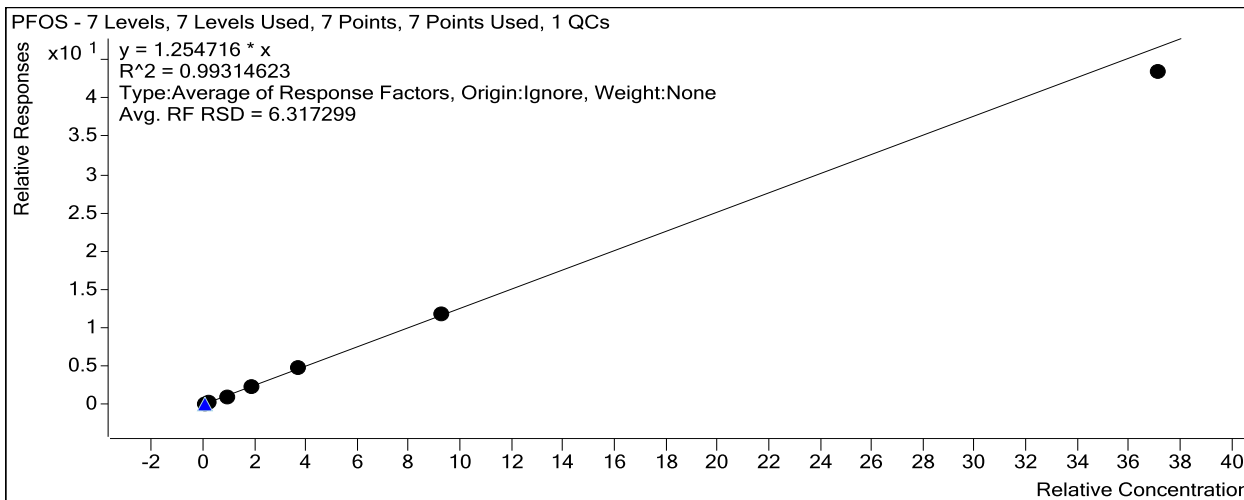
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	131286	20.0000	6564.3061
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	120454	20.0000	6022.7248
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	102889	20.0000	5144.4593



Target Compound

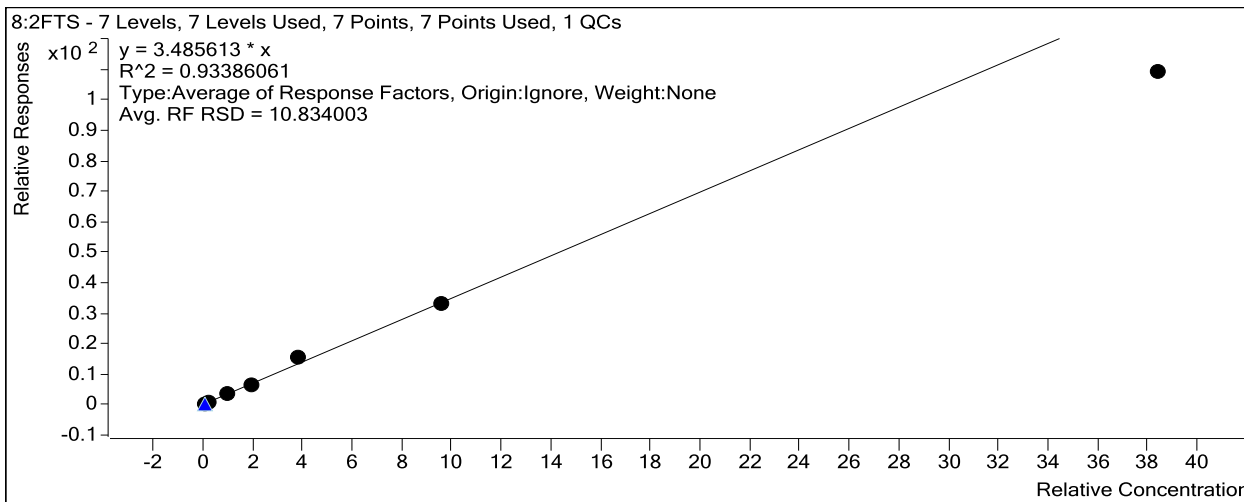
PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	3863	0.4640	1.3939
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	8914	1.1600	1.2130
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	33432	4.6400	1.1709
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	68185	9.2800	1.2702
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	147175	18.5600	1.2979
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	343193	46.4000	1.2677
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1140008	185.6000	1.1694



Quantitative Analysis Calibration Report

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	2682	0.4800	3.7053
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	5929	1.2000	3.2637
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	24849	4.8000	3.5748
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	48834	9.6000	3.4705
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	100810	19.2000	4.0675
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	227349	48.0000	3.4730
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	614804	192.0000	2.8444

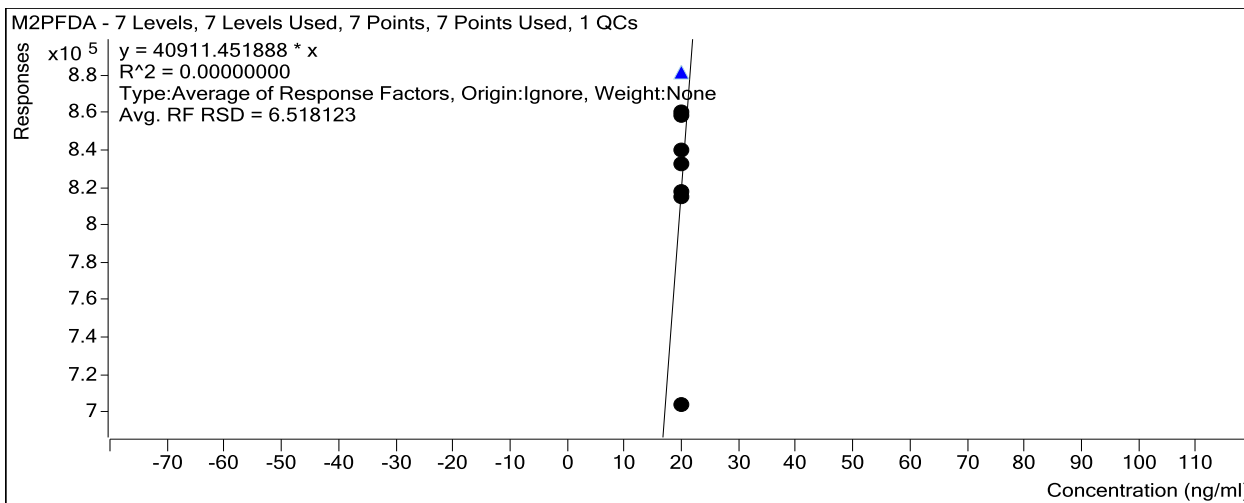


Target Compound

PFNS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	3183	0.4810	1.1077
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	7594	1.2025	0.9968
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	30261	4.8100	1.0224
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	64546	9.6200	1.1599
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	131606	19.2400	1.1196
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	311190	48.1000	1.1089
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	946543	192.4000	0.9366

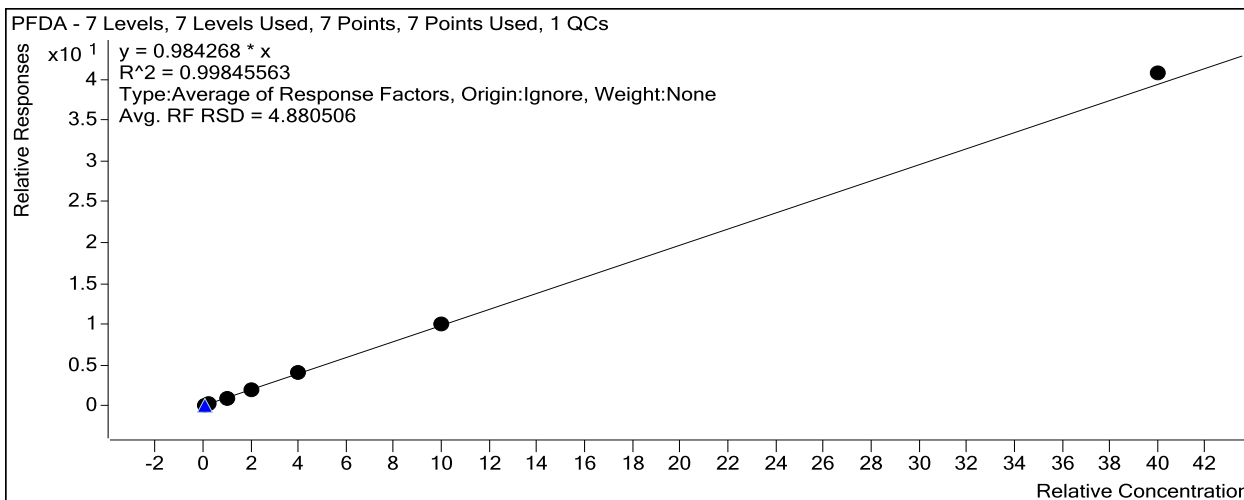
Quantitative Analysis Calibration Report



Target Compound

PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	21374	0.5000	0.9493
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	52948	1.2500	0.9178
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	214004	5.0000	0.9393
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	453731	10.0000	1.0302
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	943441	20.0000	1.0357
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2249006	50.0000	0.9987
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	7676993	200.0000	1.0190



Extracted ISTD

d3-NMeFOSAA

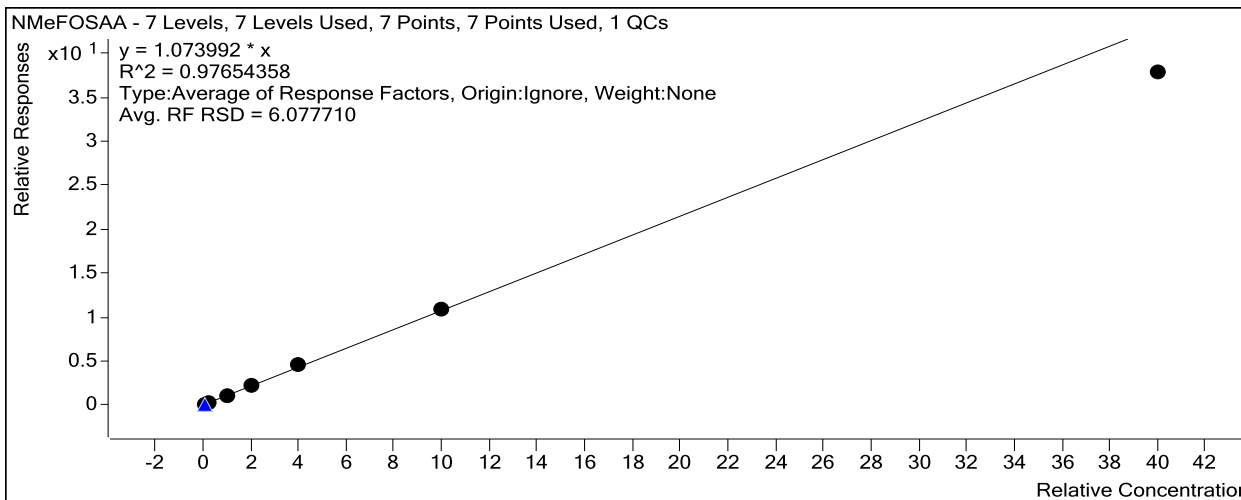
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

File Path	Calibration	Level	Enabled	Response	Exp Conc	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	21525	5.0000	4304.9577
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	22268	5.0000	4453.5590
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	21512	5.0000	4302.4052
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	21431	5.0000	4286.2426
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	22478	5.0000	4495.5840
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	23030	5.0000	4605.9403
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	23011	5.0000	4602.1751

Target Compound *NMeFOSAA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	2357	0.5000	1.0950
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	5814	1.2500	1.0443
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	22915	5.0000	1.0652
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	48796	10.0000	1.1384
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	101604	20.0000	1.1300
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	252970	50.0000	1.0985
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	871129	200.0000	0.9464

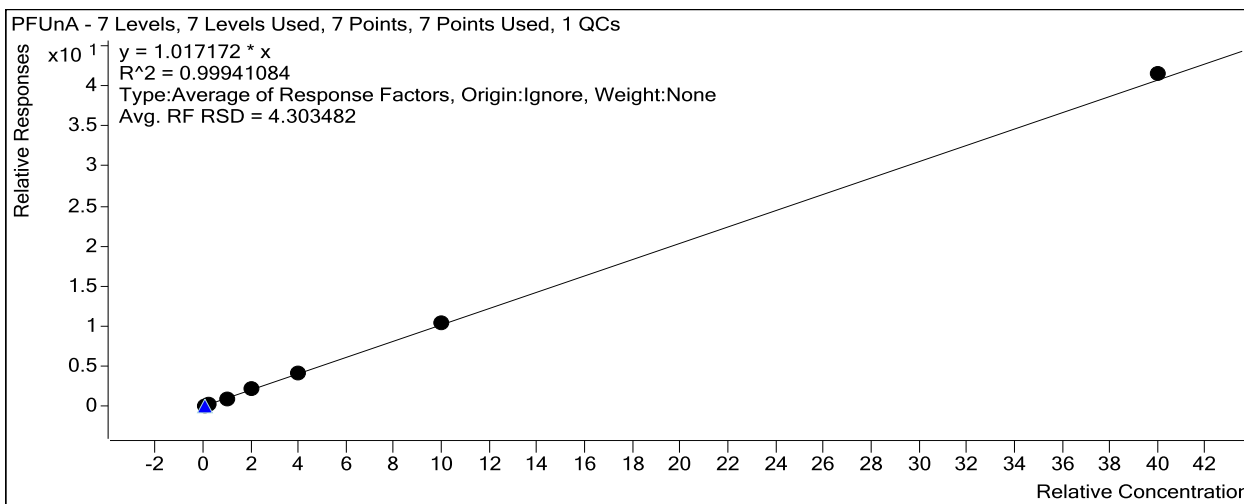


Extracted ISTD *M8FOSA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	69601	5.0000	13920.1599
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	71464	5.0000	14292.7376
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	70811	5.0000	14162.1947

Quantitative Analysis Calibration Report

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	21627	0.5000	0.9704
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	55351	1.2500	0.9693
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	216904	5.0000	0.9737
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	463222	10.0000	1.0596
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	935193	20.0000	1.0608
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2257267	50.0000	1.0490
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	7562966	200.0000	1.0374

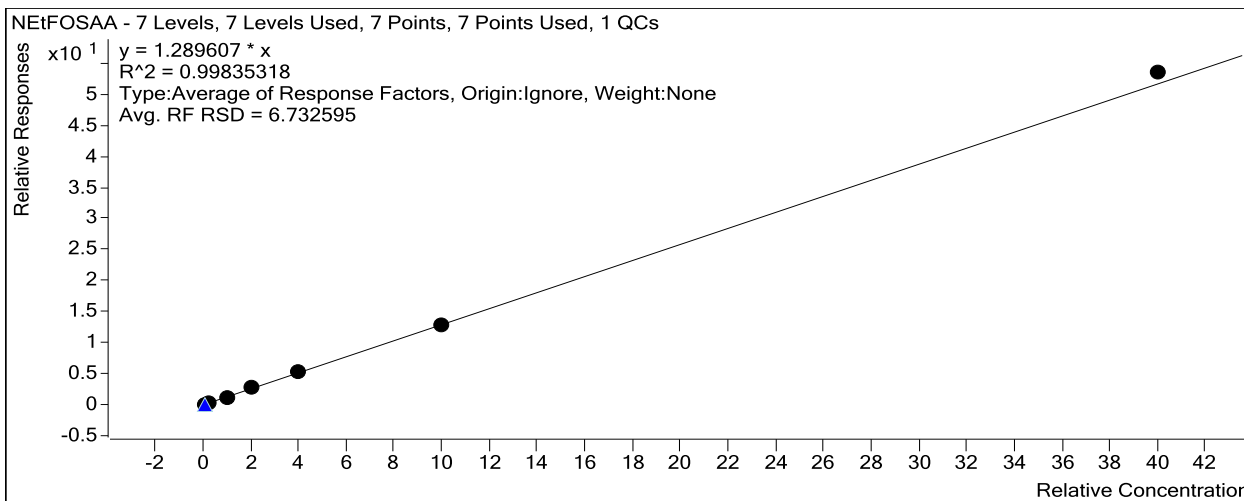


Target Compound

NETFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	5078	0.5000	1.2887
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	11438	1.2500	1.1493
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	46532	5.0000	1.2005
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	102942	10.0000	1.3904
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	202695	20.0000	1.3610
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	477961	50.0000	1.3008
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1515170	200.0000	1.3366

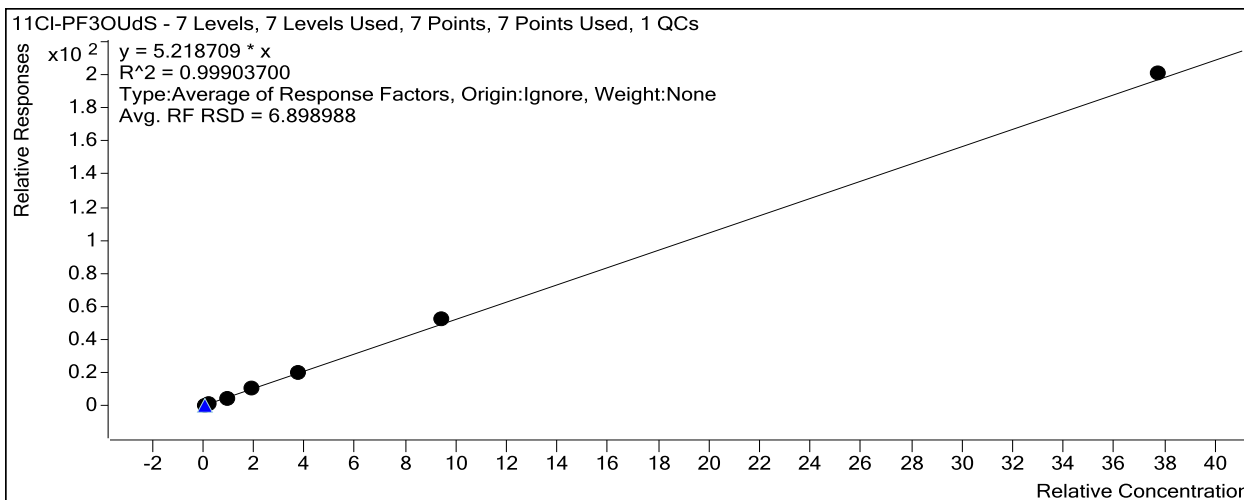
Quantitative Analysis Calibration Report



Target Compound

11CI-PF3OUdS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	14056	0.4715	4.9907
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	34531	1.1788	4.6238
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	144834	4.7150	4.9918
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	303415	9.4300	5.5624
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	626931	18.8600	5.4408
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	1538985	47.1500	5.5944
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	5277143	188.6000	5.3271



Extracted ISTD

MPFD0A

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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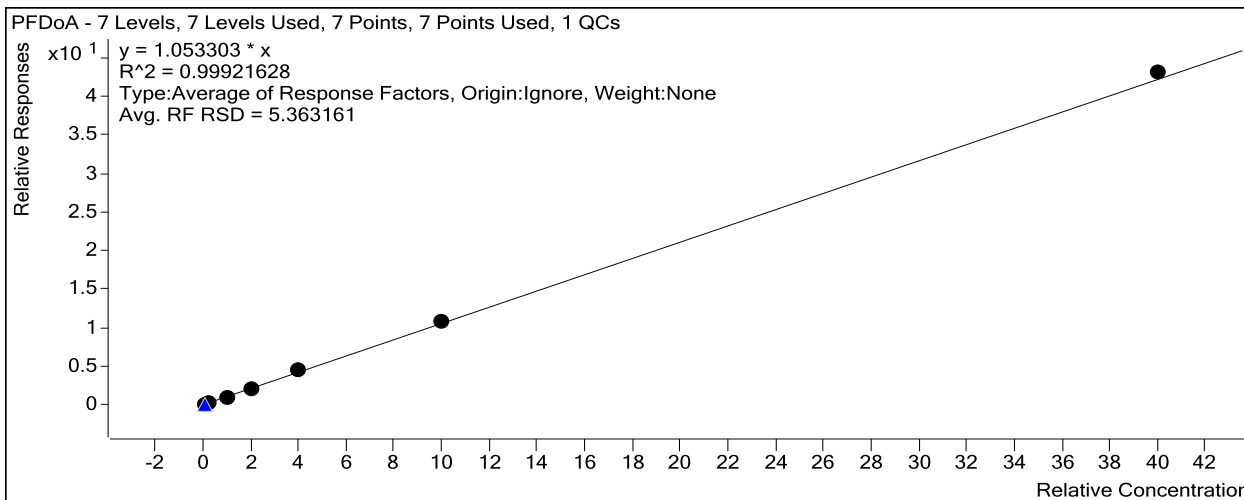
Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	249372	5.0000	49874.3402
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	256021	5.0000	51204.2502
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	251711	5.0000	50342.2372
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	246298	5.0000	49259.6706
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	250582	5.0000	50116.3079
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	253866	5.0000	50773.1348
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	227494	5.0000	45498.7039

Target Compound

PFD_oA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	24330	0.5000	0.9756
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	64017	1.2500	1.0002
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	254730	5.0000	1.0120
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	539301	10.0000	1.0948
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1126644	20.0000	1.1240
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2765043	50.0000	1.0892
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	9803035	200.0000	1.0773

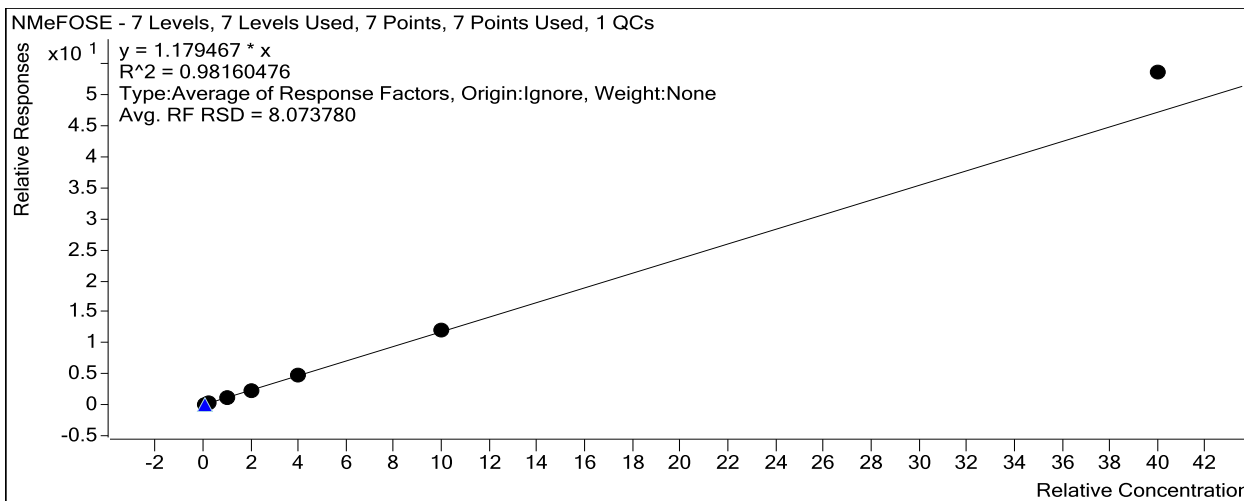


Target Compound

10:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	2570	0.4820	3.5361
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	6517	1.2050	3.5727
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	25512	4.8200	3.6551

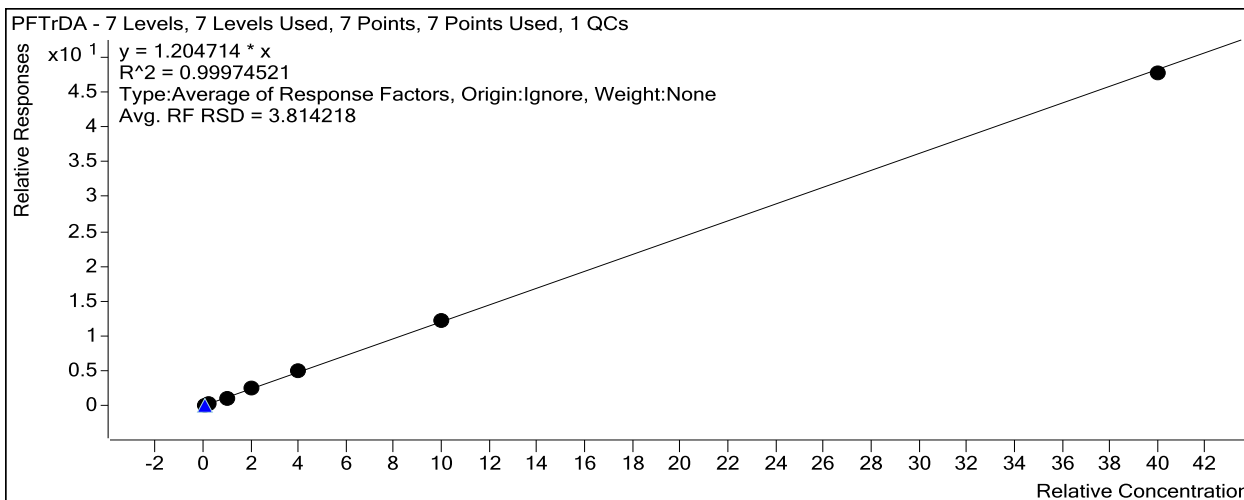
Quantitative Analysis Calibration Report



Target Compound

PFTrDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	29507	0.5000	1.1832
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	74511	1.2500	1.1641
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	288551	5.0000	1.1464
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	609904	10.0000	1.2381
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1278365	20.0000	1.2754
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	3133165	50.0000	1.2342
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	10842763	200.0000	1.1915



Extracted ISTD

d9-NEtFOSE

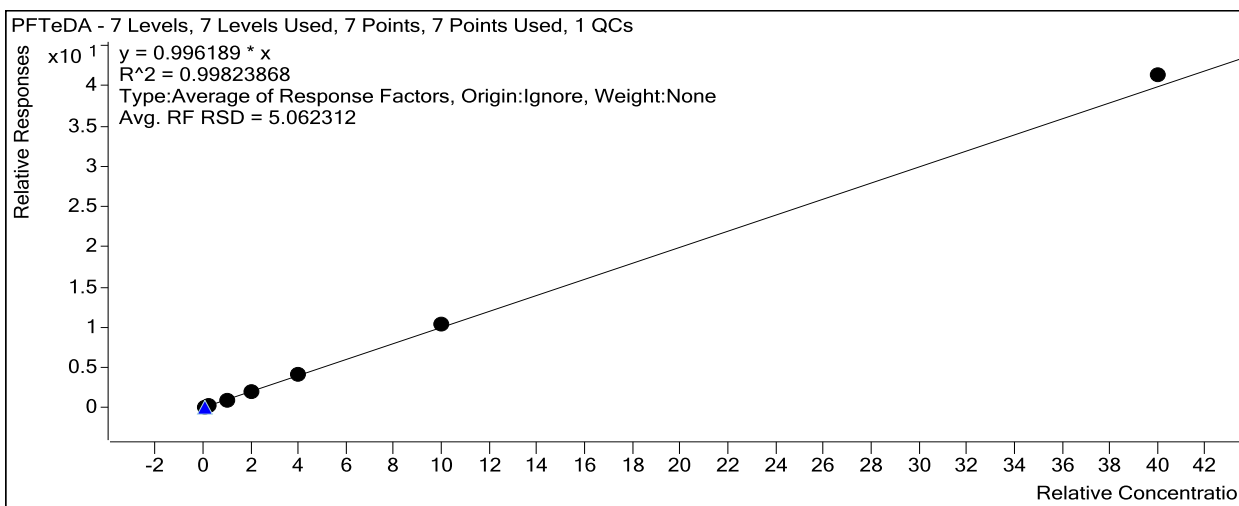
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_7.d Calibration 7 317141 5.0000 63428.1559

Target Compound *PFTeDA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	33469	0.5000	0.9626
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	81489	1.2500	0.9329
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	323712	5.0000	0.9345
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	680592	10.0000	1.0331
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1430425	20.0000	1.0412
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	3556936	50.0000	1.0361
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	13102668	200.0000	1.0329



Target Compound *PFHxDA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	44742	0.5000	12.0312
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	104596	1.2500	10.8632
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	419227	5.0000	10.8710
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	840385	10.0000	11.6059
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1872004	20.0000	12.1666
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	4738735	50.0000	11.9293
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	17907227	200.0000	12.2367

Quantitative Analysis Calibration Report

Batch Data Path
Analysis Time
Report Time
Last Calib Update

D:\MassHunter\Data\QQQ4\2220423ACAL\QuantResults\2220424B.batch.bin
 4/25/2022 1:44 PM **Analyst Name** GCAL\lcms
 4/25/2022 2:56 PM **Reporter Name** GCAL\lcms
 4/24/2022 6:52 AM **Batch State** Processed

Calibration Info
Extracted ISTD

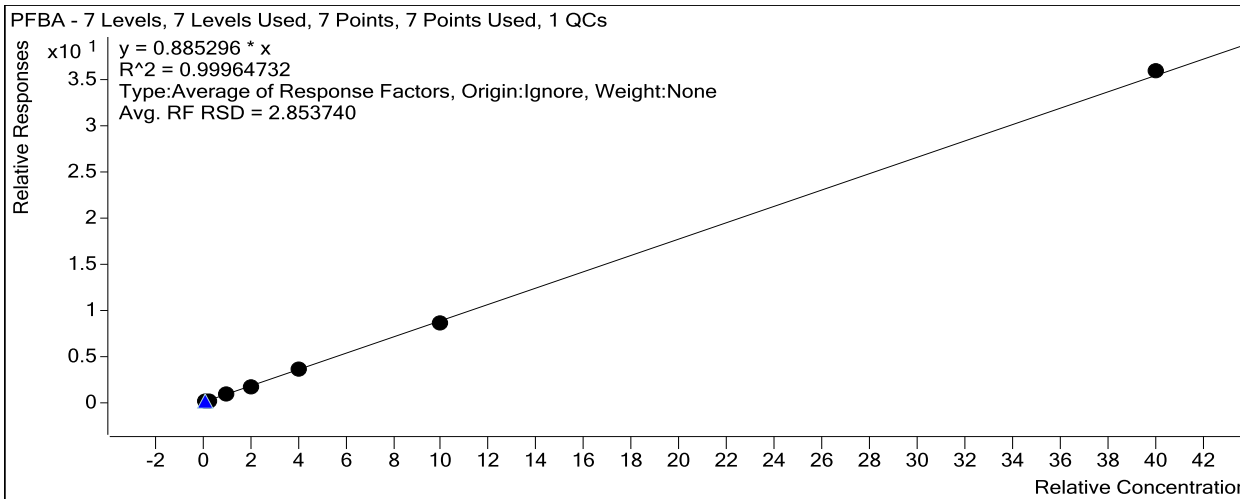
MPFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	113416	5.0000	22683.2835
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	106854	5.0000	21370.7567
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	101636	5.0000	20327.2826
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	111503	5.0000	22300.5726
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	103153	5.0000	20630.5321
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	106686	5.0000	21337.2299
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	100530	5.0000	20105.9261

Target Compound

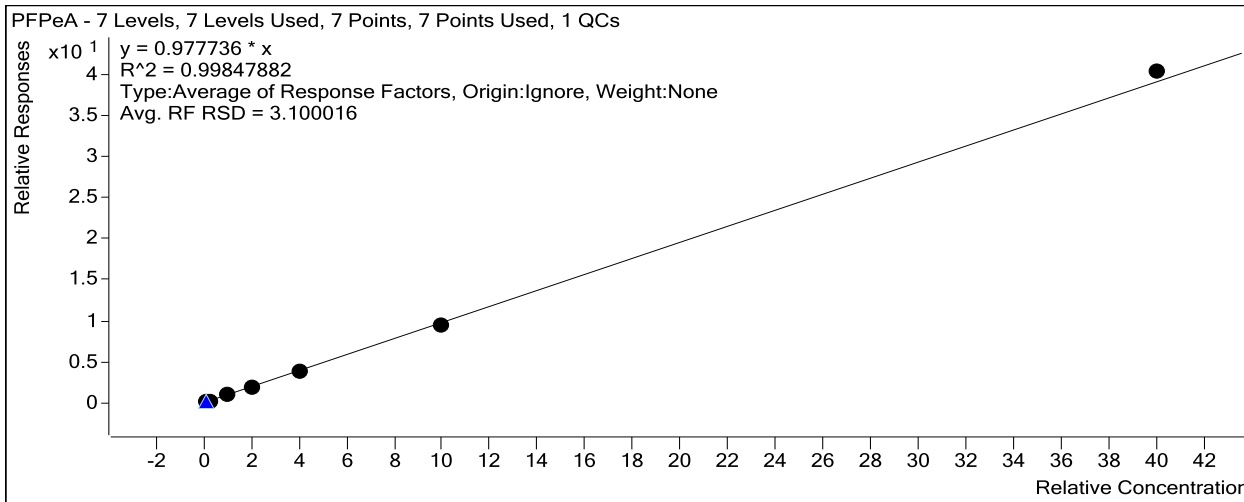
PFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	9606	0.5000	0.8470
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	23882	1.2500	0.8940
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	93837	5.0000	0.9233
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	194261	10.0000	0.8711
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	369480	20.0000	0.8955
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	924750	50.0000	0.8668
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	3616689	200.0000	0.8994



Quantitative Analysis Calibration Report

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	13515	0.5000	0.9402
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	33183	1.2500	0.9871
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	130444	5.0000	1.0148
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	269790	10.0000	0.9527
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	513054	20.0000	0.9872
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	1265763	50.0000	0.9503
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	4860211	200.0000	1.0119



Extracted ISTD

M3PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	44015	5.0000	8802.9624
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	40940	5.0000	8187.9056
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	39108	5.0000	7821.6887
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	43008	5.0000	8601.6975
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	39336	5.0000	7867.2330
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	39438	5.0000	7887.6923
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	35770	5.0000	7153.9670

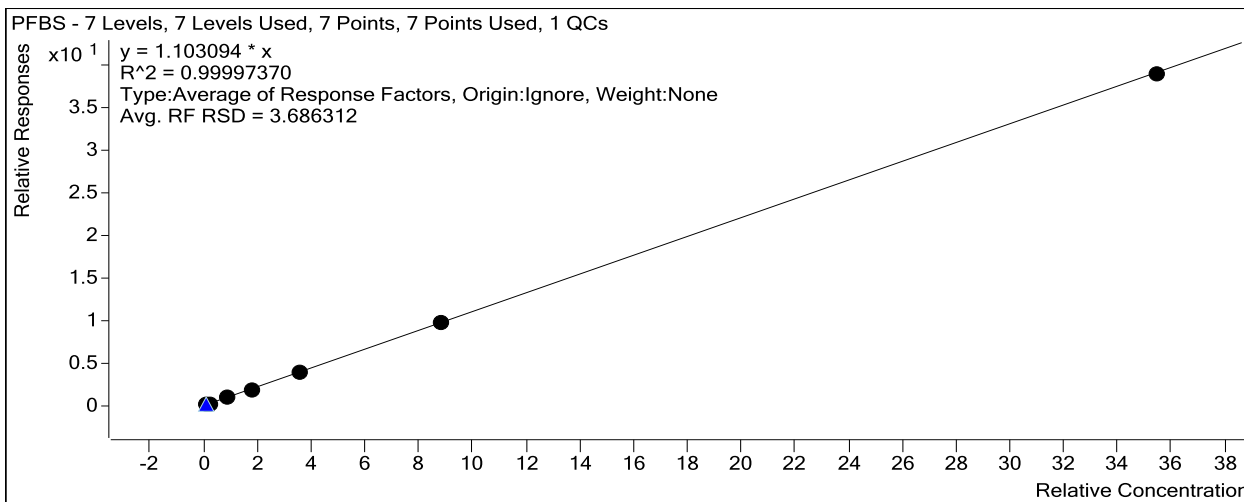
Target Compound

PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	4045	0.4435	1.0361

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	10399	1.1088	1.1455
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	40135	4.4350	1.1570
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	82475	8.8700	1.0810
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	155159	17.7400	1.1117
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	381541	44.3500	1.0907
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	1395678	177.4000	1.0997

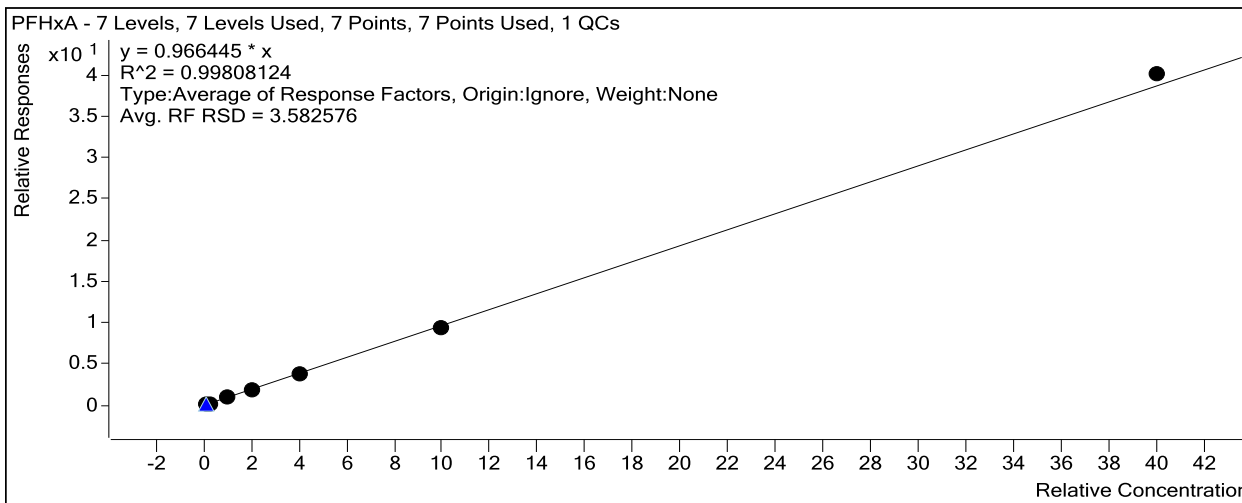


Target Compound

PFMBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	8299	0.5000	0.4772
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	20664	1.2500	0.5125
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	80351	5.0000	0.5175
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	167608	10.0000	0.4867
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	315464	20.0000	0.5030
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	781314	50.0000	0.4904
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	2873035	200.0000	0.4958

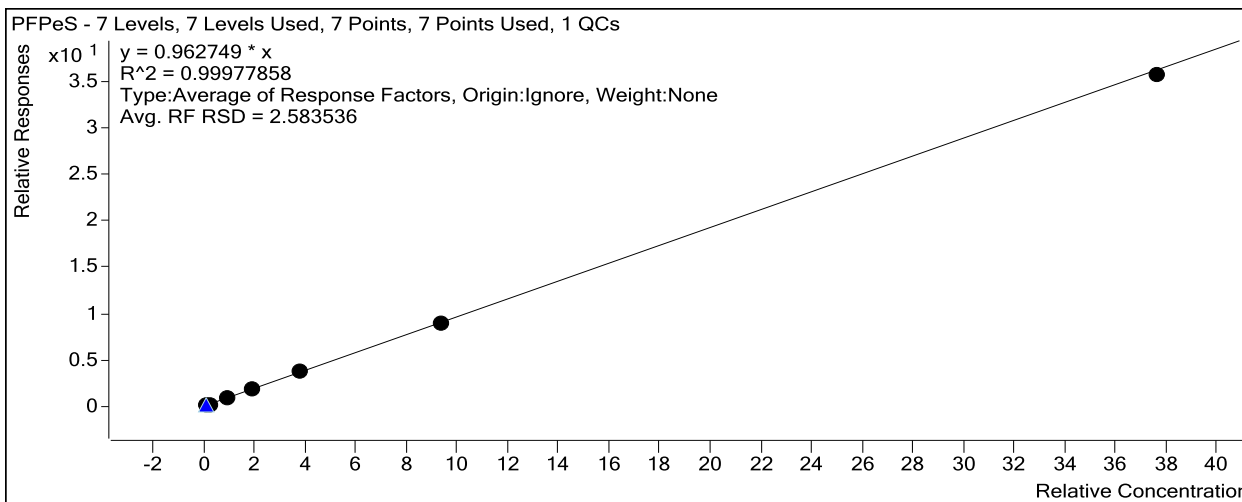
Quantitative Analysis Calibration Report



Target Compound

PFPeS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	3846	0.4705	0.9285
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	9489	1.1763	0.9852
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	36576	4.7050	0.9939
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	76732	9.4100	0.9480
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	145804	18.8200	0.9848
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	351753	47.0500	0.9478
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	1280496	188.2000	0.9511



Target Compound

HFPO-DA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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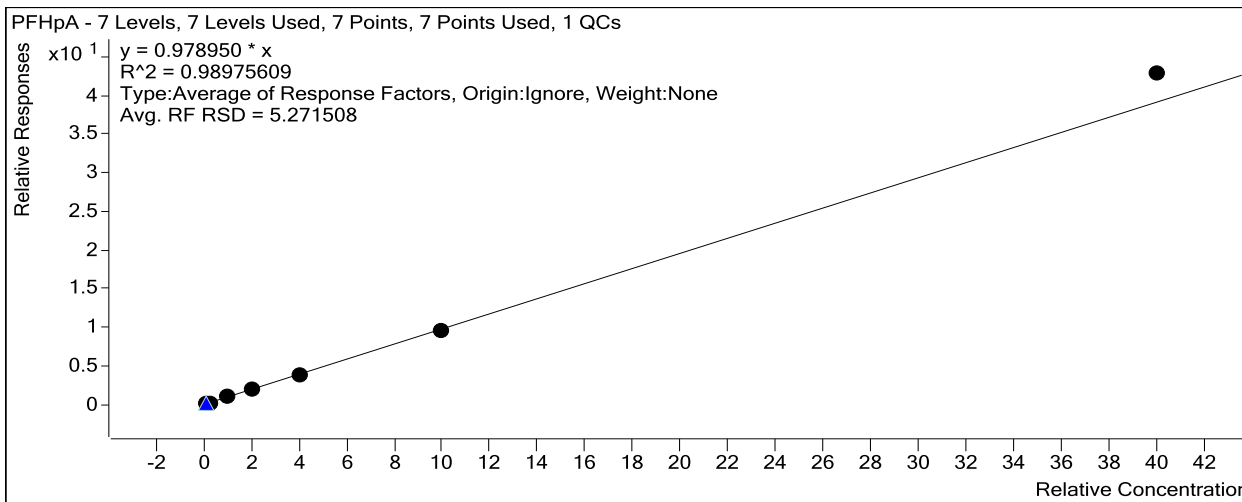
Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	271603	5.0000	54320.6063
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	250530	5.0000	50106.0537
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	256568	5.0000	51313.6795
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	228859	5.0000	45771.8276

Target Compound

PFHpA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	25139	0.5000	0.9146
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	63236	1.2500	0.9752
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	249765	5.0000	1.0098
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	517158	10.0000	0.9520
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	979409	20.0000	0.9773
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	2433887	50.0000	0.9486
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	9841100	200.0000	1.0750



Extracted ISTD

M3PFHxS

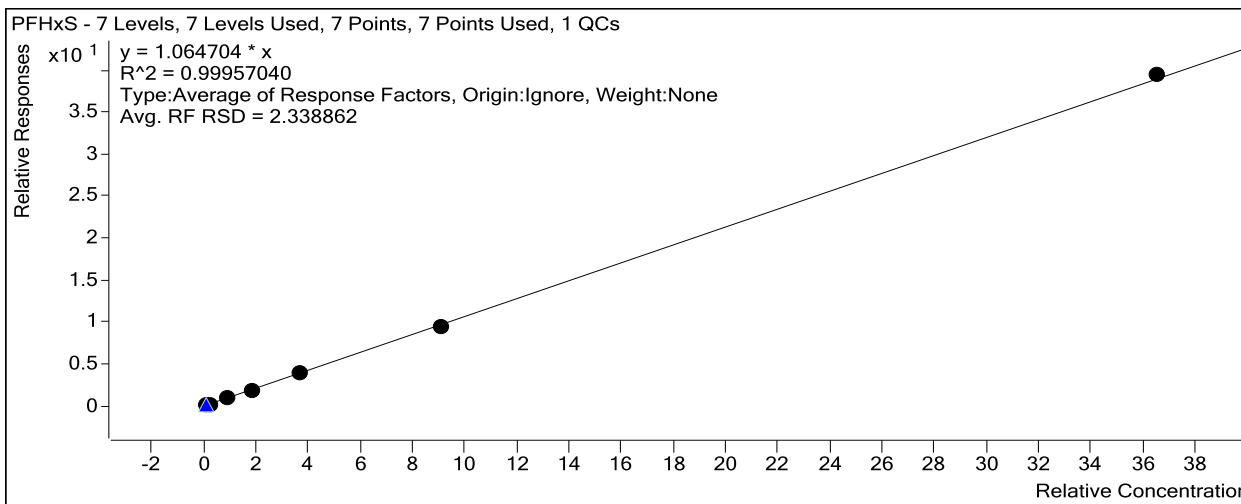
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	36831	5.0000	7366.2078
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	34307	5.0000	6861.3869
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	32618	5.0000	6523.5252
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	35801	5.0000	7160.1914
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	32450	5.0000	6489.9402
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	33474	5.0000	6694.8689

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220423ACAL\2220423A_07.d Calibration 7 29452 5.0000 5890.4826

Target Compound *PFHxS*

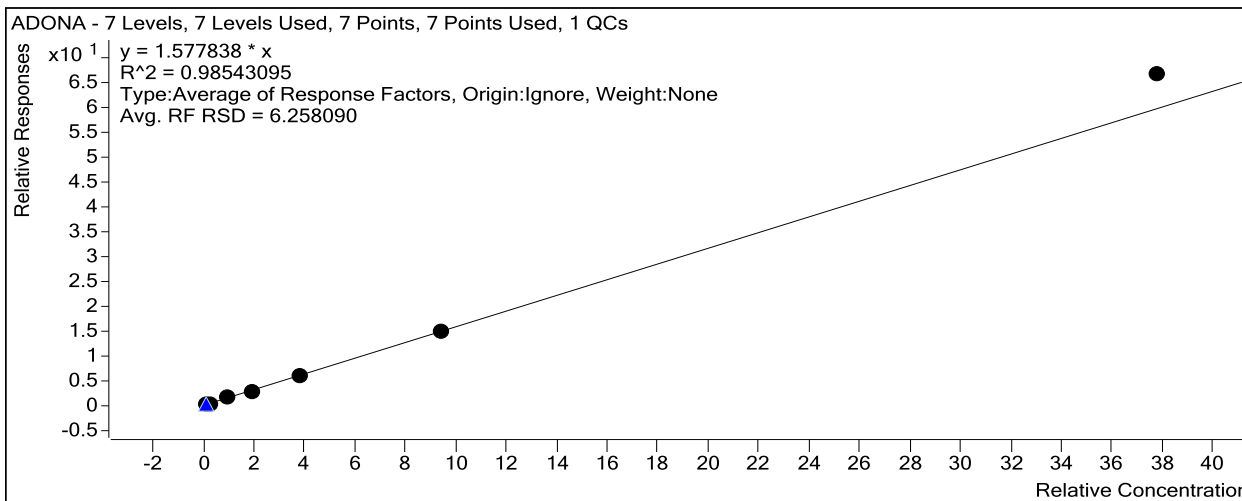
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	3572	0.4570	1.0611
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	8397	1.1425	1.0712
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	32602	4.5700	1.0936
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	68019	9.1400	1.0393
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	128315	18.2800	1.0816
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	313452	45.7000	1.0245
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	1164687	182.8000	1.0816



Target Compound *ADONA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	29391	0.4725	1.4457
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	75293	1.1813	1.5667
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	294986	4.7250	1.6093
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	613228	9.4500	1.5162
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	1160581	18.9000	1.5826
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	2926025	47.2500	1.5575
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	11768566	189.0000	1.7668

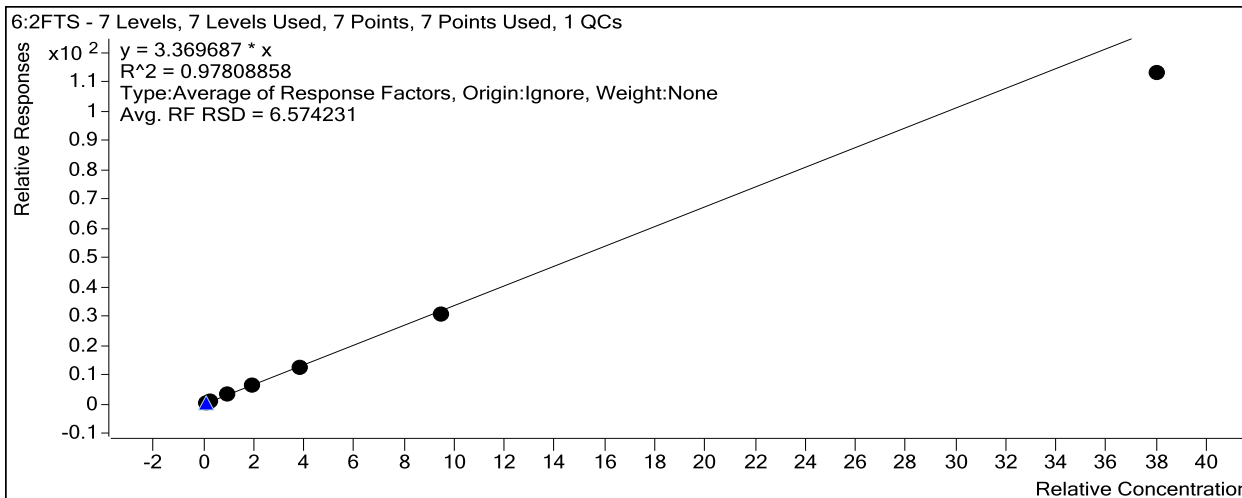
Quantitative Analysis Calibration Report



Target Compound

6:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	2980	0.4755	3.4285
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	7431	1.1888	3.6891
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	28787	4.7550	3.4894
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	58453	9.5100	3.4147
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	105173	19.0200	3.3643
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	245903	47.5500	3.2194
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	810267	190.2000	2.9824



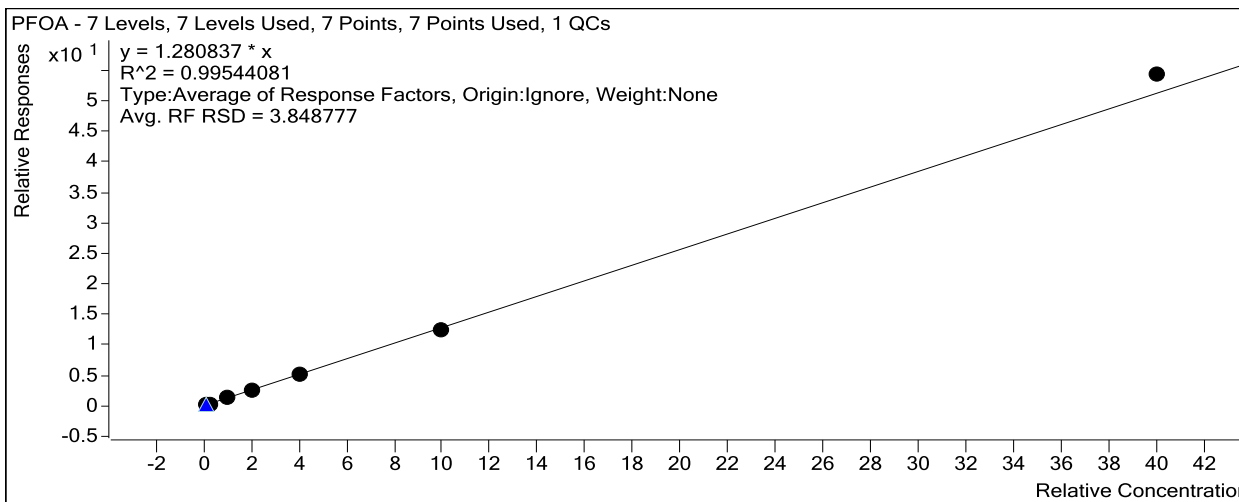
Extracted ISTD

M2 6:2 FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	26313	0.5000	1.2231
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	65683	1.2500	1.2917
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	256890	5.0000	1.3244
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	535038	10.0000	1.2501
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	990335	20.0000	1.2762
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	2462876	50.0000	1.2389
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	9596928	200.0000	1.3615

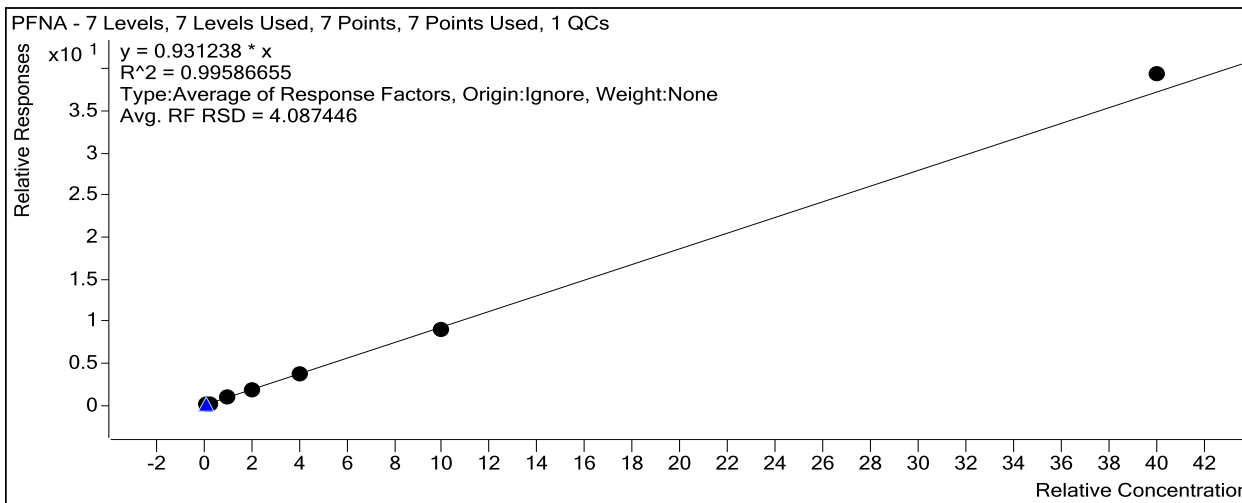


Target Compound

PFHpS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	3658	0.4765	1.0422
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	8848	1.1913	1.0825
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	34173	4.7650	1.0994
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	70284	9.5300	1.0300
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	130883	19.0600	1.0581
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	320534	47.6500	1.0048
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	1133189	190.6000	1.0093

Quantitative Analysis Calibration Report



Extracted ISTD

M8PFOS

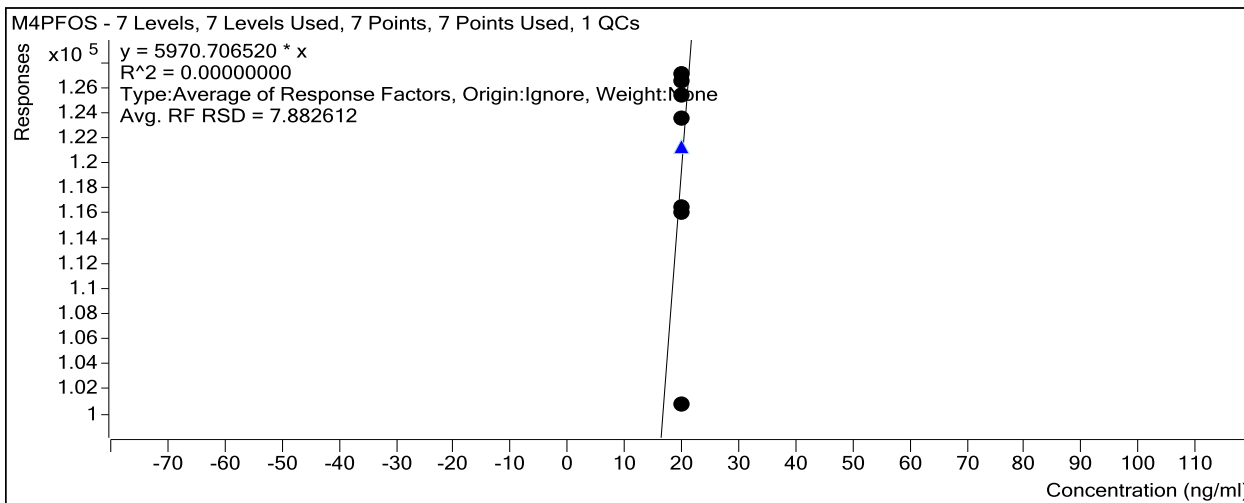
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	33493	5.0000	6698.6147
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	31019	5.0000	6203.7118
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	29897	5.0000	5979.4601
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	32656	5.0000	6531.2633
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	29977	5.0000	5995.4534
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	30032	5.0000	6006.3187
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	25058	5.0000	5011.5352

Instrument ISTD

M4PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	125471	20.0000	6273.5330
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	126471	20.0000	6323.5713
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	116439	20.0000	5821.9740
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	127144	20.0000	6357.2123
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	123539	20.0000	6176.9309
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	116087	20.0000	5804.3614
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	100747	20.0000	5037.3628

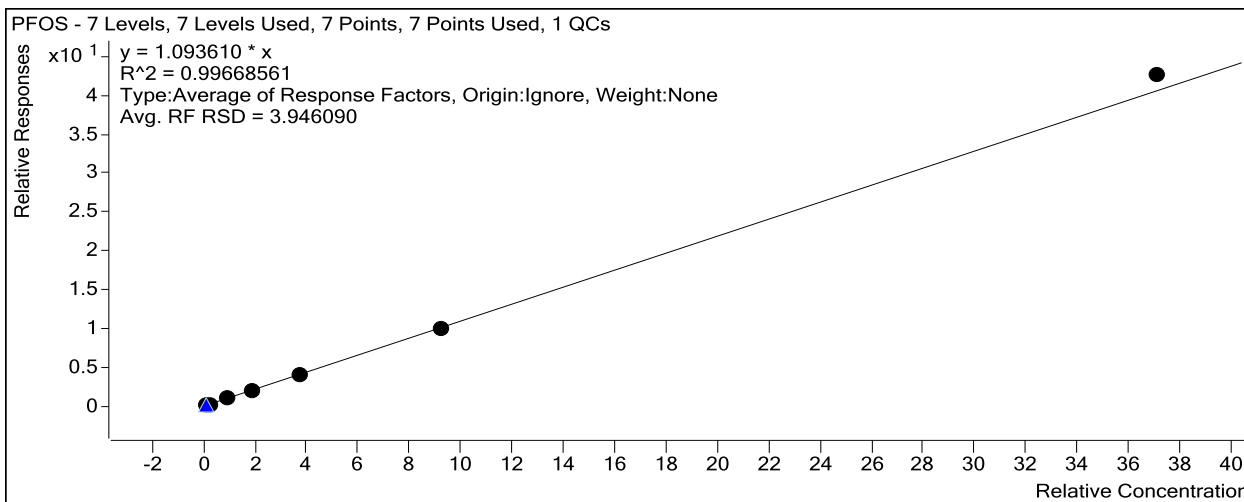
Quantitative Analysis Calibration Report



Target Compound

PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	3211	0.4640	1.0331
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	8049	1.1600	1.1185
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	31224	4.6400	1.1254
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	63744	9.2800	1.0517
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	122995	18.5600	1.1053
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	298009	46.4000	1.0693
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	1071457	185.6000	1.1519



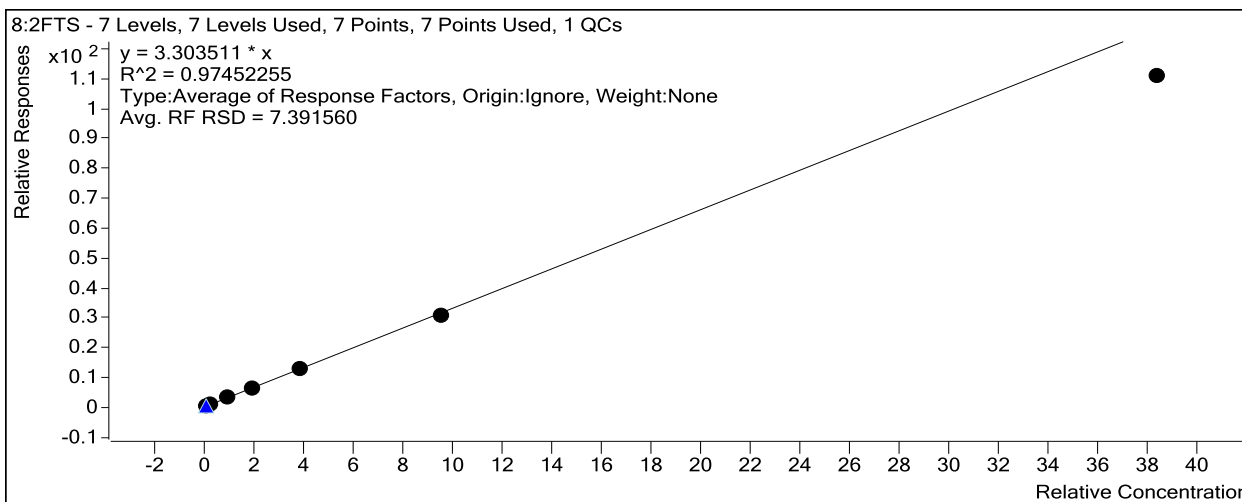
Target Compound

9CI-PF3ONS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	43352	9.6000	3.3787
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	80984	19.2000	3.4472
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	187007	48.0000	3.2057
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	579184	192.0000	2.8972

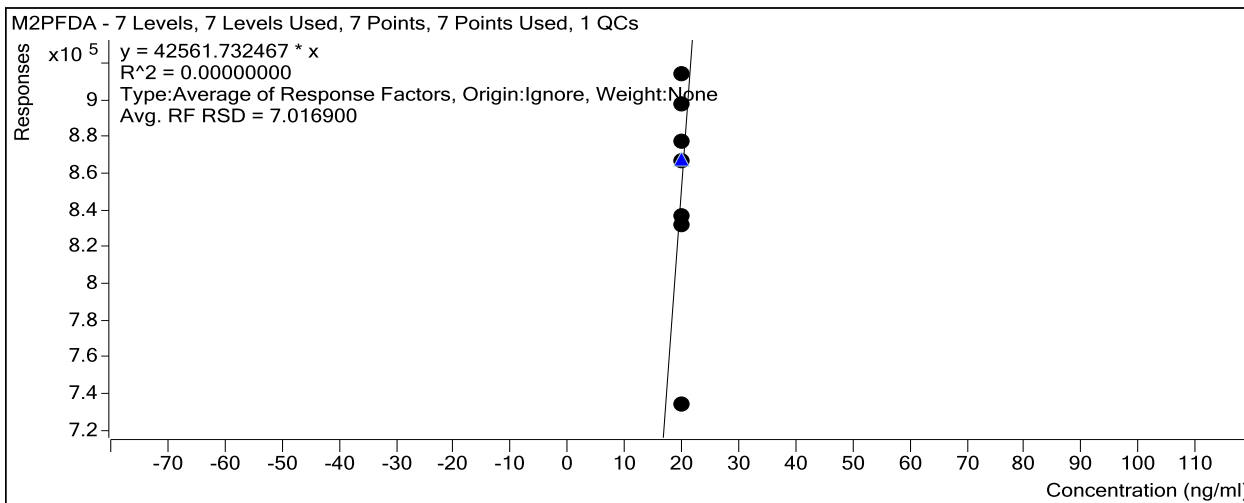


Target Compound

PFNS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	2888	0.4810	0.8963
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	7590	1.2025	1.0174
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	29699	4.8100	1.0326
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	60331	9.6200	0.9602
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	111637	19.2400	0.9678
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	266725	48.1000	0.9232
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	909921	192.4000	0.9437

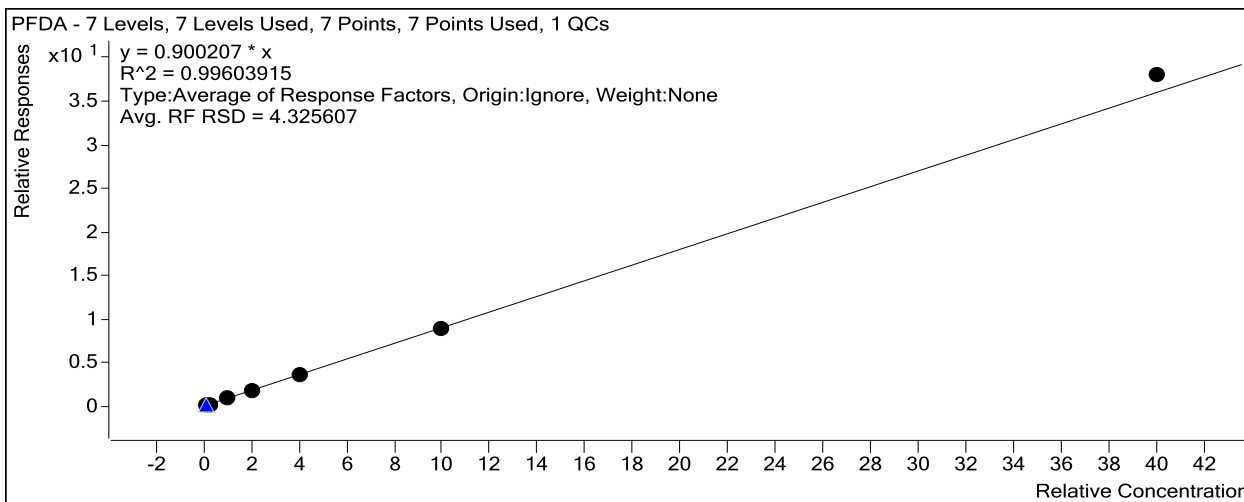
Quantitative Analysis Calibration Report



Target Compound

PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	21407	0.5000	0.8380
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	54070	1.2500	0.9089
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	217330	5.0000	0.9414
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	441946	10.0000	0.8811
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	829956	20.0000	0.8950
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	2021619	50.0000	0.8840
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	7481706	200.0000	0.9531



Extracted ISTD

d3-NMeFOSAA

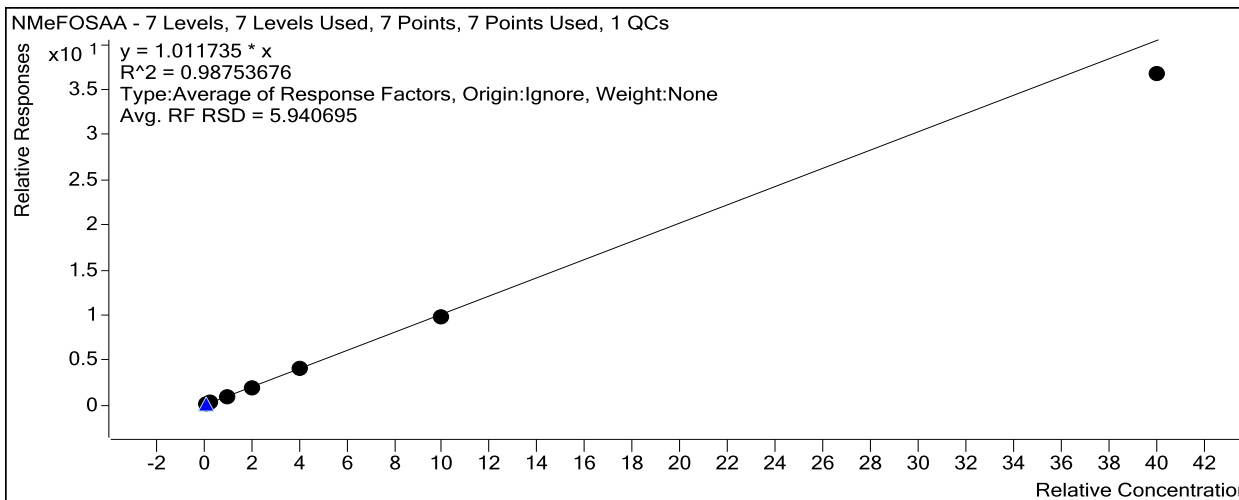
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	21591	5.0000	4318.1006
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	20410	5.0000	4082.0811
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	20291	5.0000	4058.1984
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	21307	5.0000	4261.3458
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	20459	5.0000	4091.7213
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	21040	5.0000	4208.0706
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	21671	5.0000	4334.1045

Target Compound *NMeFOSAA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	2270	0.5000	1.0516
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	5670	1.2500	1.1112
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	20802	5.0000	1.0252
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	42050	10.0000	0.9868
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	82601	20.0000	1.0094
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	205491	50.0000	0.9767
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	798685	200.0000	0.9214

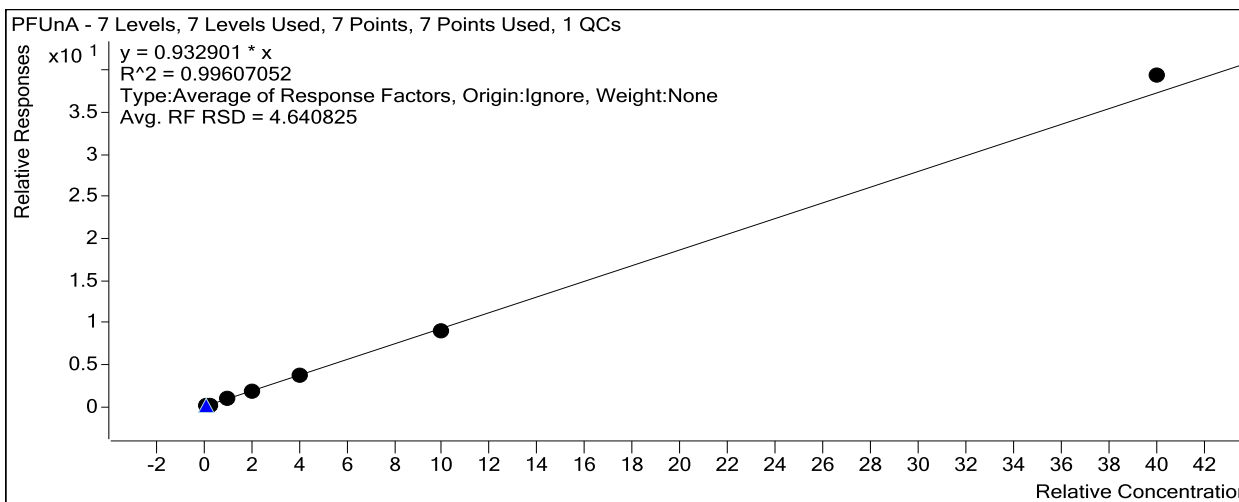


Extracted ISTD *M8FOSA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	76788	5.0000	15357.5943
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	70952	5.0000	14190.3832
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	67866	5.0000	13573.2547

Quantitative Analysis Calibration Report

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	21382	0.5000	0.8724
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	53411	1.2500	0.9140
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	215879	5.0000	0.9939
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	444817	10.0000	0.9258
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	825132	20.0000	0.9241
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	2003458	50.0000	0.9126
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	7383224	200.0000	0.9874

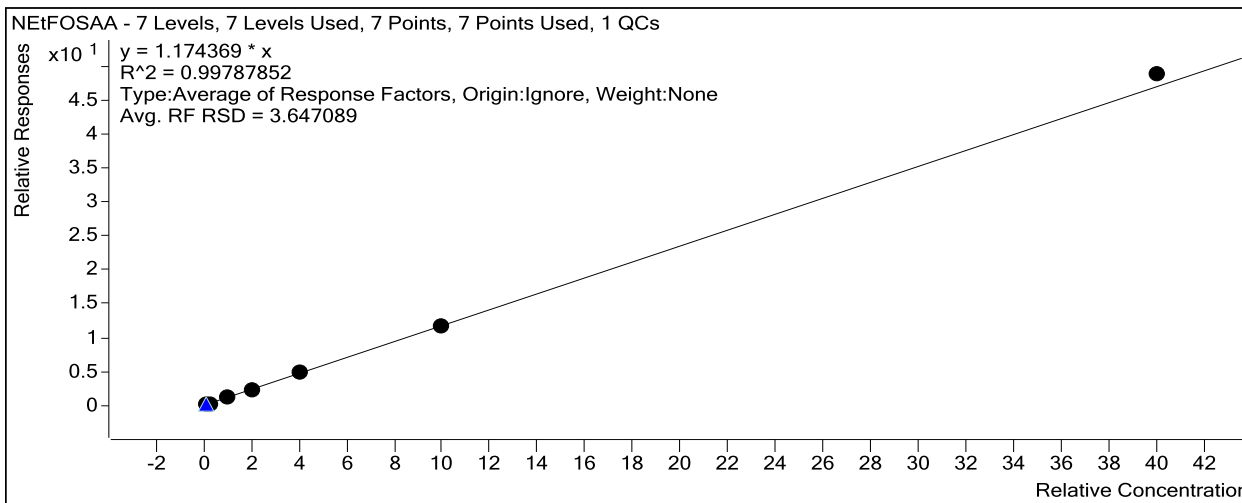


Target Compound

NETFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	4393	0.5000	1.1395
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	10403	1.2500	1.1045
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	42078	5.0000	1.2014
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	86147	10.0000	1.1630
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	164651	20.0000	1.2141
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	396768	50.0000	1.1740
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	1365053	200.0000	1.2241

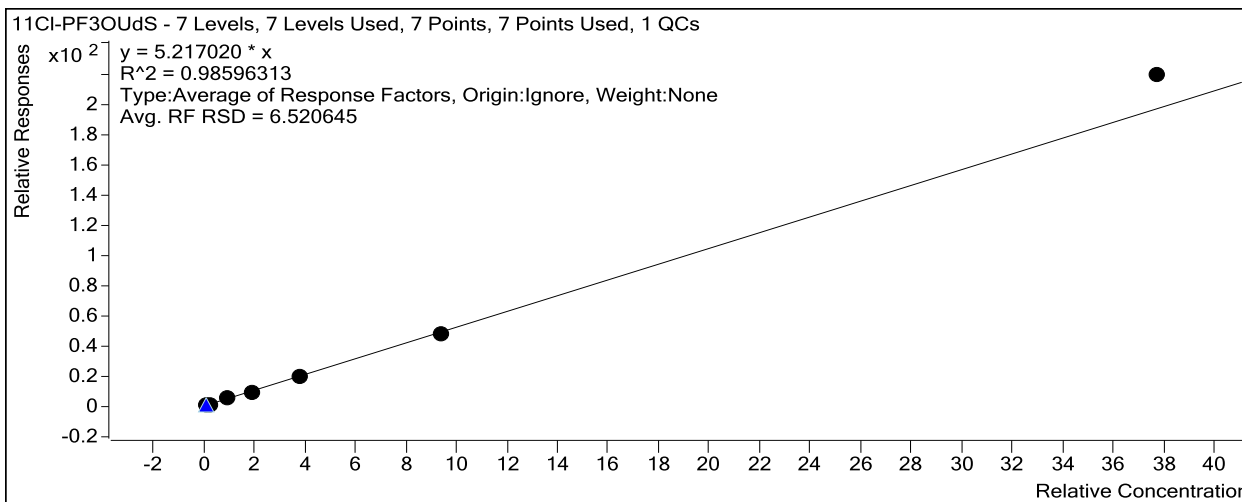
Quantitative Analysis Calibration Report



Target Compound

11CI-PF3OUdS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	14972	0.4715	4.7405
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	39259	1.1788	5.3685
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	149787	4.7150	5.3129
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	310066	9.4300	5.0344
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	586512	18.8600	5.1870
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	1429737	47.1500	5.0485
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	5507883	188.6000	5.8274



Extracted ISTD

MPFD0A

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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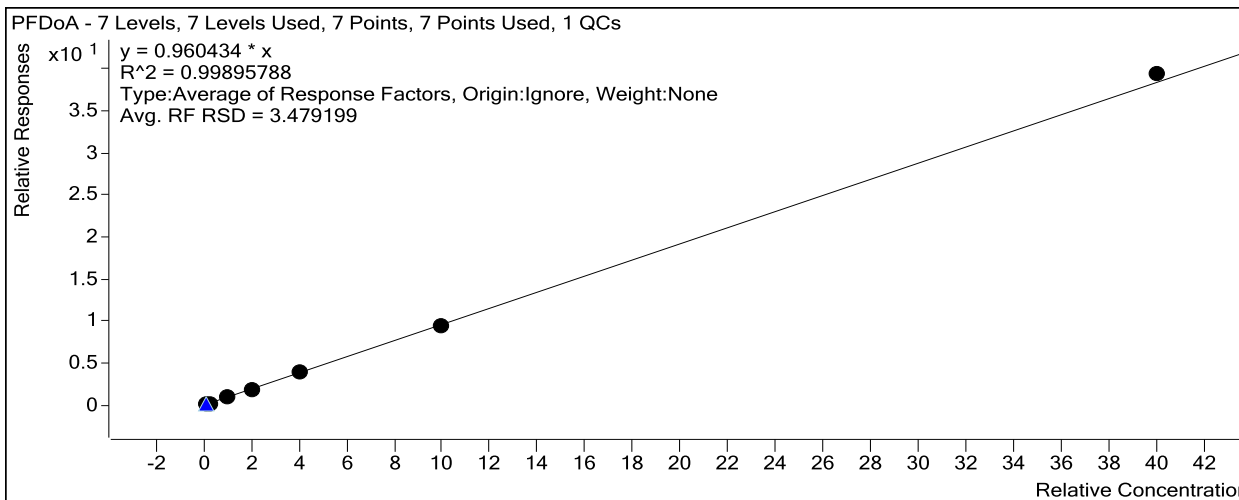
Quantitative Analysis Calibration Report

File Path	Type	Level	Enabled	Response	Exp Conc	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	280205	5.0000	56040.9637
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	262691	5.0000	52538.1865
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	252172	5.0000	50434.3939
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	272020	5.0000	54403.9055
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	251871	5.0000	50374.2577
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	257170	5.0000	51434.0567
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	238704	5.0000	47740.8847

Target Compound

PFD_oA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	25007	0.5000	0.8925
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	64622	1.2500	0.9840
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	245566	5.0000	0.9738
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	523020	10.0000	0.9614
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	985680	20.0000	0.9784
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	2429603	50.0000	0.9447
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	9436587	200.0000	0.9883

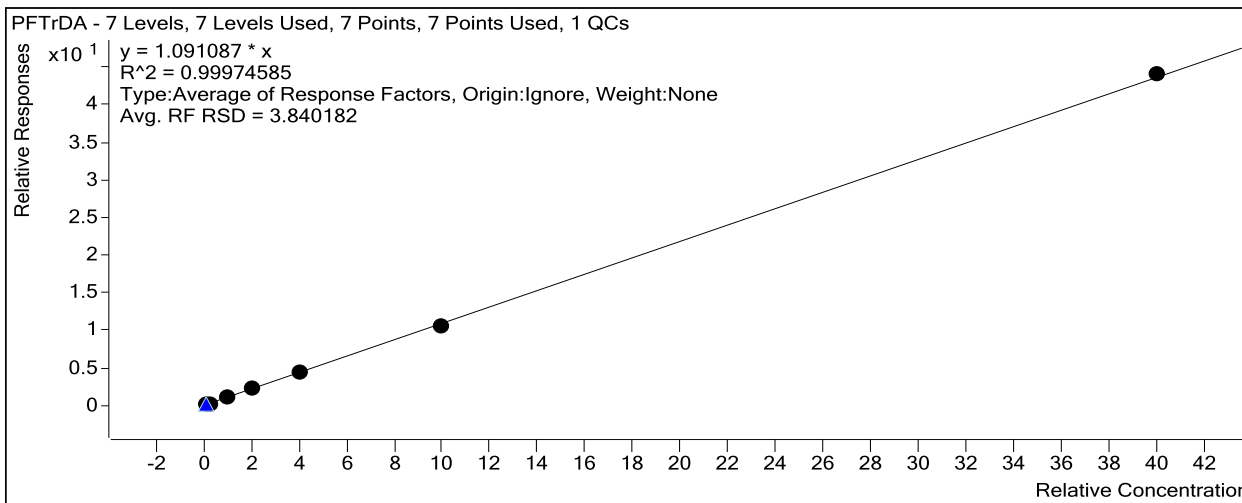


Target Compound

10:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	2605	0.4820	3.8240
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	6082	1.2050	3.9221
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	22596	4.8200	3.7753

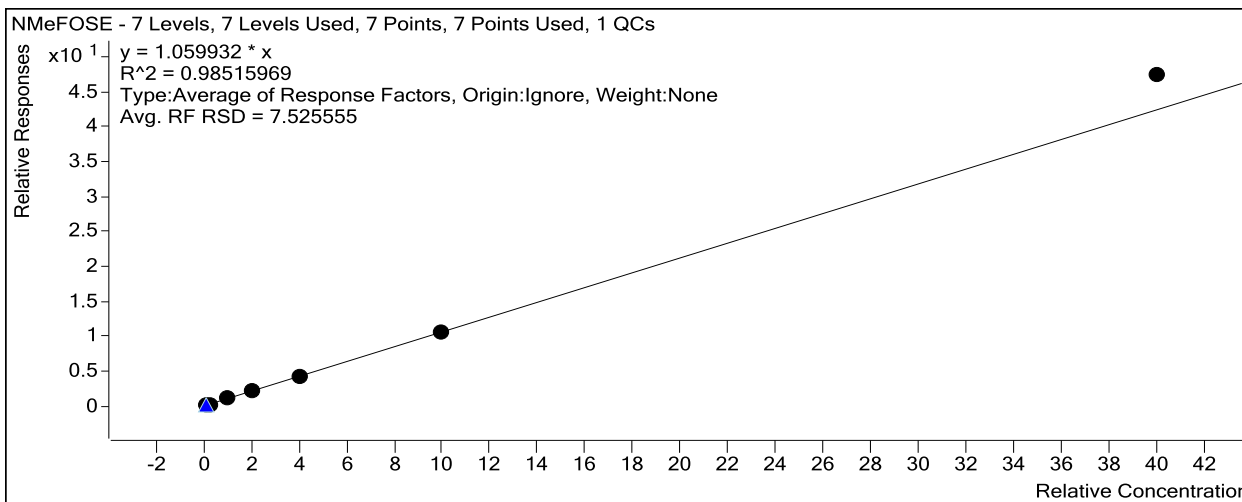
Quantitative Analysis Calibration Report



Target Compound

NMeFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	1759	0.5000	0.9471
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	4382	1.2500	0.9906
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	18327	5.0000	1.1172
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	37405	10.0000	1.0426
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	70599	20.0000	1.0834
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	175112	50.0000	1.0505
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	651358	200.0000	1.1881



Extracted ISTD

d9-NEtFOSE

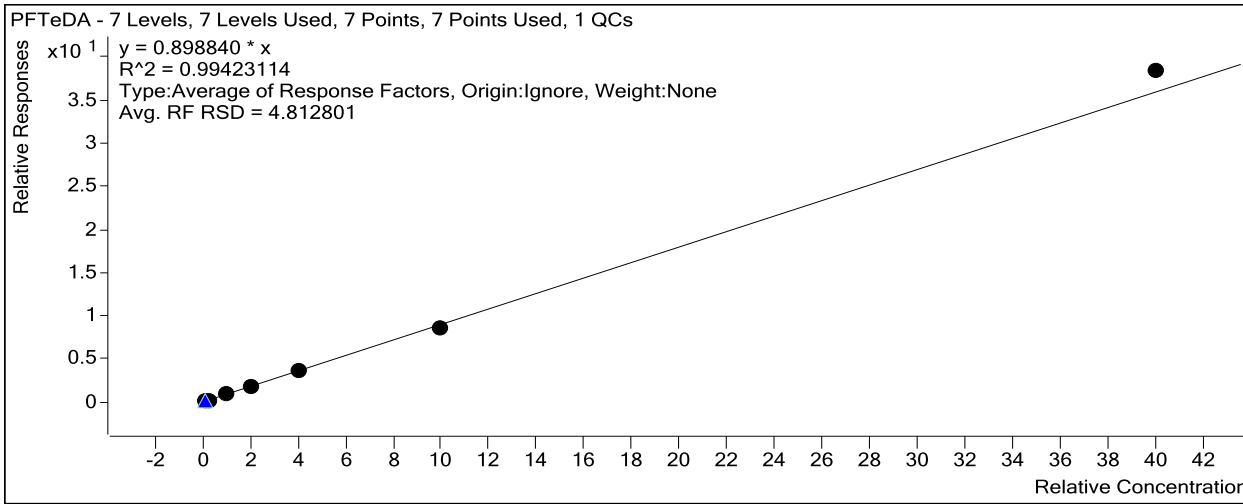
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220423ACAL\2220423A_07.d Calibration 7 315330 5.0000 63066.0244

Target Compound *PFTeDA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	30641	0.5000	0.8406
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	80038	1.2500	0.9156
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	310781	5.0000	0.9357
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	641514	10.0000	0.8691
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	1209008	20.0000	0.9034
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	2990845	50.0000	0.8645
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	12146341	200.0000	0.9630



Extracted ISTD *M2PFHxDA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220423ACAL\2220423A_01.d	Calibration	1	<input checked="" type="checkbox"/>	39347	5.0000	7869.4263
D:\MassHunter\Data\2220423ACAL\2220423A_02.d	Calibration	2	<input checked="" type="checkbox"/>	37189	5.0000	7437.7439
D:\MassHunter\Data\2220423ACAL\2220423A_03.d	Calibration	3	<input checked="" type="checkbox"/>	39339	5.0000	7867.7962
D:\MassHunter\Data\2220423ACAL\2220423A_04.d	Calibration	4	<input checked="" type="checkbox"/>	42813	5.0000	8562.5625
D:\MassHunter\Data\2220423ACAL\2220423A_05.d	Calibration	5	<input checked="" type="checkbox"/>	34550	5.0000	6909.9713
D:\MassHunter\Data\2220423ACAL\2220423A_06.d	Calibration	6	<input checked="" type="checkbox"/>	34207	5.0000	6841.4121
D:\MassHunter\Data\2220423ACAL\2220423A_07.d	Calibration	7	<input checked="" type="checkbox"/>	31323	5.0000	6264.5190

Target Compound *PFHxDA*

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/13/2022 21:45</u>	Lab File ID:	<u>2220413B_7.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738448</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	10300	109	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10800	113	70	130	
NEtFOSAA	ng/L	10000	10600	106	70	130	
NMeFOSAA	ng/L	10000	10300	103	70	130	
Perfluorobutanoic acid	ng/L	10000	10500	105	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9260	104	70	130	
Perfluorodecanoic acid	ng/L	10000	10600	106	70	130	
Perfluorododecanoic acid	ng/L	10000	10400	104	70	130	
Perfluoroheptanoic acid	ng/L	10000	10500	105	70	130	
Perfluorohexanoic acid	ng/L	10000	10400	104	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9120	100	70	130	
Perfluorononanoic acid	ng/L	10000	10600	106	70	130	
Perfluorooctanoic acid	ng/L	10000	10500	105	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9460	102	70	130	
Perfluoropentanoic acid	ng/L	10000	10500	105	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10200	102	70	130	
Perfluorotridecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroundecanoic acid	ng/L	10000	10600	106	70	130	

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/14/2022 01:13</u>	Lab File ID:	<u>2220413B_21.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738448</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	9980	105	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10800	112	70	130	
NEtFOSAA	ng/L	10000	10600	106	70	130	
NMeFOSAA	ng/L	10000	11200	112	70	130	
Perfluorobutanoic acid	ng/L	10000	10500	105	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9400	106	70	130	
Perfluorodecanoic acid	ng/L	10000	10600	106	70	130	
Perfluorododecanoic acid	ng/L	10000	10400	104	70	130	
Perfluoroheptanoic acid	ng/L	10000	10400	104	70	130	
Perfluorohexanoic acid	ng/L	10000	10400	104	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9340	102	70	130	
Perfluorononanoic acid	ng/L	10000	10300	103	70	130	
Perfluorooctanoic acid	ng/L	10000	10300	103	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9400	101	70	130	
Perfluoropentanoic acid	ng/L	10000	10400	104	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10300	103	70	130	
Perfluorotridecanoic acid	ng/L	10000	10700	107	70	130	
Perfluoroundecanoic acid	ng/L	10000	10700	107	70	130	

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/14/2022 03:57</u>	Lab File ID:	<u>2220413B_32.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738448</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	10400	110	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10600	110	70	130	
NEtFOSAA	ng/L	10000	10600	106	70	130	
NMeFOSAA	ng/L	10000	10500	105	70	130	
Perfluorobutanoic acid	ng/L	10000	10500	105	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9270	105	70	130	
Perfluorodecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorododecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroheptanoic acid	ng/L	10000	10500	105	70	130	
Perfluorohexanoic acid	ng/L	10000	10400	104	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9410	103	70	130	
Perfluorononanoic acid	ng/L	10000	10500	105	70	130	
Perfluorooctanoic acid	ng/L	10000	10400	104	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9320	100	70	130	
Perfluoropentanoic acid	ng/L	10000	10300	103	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10400	104	70	130	
Perfluorotridecanoic acid	ng/L	10000	10900	109	70	130	
Perfluoroundecanoic acid	ng/L	10000	10400	104	70	130	

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/15/2022 22:52</u>	Lab File ID:	<u>2220415B_8.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738621</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	10200	107	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	11100	116	70	130	
NEtFOSAA	ng/L	10000	10300	103	70	130	
NMeFOSAA	ng/L	10000	10100	101	70	130	
Perfluorobutanoic acid	ng/L	10000	10500	105	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9230	104	70	130	
Perfluorodecanoic acid	ng/L	10000	10600	106	70	130	
Perfluorododecanoic acid	ng/L	10000	10600	106	70	130	
Perfluoroheptanoic acid	ng/L	10000	10600	106	70	130	
Perfluorohexanoic acid	ng/L	10000	10500	105	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9350	102	70	130	
Perfluorononanoic acid	ng/L	10000	10400	104	70	130	
Perfluorooctanoic acid	ng/L	10000	10500	105	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9270	100	70	130	
Perfluoropentanoic acid	ng/L	10000	10400	104	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10400	104	70	130	
Perfluorotridecanoic acid	ng/L	10000	11800	118	70	130	
Perfluoroundecanoic acid	ng/L	10000	10400	104	70	130	

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/16/2022 02:20</u>	Lab File ID:	<u>2220415B_22.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738621</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	10100	106	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10200	107	70	130	
NEtFOSAA	ng/L	10000	10600	106	70	130	
NMeFOSAA	ng/L	10000	10600	106	70	130	
Perfluorobutanoic acid	ng/L	10000	10600	106	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9160	103	70	130	
Perfluorodecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorododecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroheptanoic acid	ng/L	10000	10500	105	70	130	
Perfluorohexanoic acid	ng/L	10000	10500	105	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9320	102	70	130	
Perfluorononanoic acid	ng/L	10000	10400	104	70	130	
Perfluorooctanoic acid	ng/L	10000	10400	104	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9410	101	70	130	
Perfluoropentanoic acid	ng/L	10000	10500	105	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorotridecanoic acid	ng/L	10000	11800	118	70	130	
Perfluoroundecanoic acid	ng/L	10000	10400	104	70	130	

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/16/2022 05:04</u>	Lab File ID:	<u>2220415B_33.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738621</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	10400	109	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	11100	116	70	130	
NEtFOSAA	ng/L	10000	10500	105	70	130	
NMeFOSAA	ng/L	10000	10400	104	70	130	
Perfluorobutanoic acid	ng/L	10000	10500	105	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9240	104	70	130	
Perfluorodecanoic acid	ng/L	10000	10400	104	70	130	
Perfluorododecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroheptanoic acid	ng/L	10000	10500	105	70	130	
Perfluorohexanoic acid	ng/L	10000	10500	105	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9350	102	70	130	
Perfluorononanoic acid	ng/L	10000	10500	105	70	130	
Perfluorooctanoic acid	ng/L	10000	10500	105	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9380	101	70	130	
Perfluoropentanoic acid	ng/L	10000	10500	105	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorotridecanoic acid	ng/L	10000	11400	114	70	130	
Perfluoroundecanoic acid	ng/L	10000	10500	105	70	130	

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/16/2022 09:02</u>	Lab File ID:	<u>2220415C_16.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738661</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	9830	103	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10400	108	70	130	
NEtFOSAA	ng/L	10000	10600	106	70	130	
NMeFOSAA	ng/L	10000	10300	103	70	130	
Perfluorobutanoic acid	ng/L	10000	10500	105	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9250	104	70	130	
Perfluorodecanoic acid	ng/L	10000	10400	104	70	130	
Perfluorododecanoic acid	ng/L	10000	10600	106	70	130	
Perfluoroheptanoic acid	ng/L	10000	10500	105	70	130	
Perfluorohexanoic acid	ng/L	10000	10700	107	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9390	103	70	130	
Perfluorononanoic acid	ng/L	10000	10600	106	70	130	
Perfluorooctanoic acid	ng/L	10000	10500	105	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9220	99	70	130	
Perfluoropentanoic acid	ng/L	10000	10500	105	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10400	104	70	130	
Perfluorotridecanoic acid	ng/L	10000	11700	117	70	130	
Perfluoroundecanoic acid	ng/L	10000	10500	105	70	130	

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/16/2022 11:46</u>	Lab File ID:	<u>2220415C_27.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738661</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	10200	107	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10900	114	70	130	
NEtFOSAA	ng/L	10000	10500	105	70	130	
NMeFOSAA	ng/L	10000	10400	104	70	130	
Perfluorobutanoic acid	ng/L	10000	10600	106	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9310	105	70	130	
Perfluorodecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorododecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroheptanoic acid	ng/L	10000	10400	104	70	130	
Perfluorohexanoic acid	ng/L	10000	10500	105	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9330	102	70	130	
Perfluorononanoic acid	ng/L	10000	10400	104	70	130	
Perfluorooctanoic acid	ng/L	10000	10500	105	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9190	99	70	130	
Perfluoropentanoic acid	ng/L	10000	10400	104	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10300	103	70	130	
Perfluorotridecanoic acid	ng/L	10000	11500	115	70	130	
Perfluoroundecanoic acid	ng/L	10000	10700	107	70	130	

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/21/2022 13:05</u>	Lab File ID:	<u>2220421A_19.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739037</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	10400	110	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10600	110	70	130	
NEtFOSAA	ng/L	10000	10200	102	70	130	
NMeFOSAA	ng/L	10000	10800	108	70	130	
Perfluorobutanoic acid	ng/L	10000	10400	104	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9390	106	70	130	
Perfluorodecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorododecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroheptanoic acid	ng/L	10000	10400	104	70	130	
Perfluorohexanoic acid	ng/L	10000	10700	107	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9450	103	70	130	
Perfluorononanoic acid	ng/L	10000	10300	103	70	130	
Perfluorooctanoic acid	ng/L	10000	10200	102	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9300	100	70	130	
Perfluoropentanoic acid	ng/L	10000	10400	104	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10300	103	70	130	
Perfluorotridecanoic acid	ng/L	10000	10300	103	70	130	
Perfluoroundecanoic acid	ng/L	10000	10400	104	70	130	

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/21/2022 16:06</u>	Lab File ID:	<u>2220421A_31.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739037</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	10300	109	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10100	105	70	130	
NEtFOSAA	ng/L	10000	10400	104	70	130	
NMeFOSAA	ng/L	10000	10200	102	70	130	
Perfluorobutanoic acid	ng/L	10000	10500	105	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9280	105	70	130	
Perfluorodecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorododecanoic acid	ng/L	10000	10300	103	70	130	
Perfluoroheptanoic acid	ng/L	10000	10400	104	70	130	
Perfluorohexanoic acid	ng/L	10000	10500	105	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9370	102	70	130	
Perfluorononanoic acid	ng/L	10000	10200	102	70	130	
Perfluorooctanoic acid	ng/L	10000	10400	104	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9340	101	70	130	
Perfluoropentanoic acid	ng/L	10000	10400	104	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10400	104	70	130	
Perfluorotridecanoic acid	ng/L	10000	10300	103	70	130	
Perfluoroundecanoic acid	ng/L	10000	10400	104	70	130	

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/21/2022 19:04</u>	Lab File ID:	<u>2220421A_43.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739037</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	10900	114	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	11000	114	70	130	
NEtFOSAA	ng/L	10000	10400	104	70	130	
NMeFOSAA	ng/L	10000	10600	106	70	130	
Perfluorobutanoic acid	ng/L	10000	10500	105	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9300	105	70	130	
Perfluorodecanoic acid	ng/L	10000	10600	106	70	130	
Perfluorododecanoic acid	ng/L	10000	10400	104	70	130	
Perfluoroheptanoic acid	ng/L	10000	10500	105	70	130	
Perfluorohexanoic acid	ng/L	10000	10500	105	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9320	102	70	130	
Perfluorononanoic acid	ng/L	10000	10300	103	70	130	
Perfluorooctanoic acid	ng/L	10000	10300	103	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9290	100	70	130	
Perfluoropentanoic acid	ng/L	10000	10400	104	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10100	101	70	130	
Perfluorotridecanoic acid	ng/L	10000	10200	102	70	130	
Perfluoroundecanoic acid	ng/L	10000	10500	105	70	130	

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040507</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/25/2022 00:35</u>	Lab File ID:	<u>2220424B_14.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739285</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
6:2 Fluorotelomersulfonic acid	ng/L	9510	9480	100	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	9740	101	70	130	
NEtFOSAA	ng/L	10000	9810	98	70	130	
NMeFOSAA	ng/L	10000	9990	100	70	130	
Perfluorobutanoic acid	ng/L	10000	9840	98	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	8870	100	70	130	
Perfluorodecanoic acid	ng/L	10000	9730	97	70	130	
Perfluorododecanoic acid	ng/L	10000	9740	97	70	130	
Perfluoroheptanoic acid	ng/L	10000	9660	97	70	130	
Perfluorohexanoic acid	ng/L	10000	9810	98	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	8780	96	70	130	
Perfluorononanoic acid	ng/L	10000	9550	96	70	130	
Perfluorooctanoic acid	ng/L	10000	9620	96	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	8950	96	70	130	
Perfluoropentanoic acid	ng/L	10000	9870	99	70	130	
Perfluorotetradecanoic acid	ng/L	10000	9780	98	70	130	
Perfluorotridecanoic acid	ng/L	10000	10600	106	70	130	
Perfluoroundecanoic acid	ng/L	10000	9830	98	70	130	

8I - INTERNAL STANDARD AREA SUMMARY

Report No:	<u>222040507</u>	Standard ID:	<u>1450 (ISC)</u>
Analyst:	<u>SXA</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/13/22 20:31</u>	Lab File ID:	<u>2220413B_2.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738448</u>

	M2PFDA <i>Area</i>	M2PFHxA <i>Area</i>	M2PFOA <i>Area</i>	M4PFOS <i>Area</i>
STANDARD	914574	651296	791104	129892

<i>CLIENT SAMPLE ID</i>	<i>LAB SAMP ID</i>		#		#		#		#
MB2331063	2331063	958226		662092		808494		134620	
LCS2331064	2331064	929178		655959		797357		131458	
LCSD2331065	2331065	928613		655995		802378		131428	

AREA UPPER LIMIT = +50% of internal standard area
 AREA LOWER LIMIT = -50% of internal standard area

Column used to flag values outside QC limits
 * Value outside QC limits

8I - INTERNAL STANDARD AREA SUMMARY

Report No:	<u>222040507</u>	Standard ID:	<u>1450 (ISC)</u>
Analyst:	<u>SXA</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/15/22 21:23</u>	Lab File ID:	<u>2220415B_2.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738621</u>

	M2PFDA <i>Area</i>	M2PFHxA <i>Area</i>	M2PFOA <i>Area</i>	M4PFOS <i>Area</i>
STANDARD	927367	649788	796745	129920

<i>CLIENT SAMPLE ID</i>	<i>LAB SAMP ID</i>		#		#		#		#
AOI01-01-SB-0.0-2.0	22204050701	797771		533957		673529		109272	
AOI01-01-SB-0.0-2.0-MS	22204050708	790617		539844		672746		109060	
AOI01-01-SB-0.0-2.0-MSD	22204050709	815769		554406		683959		111916	

AREA UPPER LIMIT = +50% of internal standard area
 AREA LOWER LIMIT = -50% of internal standard area

Column used to flag values outside QC limits
 * Value outside QC limits

8I - INTERNAL STANDARD AREA SUMMARY

Report No:	<u>222040507</u>	Standard ID:	<u>1450 (ISC)</u>
Analyst:	<u>SXA</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/16/22 05:34</u>	Lab File ID:	<u>2220415C_2.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738661</u>

	M2PFDA <i>Area</i>	M2PFHxA <i>Area</i>	M2PFOA <i>Area</i>	M4PFOS <i>Area</i>
STANDARD	943695	658025	817264	133422

<i>CLIENT SAMPLE ID</i>	<i>LAB SAMP ID</i>		#		#		#		#
AOI02-02-SB-0.0-2.0	22204050710	940230		656400		815139		130987	
AOI01-01-SB-37.0-39.0	22204050711	905866		616592		780631		123774	
AOI01-01-SB-0.0-2.0-D	22204050712	917686		631117		783086		126453	
AOI02-02-SB-14.0-16.0	22204050713	933597		647840		807168		128886	
WU-FRB-01	22204050714	976956		674764		837696		134715	
AOI02-04-SB-0.0-2.0	22204050715	971423		638222		809248		129112	
AOI02-04-SB-14.0-16.0	22204050716	935993		647496		806250		129898	
MB2332013	2332013	904023		627354		787548		125809	
LCS2332014	2332014	931902		648711		800355		128345	
LCSD2332015	2332015	922629		646560		806316		129666	

AREA UPPER LIMIT = +50% of internal standard area
 AREA LOWER LIMIT = -50% of internal standard area

Column used to flag values outside QC limits
 * Value outside QC limits

8I - INTERNAL STANDARD AREA SUMMARY

Report No:	<u>222040507</u>	Standard ID:	<u>1450 (ISC)</u>
Analyst:	<u>SXA</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/21/22 09:00</u>	Lab File ID:	<u>2220421A_3.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739037</u>

	M2PFDA <i>Area</i>	M2PFHxA <i>Area</i>	M2PFOA <i>Area</i>	M4PFOS <i>Area</i>
STANDARD	764183	526184	639793	108125

<i>CLIENT SAMPLE ID</i>	<i>LAB SAMP ID</i>	<i>#</i>	<i>#</i>	<i>#</i>	<i>#</i>				
WU-ERB-01	22204050702	677942		476742		579605		94952	
WU-ERB-03	22204050703	669016		471662		585563		94538	
WU-ERB-05	22204050705	725906		505934		625005		100833	
WU-ERB-06	22204050706	715025		501574		610622		99748	
WU-DECON-03	22204050707	691588		486747		591236		96080	
MB2334174	2334174	665222		463383		564257		93220	
LCS2334175	2334175	653886		454107		559802		91876	
LCSD2334176	2334176	654851		455701		554944		90868	

AREA UPPER LIMIT = +50% of internal standard area
 AREA LOWER LIMIT = -50% of internal standard area

Column used to flag values outside QC limits
 * Value outside QC limits

8I - INTERNAL STANDARD AREA SUMMARY

Report No:	<u>222040507</u>	Standard ID:	<u>1450 (ISC)</u>
Analyst:	<u>SXA</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/24/22 21:37</u>	Lab File ID:	<u>2220424B_2.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739285</u>

	M2PFDA <i>Area</i>	M2PFHxA <i>Area</i>	M2PFOA <i>Area</i>	M4PFOS <i>Area</i>
STANDARD	871059	605612	750251	125432

<i>CLIENT SAMPLE ID</i>	<i>LAB SAMP ID</i>	<i>#</i>	<i>#</i>	<i>#</i>	<i>#</i>				
WU-ERB-04	22204050704	803817		555089		690809		115156	
MB2337269	2337269	787743		538780		674014		112668	
LCS2337270	2337270	790434		548092		690711		114242	
LCSD2337271	2337271	802841		565907		706467		114672	

AREA UPPER LIMIT = +50% of internal standard area
 AREA LOWER LIMIT = -50% of internal standard area

Column used to flag values outside QC limits
 * Value outside QC limits

LC-QQQ Instrument Run Log

Instrument: QQQ5
Instrument Batch: 2220508A.batch.bin
Current ICAL Batch: 2220506BCAL
ICAL Std (ID/Exp): 022-56-2 10/21/22
ICV Std (ID/Exp): 022-59-4 7/19/22

LIMS Batch (HBN): 740431
20mM NH4OAc (ID/Exp): 022-67-1 5/10/22 8:00
Methanol (ID/Exp): 2131409 10/31/26
EIS Mix (ID/Exp): 022-55-3 10/12/22
IIS Mix (ID/Exp): 022-57-4 11/4/22

Acquisition time	Data File	Name	Type	Dilution	Comment
05/06/22 17:43:19	2220506B_1.d	1400 rt test	QC	1	SXA,QQQ5,CCV#022-57-7
05/06/22 17:58:03	2220506B_2.d	1201	Cal	1	SXA,QQQ5,ICAL 022-57-7
05/06/22 18:12:39	2220506B_3.d	1202	Cal	1	SXA,QQQ5,ICAL#022-58-1
05/06/22 18:27:15	2220506B_4.d	1203	Cal	1	SXA,QQQ5,ICAL#022-58-2
05/06/22 18:41:51	2220506B_5.d	1204	Cal	1	SXA,QQQ5,ICAL#022-58-3
05/06/22 18:56:29	2220506B_6.d	1205	Cal	1	SXA,QQQ5,ICAL#022-58-4
05/06/22 19:11:05	2220506B_7.d	1206	Cal	1	SXA,QQQ5,ICAL#022-59-2
05/06/22 19:25:41	2220506B_8.d	1207	Cal	1	SXA,QQQ5,ICAL#022-59-3
05/06/22 19:43:53	2220506B_9.d	1500	Blank	1	SXA,QQQ5,Instrument Blank#022-59-5
05/06/22 19:58:38	2220506B_10.d	1600	QC	1	SXA,QQQ5,ICV#022-59-4
05/06/22 20:13:15	2220506B_11.d	1450	QC	1	SXA,QQQ5,CCV#022-57-7
05/06/22 20:36:23	2220506B_12.d	1600	QC	1	SXA,QQQ5,ICV#022-49-1
05/08/22 10:53:39	2220508A_1.d	1400 rt test	QC	1	SXA,QQQ5,CCV#022-58-3
05/08/22 11:19:11	2220508A_2.d	1500	Blank	1	SXA,QQQ5,Instrument Blank#022-59-5
05/08/22 11:33:56	2220508A_3.d	1450	QC	1	SXA,QQQ5,CCV#022-57-7
05/08/22 11:48:33	2220508A_4.d	2343356	Blank	1	SXA,QQQ5,740299
05/08/22 12:03:10	2220508A_5.d	2343357	QC	1	SXA,QQQ5,740299
05/08/22 12:17:46	2220508A_6.d	2343358	QC	1	SXA,QQQ5,740299
05/08/22 12:32:23	2220508A_7.d	22204064507	Sample	1	SXA,QQQ5,740299
05/08/22 12:46:59	2220508A_8.d	22204064508	Sample	1	SXA,QQQ5,740299
05/08/22 13:01:39	2220508A_9.d	22204064509	Sample	1	SXA,QQQ5,740299
05/08/22 13:16:15	2220508A_10.d	22204064510	Sample	1	SXA,QQQ5,740299
05/08/22 13:30:53	2220508A_11.d	22204064511	Sample	1	SXA,QQQ5,740299
05/08/22 13:45:31	2220508A_12.d	22204064512	Sample	1	SXA,QQQ5,740299
05/08/22 14:00:08	2220508A_13.d	22204064513	Sample	1	SXA,QQQ5,740299
05/08/22 14:14:44	2220508A_14.d	22204064514	Sample	1	SXA,QQQ5,740299
05/08/22 14:29:21	2220508A_15.d	22204064515	Sample	1	SXA,QQQ5,740299
05/08/22 14:43:57	2220508A_16.d	22204064516	Sample	1	SXA,QQQ5,740299
05/08/22 14:58:34	2220508A_17.d	1400	QC	1	SXA,QQQ5,CCV#022-58-3
05/08/22 15:13:10	2220508A_18.d	22204226001	Sample	1	SXA,QQQ5,740299
05/08/22 15:27:50	2220508A_19.d	22204226002	Sample	1	SXA,QQQ5,740299
05/08/22 15:42:26	2220508A_20.d	22204298101	Sample	1	SXA,QQQ5,740299
05/08/22 15:57:03	2220508A_21.d	22205030102	Sample	1	SXA,QQQ5,740299
05/08/22 16:11:39	2220508A_22.d	22205030104	Sample	1	SXA,QQQ5,740299
05/08/22 16:26:16	2220508A_23.d	22205030106	Sample	1	SXA,QQQ5,740299
05/08/22 16:40:53	2220508A_24.d	22205030108	Sample	1	SXA,QQQ5,740299
05/08/22 16:55:29	2220508A_25.d	1400	QC	1	SXA,QQQ5,CCV#022-58-3

LC-QQQ Instrument Run Log

Instrument: QQQ 3
Instrument Batch: 2220513A.batch.bin
Current ICAL Batch: 2220511BCAL
ICAL Std (ID/Exp): 022-56-2 10/21/22
ICV Std (ID/Exp): 022-59-4 7/19/22

LIMS Batch (HBN): 740969
20mM NH4OAc (ID/Exp): 022-68-6 05/14/22 08:00
Methanol (ID/Exp): 2131409 10/31/26
EIS Mix (ID/Exp): 022-55-3 10/12/22
IIS Mix (ID/Exp): 022-57-4 11/4/22

Acquisition time	Data File	Name	Type	Dilution	Comment
05/11/22 12:04:53	2220511B_1.d	1201	Cal	1	RXJ,QQQ3;ICAL 022-57-7
05/11/22 12:19:40	2220511B_2.d	1202	Cal	1	RXJ,QQQ3;ICAL 022-58-1
05/11/22 12:34:19	2220511B_3.d	1203	Cal	1	RXJ,QQQ3;ICAL 022-58-2
05/11/22 12:48:57	2220511B_4.d	1204	Cal	1	RXJ,QQQ3;ICAL 022-58-3
05/11/22 13:03:35	2220511B_5.d	1205	Cal	1	RXJ,QQQ3;ICAL 022-58-4
05/11/22 13:18:13	2220511B_6.d	1206	Cal	1	RXJ,QQQ3;ICAL 022-59-2
05/11/22 13:32:52	2220511B_7.d	1207	Cal	1	RXJ,QQQ3;ICAL 022-59-3
05/11/22 14:46:46	2220511B_8.d	1500	Blank	1	RXJ,QQQ3;Instrument Blank 022-59-5
05/11/22 15:01:37	2220511B_9.d	1600	QC	1	RXJ,QQQ3;ICV 022-59-4
05/11/22 15:16:16	2220511B_10.d	1450	QC	1	RXJ,QQQ3;CCV 022-57-7
05/13/22 13:02:21	2220513A_1.d	1400 RT TEST	QC	1	RXJ,QQQ3;CCV 022-58-3
05/13/22 13:21:18	2220513A_2.d	1500	Blank	1	RXJ,QQQ3;Instrument Blank 022-59-5
05/13/22 13:36:09	2220513A_3.d	1450	QC	1	RXJ,QQQ3;CCV 022-57-7
05/13/22 14:03:56	2220513A_4.d	2345193	Blank	1	RXJ,QQQ3;740685
05/13/22 14:18:45	2220513A_5.d	2345194	QC	1	RXJ,QQQ3;740685
05/13/22 14:33:24	2220513A_6.d	2345195	QC	1	RXJ,QQQ3;740685
05/13/22 14:48:03	2220513A_7.d	22204064507	Sample	1	RXJ,QQQ3;740685
05/13/22 15:02:41	2220513A_8.d	22204064509	Sample	1	RXJ,QQQ3;740685
05/13/22 15:17:21	2220513A_9.d	22204064510	Sample	1	RXJ,QQQ3;740685
05/13/22 15:31:59	2220513A_10.d	22204064511	Sample	1	RXJ,QQQ3;740685
05/13/22 15:46:38	2220513A_11.d	22204064512	Sample	1	RXJ,QQQ3;740685
05/13/22 16:01:18	2220513A_12.d	22204064513	Sample	1	RXJ,QQQ3;740685
05/13/22 16:16:00	2220513A_13.d	22204064514	Sample	1	RXJ,QQQ3;740685
05/13/22 16:30:38	2220513A_14.d	22204064515	Sample	1	RXJ,QQQ3;740685
05/13/22 16:45:17	2220513A_15.d	22204064516	Sample	1	RXJ,QQQ3;740685
05/13/22 16:59:56	2220513A_16.d	22204302301	Sample	1	RXJ,QQQ3;740685
05/13/22 17:14:36	2220513A_17.d	1400	QC	1	RXJ,QQQ3;CCV 022-58-3
05/13/22 17:29:14	2220513A_18.d	22204302303	Sample	1	RXJ,QQQ3;740685
05/13/22 17:43:55	2220513A_19.d	22204302305x5	Sample	1	RXJ,QQQ3;740685; foamy
05/13/22 17:58:34	2220513A_20.d	22204299503	Sample	1	RXJ,QQQ3;740685
05/13/22 18:13:12	2220513A_21.d	22205036001	Sample	1	RXJ,QQQ3;740685
05/13/22 18:27:51	2220513A_22.d	22205036002	Sample	1	RXJ,QQQ3;740685
05/13/22 18:42:33	2220513A_23.d	22205036003	Sample	1	RXJ,QQQ3;740685
05/13/22 18:57:13	2220513A_24.d	22205036004	Sample	1	RXJ,QQQ3;740685
05/13/22 19:11:52	2220513A_25.d	Grind Blank	Blank	1	RXJ,QQQ3;740685
05/13/22 19:26:32	2220513A_26.d	22204282017	Sample	1	RXJ,QQQ3;740487
05/13/22 19:41:12	2220513A_27.d	1400	QC	1	RXJ,QQQ3;CCV 022-58-3
05/13/22 19:55:50	2220513A_28.d	22204159709x10	Sample	10	RXJ,QQQ3;740873
05/13/22 20:10:30	2220513A_29.d	22204204202x10	Sample	10	RXJ,QQQ3;740873
05/13/22 20:25:09	2220513A_30.d	22204204203x10	Sample	10	RXJ,QQQ3;740873
05/13/22 20:39:49	2220513A_31.d	22204159712x5	Sample	5	RXJ,QQQ3;740683
05/13/22 20:54:28	2220513A_32.d	22204159713x5	Sample	5	RXJ,QQQ3;740683
05/13/22 21:09:09	2220513A_33.d	1400	QC	1	RXJ,QQQ3;CCV 022-58-3

ORGANICS INSTRUMENT SENSITIVITY CHECK

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ5</u>
Analysis Date:	<u>05/08/2022 11:33</u>	Lab File ID:	<u>2220508A_3.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>740431</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	3.78	3.61	96	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	3.75	3.40	91	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	3.81	3.51	92	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	3.84	4.39	114	70	130	
9Cl-PF3ONS	ng/L	3.74	3.60	97	70	130	
ADONA	ng/L	3.78	3.64	96	70	130	
HFPO-DA	ng/L	8.00	7.68	96	70	130	
NEFOSAA	ng/L	4.00	3.91	98	70	130	
NMeFOSAA	ng/L	4.00	4.38	109	70	130	
Perfluorobutanoic acid	ng/L	4.00	4.22	106	70	130	
Perfluorobutanesulfonic acid	ng/L	3.55	3.67	104	70	130	
Perfluorodecanoic acid	ng/L	4.00	4.02	100	70	130	
Perfluorodecane sulfonic acid	ng/L	3.86	3.79	98	70	130	
Perfluorododecanoic acid	ng/L	4.00	4.01	100	70	130	
Perfluoroheptanoic acid	ng/L	4.00	3.88	97	70	130	
Perfluoroheptanesulfonic acid	ng/L	3.82	3.93	103	70	130	
Perfluorohexanoic acid	ng/L	4.00	4.14	104	70	130	
Perfluorohexanesulfonic acid	ng/L	3.66	3.90	107	70	130	
Perfluorononanoic acid	ng/L	4.00	4.02	101	70	130	
Perfluorononanesulfonic acid	ng/L	3.85	4.32	112	70	130	
Perfluorooctanoic acid	ng/L	4.00	4.02	101	70	130	
Perfluorooctanesulfonic acid	ng/L	3.71	3.94	106	70	130	
Perfluorooctane Sulfonamide	ng/L	4.00	4.18	104	70	130	
Perfluoropentanoic acid	ng/L	4.00	3.99	100	70	130	
Perfluoropentanesulfonic acid	ng/L	3.77	3.83	102	70	130	
Perfluorotetradecanoic acid	ng/L	4.00	4.06	101	70	130	
Perfluorotridecanoic acid	ng/L	4.00	3.98	99	70	130	
Perfluoroundecanoic acid	ng/L	4.00	3.91	98	70	130	

FORM 7S - ORG

ORGANICS INSTRUMENT SENSITIVITY CHECK

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>05/13/2022 13:36</u>	Lab File ID:	<u>2220513A_3.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>740969</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	3.78	3.54	94	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	3.75	3.72	99	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	3.81	4.35	114	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	3.84	3.92	102	70	130	
9Cl-PF3ONS	ng/L	3.74	3.54	95	70	130	
ADONA	ng/L	3.78	3.70	98	70	130	
HFPO-DA	ng/L	8.00	8.16	102	70	130	
NEtFOSAA	ng/L	4.00	4.00	100	70	130	
NMeFOSAA	ng/L	4.00	4.30	107	70	130	
Perfluorobutanoic acid	ng/L	4.00	4.00	100	70	130	
Perfluorobutanesulfonic acid	ng/L	3.55	3.57	101	70	130	
Perfluorodecanoic acid	ng/L	4.00	3.96	99	70	130	
Perfluorodecane sulfonic acid	ng/L	3.86	4.13	107	70	130	
Perfluorododecanoic acid	ng/L	4.00	3.99	100	70	130	
Perfluoroheptanoic acid	ng/L	4.00	3.86	97	70	130	
Perfluoroheptanesulfonic acid	ng/L	3.82	3.84	101	70	130	
Perfluorohexanoic acid	ng/L	4.00	4.05	101	70	130	
Perfluorohexanesulfonic acid	ng/L	3.66	3.83	105	70	130	
Perfluorononanoic acid	ng/L	4.00	4.02	100	70	130	
Perfluorononanesulfonic acid	ng/L	3.85	4.10	106	70	130	
Perfluorooctanoic acid	ng/L	4.00	3.97	99	70	130	
Perfluorooctanesulfonic acid	ng/L	3.71	3.96	107	70	130	
Perfluorooctane Sulfonamide	ng/L	4.00	4.28	107	70	130	
Perfluoropentanoic acid	ng/L	4.00	4.08	102	70	130	
Perfluoropentanesulfonic acid	ng/L	3.77	3.68	98	70	130	
Perfluorotetradecanoic acid	ng/L	4.00	3.89	97	70	130	
Perfluorotridecanoic acid	ng/L	4.00	4.02	100	70	130	
Perfluoroundecanoic acid	ng/L	4.00	3.71	93	70	130	

FORM 7S - ORG

ORGANICS INITIAL CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>05/11/2022 15:01</u>	Lab File ID:	<u>2220511B_9.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>740768</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	10000	10900	109	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	10000	11900	119	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	10000	12000	120	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	10100	11500	114	70	130	
9Cl-PF3ONS	ng/L	10000	11000	110	70	130	
ADONA	ng/L	10000	10900	109	70	130	
HFPO-DA	ng/L	10000	11500	115	70	130	
NEtFOSAA	ng/L	10000	11000	110	70	130	
NMeFOSAA	ng/L	10000	11300	113	70	130	
Perfluorobutanoic acid	ng/L	10000	11000	110	70	130	
Perfluorobutanesulfonic acid	ng/L	10000	11800	118	70	130	
Perfluorodecanoic acid	ng/L	10000	11100	111	70	130	
Perfluorodecane sulfonic acid	ng/L	10100	11500	113	70	130	
Perfluorododecanoic acid	ng/L	10000	10400	104	70	130	
Perfluoroheptanoic acid	ng/L	10000	11300	113	70	130	
Perfluoroheptanesulfonic acid	ng/L	10000	11300	113	70	130	
Perfluorohexanoic acid	ng/L	10100	11700	116	70	130	
Perfluorohexanesulfonic acid	ng/L	10000	11800	118	70	130	
Perfluorononanoic acid	ng/L	10000	11700	117	70	130	
Perfluorononanesulfonic acid	ng/L	10100	11500	114	70	130	
Perfluorooctanoic acid	ng/L	10100	10800	107	70	130	
Perfluorooctanesulfonic acid	ng/L	10000	9880	99	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	11100	111	70	130	
Perfluoropentanoic acid	ng/L	10100	11100	110	70	130	
Perfluoropentanesulfonic acid	ng/L	10000	11600	116	70	130	
Perfluorotetradecanoic acid	ng/L	10000	11600	116	70	130	
Perfluorotridecanoic acid	ng/L	10000	10100	101	70	130	
Perfluoroundecanoic acid	ng/L	10000	10500	105	70	130	

FORM 6I - ORG

ORGANICS INITIAL CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ5</u>
Analysis Date:	<u>05/06/2022 20:36</u>	Lab File ID:	<u>2220506B_12.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>740290</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	10000	9460	95	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	10000	10800	108	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	10000	10500	105	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	10100	10400	103	70	130	
9Cl-PF3ONS	ng/L	10000	9510	95	70	130	
ADONA	ng/L	10000	9820	98	70	130	
HFPO-DA	ng/L	10000	10100	101	70	130	
NEtFOSAA	ng/L	10000	10000	100	70	130	
NMeFOSAA	ng/L	10000	9800	98	70	130	
Perfluorobutanoic acid	ng/L	10000	9740	97	70	130	
Perfluorobutanesulfonic acid	ng/L	10000	10400	104	70	130	
Perfluorodecanoic acid	ng/L	10000	9770	98	70	130	
Perfluorodecane sulfonic acid	ng/L	10100	9430	93	70	130	
Perfluorododecanoic acid	ng/L	10000	9080	91	70	130	
Perfluoroheptanoic acid	ng/L	10000	10200	102	70	130	
Perfluoroheptanesulfonic acid	ng/L	10000	9860	99	70	130	
Perfluorohexanoic acid	ng/L	10100	10300	102	70	130	
Perfluorohexanesulfonic acid	ng/L	10000	10500	105	70	130	
Perfluorononanoic acid	ng/L	10000	10100	101	70	130	
Perfluorononanesulfonic acid	ng/L	10100	9920	98	70	130	
Perfluorooctanoic acid	ng/L	10100	9570	95	70	130	
Perfluorooctanesulfonic acid	ng/L	10000	8470	85	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	9680	97	70	130	
Perfluoropentanoic acid	ng/L	10100	10100	100	70	130	
Perfluoropentanesulfonic acid	ng/L	10000	10300	103	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorotridecanoic acid	ng/L	10000	9400	94	70	130	
Perfluoroundecanoic acid	ng/L	10000	9240	92	70	130	

FORM 6I - ORG

4I - ORGANICS INSTRUMENT BLANK

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ5</u>
Analysis Date:	<u>05/08/2022 11:19</u>	Lab File ID:	<u>2220508A_2.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>740431</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>RESULT</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>	<i>#</i>
11CI-PF3OUdS	ng/L	0.50	U	0.20	0.50	10.0	
4:2 Fluorotelomersulfonic acid	ng/L	2.00	U	0.50	2.00	10.0	
6:2 Fluorotelomersulfonic acid	ng/L	2.00	U	0.60	2.00	10.0	
8:2 Fluorotelomersulfonic acid	ng/L	1.00	U	0.30	1.00	10.0	
9CI-PF3ONS	ng/L	1.00	U	0.30	1.00	10.0	
ADONA	ng/L	0.50	U	0.10	0.50	10.0	
HFPO-DA	ng/L	5.00	U	1.40	5.00	20.0	
NEtFOSAA	ng/L	1.00	U	0.30	1.00	10.0	
NMeFOSAA	ng/L	0.50	U	0.20	0.50	10.0	
Perfluorobutanesulfonic acid	ng/L	0.50	U	0.20	0.50	10.0	
Perfluorobutanoic acid	ng/L	1.00	U	0.40	1.00	10.0	
Perfluorodecane sulfonic acid	ng/L	1.00	U	0.30	1.00	10.0	
Perfluorodecanoic acid	ng/L	1.00	U	0.40	1.00	10.0	
Perfluorododecanoic acid	ng/L	0.50	U	0.20	0.50	10.0	
Perfluoroheptanesulfonic acid	ng/L	0.50	U	0.20	0.50	10.0	
Perfluoroheptanoic acid	ng/L	0.50	U	0.20	0.50	10.0	
Perfluorohexanesulfonic acid	ng/L	1.00	U	0.30	1.00	10.0	
Perfluorohexanoic acid	ng/L	0.50	U	0.20	0.50	10.0	
Perfluorononanesulfonic acid	ng/L	1.00	U	0.30	1.00	10.0	
Perfluorononanoic acid	ng/L	0.50	U	0.20	0.50	10.0	
Perfluorooctane Sulfonamide	ng/L	0.50	U	0.20	0.50	10.0	
Perfluorooctanesulfonic acid	ng/L	2.00	U	0.50	2.00	10.0	
Perfluorooctanoic acid	ng/L	2.00	U	0.80	2.00	10.0	
Perfluoropentanesulfonic acid	ng/L	0.50	U	0.20	0.50	10.0	
Perfluoropentanoic acid	ng/L	0.50	U	0.20	0.50	10.0	
Perfluorotetradecanoic acid	ng/L	0.50	U	0.20	0.50	10.0	
Perfluorotridecanoic acid	ng/L	1.00	U	0.30	1.00	10.0	
Perfluoroundecanoic acid	ng/L	0.50	U	0.20	0.50	10.0	

* - Result greater than 1/2 LOQ

4I - ORGANICS INSTRUMENT BLANK

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>05/13/2022 13:21</u>	Lab File ID:	<u>2220513A_2.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>740969</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>RESULT</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>	<i>#</i>
11CI-PF3OUdS	ng/L	0.50	U	0.20	0.50	10.0	
4:2 Fluorotelomersulfonic acid	ng/L	2.00	U	0.50	2.00	10.0	
6:2 Fluorotelomersulfonic acid	ng/L	2.00	U	0.60	2.00	10.0	
8:2 Fluorotelomersulfonic acid	ng/L	1.00	U	0.30	1.00	10.0	
9CI-PF3ONS	ng/L	1.00	U	0.30	1.00	10.0	
ADONA	ng/L	0.50	U	0.10	0.50	10.0	
HFPO-DA	ng/L	5.00	U	1.40	5.00	20.0	
NEtFOSAA	ng/L	1.00	U	0.30	1.00	10.0	
NMeFOSAA	ng/L	0.50	U	0.20	0.50	10.0	
Perfluorobutanesulfonic acid	ng/L	0.50	U	0.20	0.50	10.0	
Perfluorobutanoic acid	ng/L	1.00	U	0.40	1.00	10.0	
Perfluorodecane sulfonic acid	ng/L	1.00	U	0.30	1.00	10.0	
Perfluorodecanoic acid	ng/L	1.00	U	0.40	1.00	10.0	
Perfluorododecanoic acid	ng/L	0.50	U	0.20	0.50	10.0	
Perfluoroheptanesulfonic acid	ng/L	0.50	U	0.20	0.50	10.0	
Perfluoroheptanoic acid	ng/L	0.50	U	0.20	0.50	10.0	
Perfluorohexanesulfonic acid	ng/L	1.00	U	0.30	1.00	10.0	
Perfluorohexanoic acid	ng/L	0.214	J	0.20	0.50	10.0	
Perfluorononanesulfonic acid	ng/L	1.00	U	0.30	1.00	10.0	
Perfluorononanoic acid	ng/L	0.50	U	0.20	0.50	10.0	
Perfluorooctane Sulfonamide	ng/L	0.50	U	0.20	0.50	10.0	
Perfluorooctanesulfonic acid	ng/L	2.00	U	0.50	2.00	10.0	
Perfluorooctanoic acid	ng/L	2.00	U	0.80	2.00	10.0	
Perfluoropentanesulfonic acid	ng/L	0.50	U	0.20	0.50	10.0	
Perfluoropentanoic acid	ng/L	0.50	U	0.20	0.50	10.0	
Perfluorotetradecanoic acid	ng/L	0.50	U	0.20	0.50	10.0	
Perfluorotridecanoic acid	ng/L	1.00	U	0.30	1.00	10.0	
Perfluoroundecanoic acid	ng/L	0.50	U	0.20	0.50	10.0	

* - Result greater than 1/2 LOQ

Quantitative Analysis Calibration Report

Batch Data Path	D:\MassHunter\Data\QQQ3\2220511BCAL\QuantResults\2220513A.batch.bin		
Analysis Time	5/16/2022 3:40 PM	Analyst Name	GCAL\lcms
Report Time	5/23/2022 9:03 PM	Reporter Name	GCAL\lcms
Last Calib Update	5/12/2022 12:06 PM	Batch State	Processed

Calibration Info

Extracted ISTD

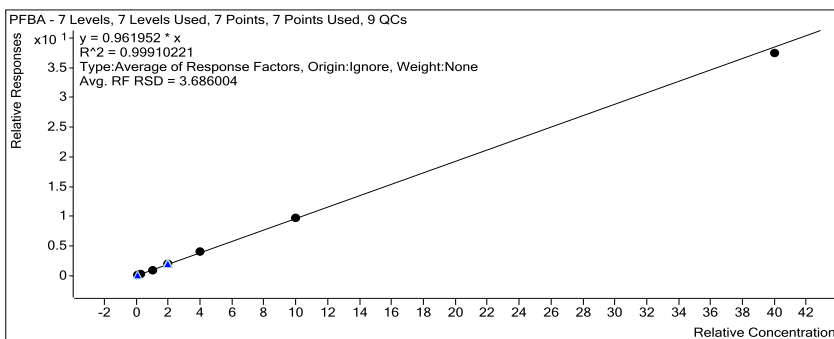
MPFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	100009	5.0000	20001.7035
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	98329	5.0000	19665.7330
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	102536	5.0000	20507.2189
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	96135	5.0000	19227.0580
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	92314	5.0000	18462.7611
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	93273	5.0000	18654.6082
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	89895	5.0000	17979.0083

Target Compound

PFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	9608	0.5000	0.9607
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	22745	1.2500	0.9253
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	94414	5.0000	0.9208
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	193959	10.0000	1.0088
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	368830	20.0000	0.9988
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	915277	50.0000	0.9813
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	3372899	200.0000	0.9380

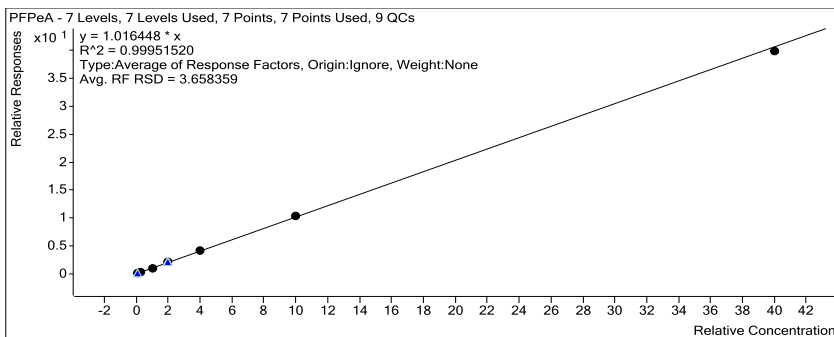


Target Compound

PFMPA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	1779	0.5000	0.1480
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	4139	1.2500	0.1380
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	16956	5.0000	0.1357
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	34460	10.0000	0.1478

Quantitative Analysis Calibration Report



Extracted ISTD

M3PFBS

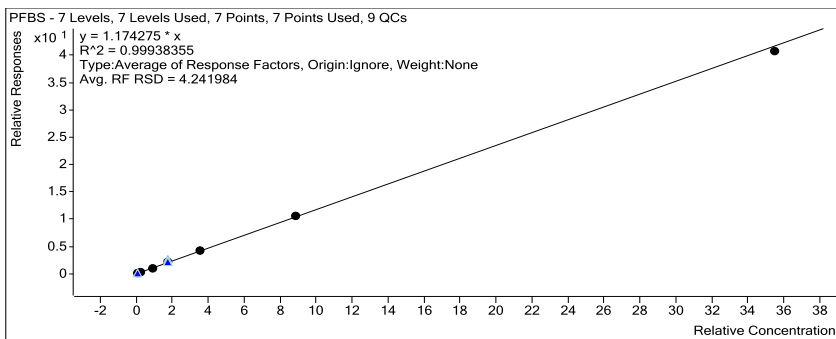
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	56542	5.0000	11308.3800
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	55464	5.0000	11092.7942
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	57744	5.0000	11548.8388
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	53899	5.0000	10779.8799
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	51750	5.0000	10349.9411
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	49248	5.0000	9849.6476
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	44509	5.0000	8901.7764

Target Compound

PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	6291	0.4435	1.2543
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	13760	1.1088	1.1187
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	57182	4.4350	1.1164
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	114974	8.8700	1.2024
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	216336	17.7400	1.1782
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	524141	44.3500	1.1999
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1815956	177.4000	1.1499

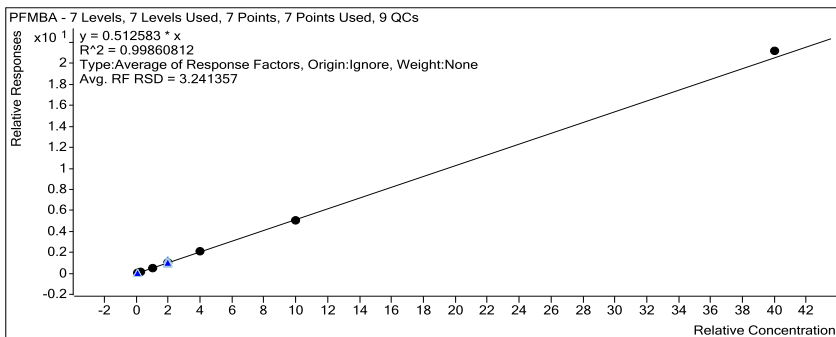
Quantitative Analysis Calibration Report



Target Compound

PFMBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	9082	0.5000	0.5170
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	21130	1.2500	0.4875
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	89797	5.0000	0.4952
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	179082	10.0000	0.5230
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	338306	20.0000	0.5287
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	830040	50.0000	0.5068
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	3195016	200.0000	0.5299



Target Compound

PFEESA

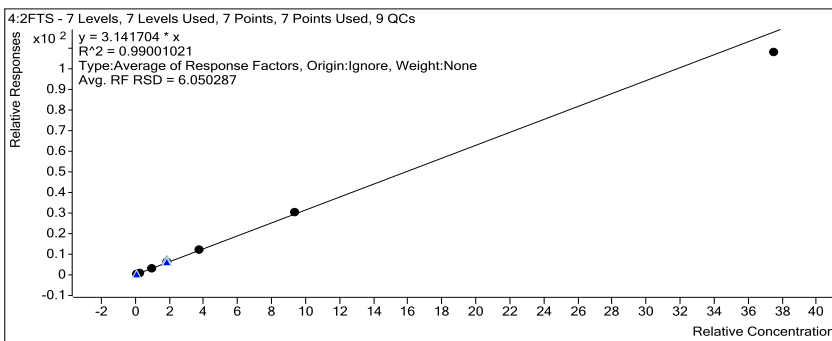
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	14520	0.4450	3.7199
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	35545	1.1125	3.7989
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	149453	4.4500	3.7183
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	301442	8.9000	4.0312
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	581657	17.8000	4.0885

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	24434	5.0000	4886.7492
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	22509	5.0000	4501.8456
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	19132	5.0000	3826.4136
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	14463	5.0000	2892.5556

Target Compound 4:2F7S

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	8635	0.4685	3.0704
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	19796	1.1713	2.9551
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	81740	4.6850	3.1243
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	156900	9.3700	3.4266
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	277878	18.7400	3.2938
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	579564	46.8500	3.2330
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1565911	187.4000	2.8888



Extracted ISTD M5PFHxA

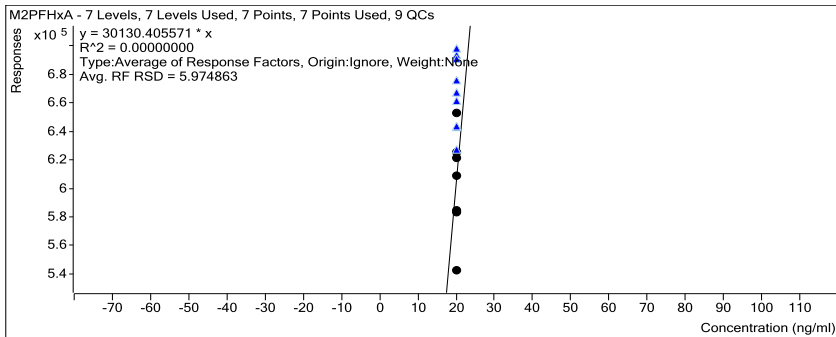
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	175661	5.0000	35132.1371
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D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	181352	5.0000	36270.3824
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	171208	5.0000	34241.5233
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	159960	5.0000	31991.9536
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	163794	5.0000	32758.8823
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Instrument ISTD M2PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	653122	20.0000	32656.1065
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	624999	20.0000	31249.9491
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	621148	20.0000	31057.4197
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	609015	20.0000	30450.7507
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	582926	20.0000	29146.2785

Quantitative Analysis Calibration Report

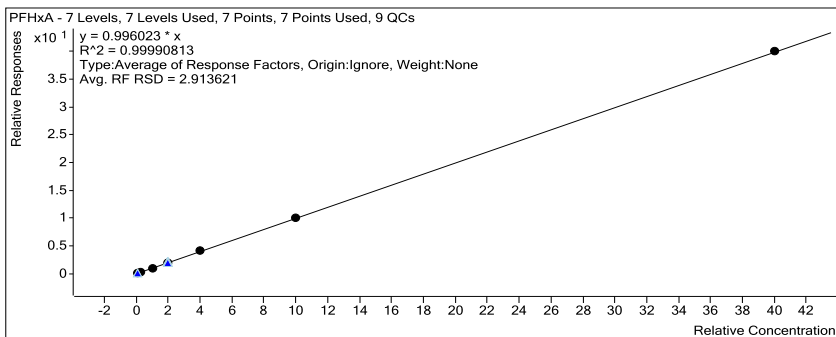
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	584710	20.0000	29235.4815
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	542337	20.0000	27116.8530



Target Compound

PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	17874	0.5000	1.0175
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	41438	1.2500	0.9560
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	173085	5.0000	0.9544
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	343702	10.0000	1.0038
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	656754	20.0000	1.0264
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	1656074	50.0000	1.0111
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	6046878	200.0000	1.0029



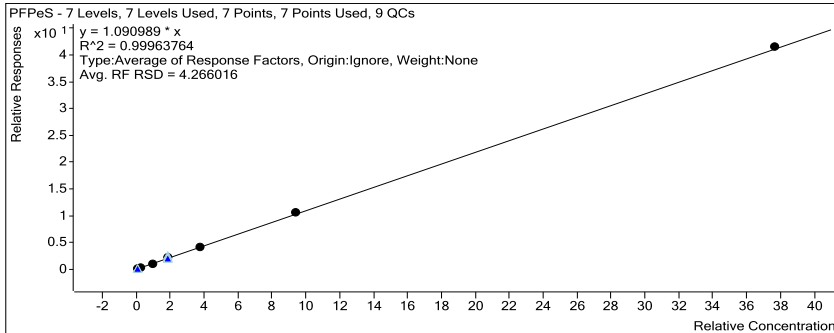
Target Compound

PFPeS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	5803	0.4705	1.0907
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	13232	1.1763	1.0141
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	56834	4.7050	1.0460

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	116153	9.4100	1.1451
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	214633	18.8200	1.1019
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	525178	47.0500	1.1333
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1852900	188.2000	1.1060



Extracted ISTD

M3HFPODA

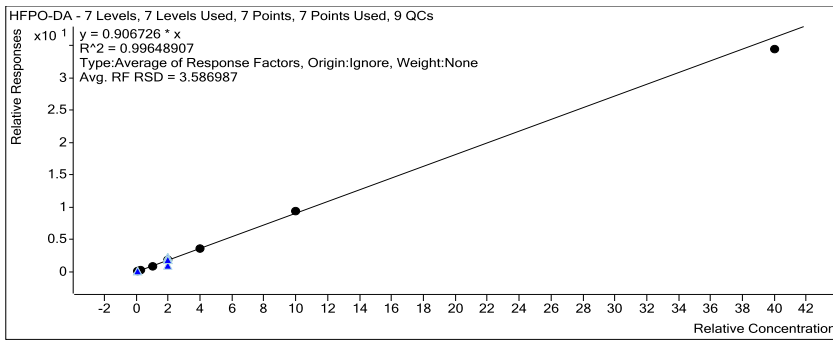
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	49638	10.0000	4963.8395
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	48560	10.0000	4856.0148
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	49374	10.0000	4937.4277
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	48513	10.0000	4851.2941
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	45875	10.0000	4587.4948
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	44357	10.0000	4435.6812
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	40645	10.0000	4064.4747

Target Compound

HFPO-DA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	4642	1.0000	0.9351
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	10497	2.5000	0.8647
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	44514	10.0000	0.9016
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	90335	20.0000	0.9310
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	167234	40.0000	0.9114
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	417353	100.0000	0.9409
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1402061	400.0000	0.8624

Quantitative Analysis Calibration Report



Extracted ISTD

M4PFHpA

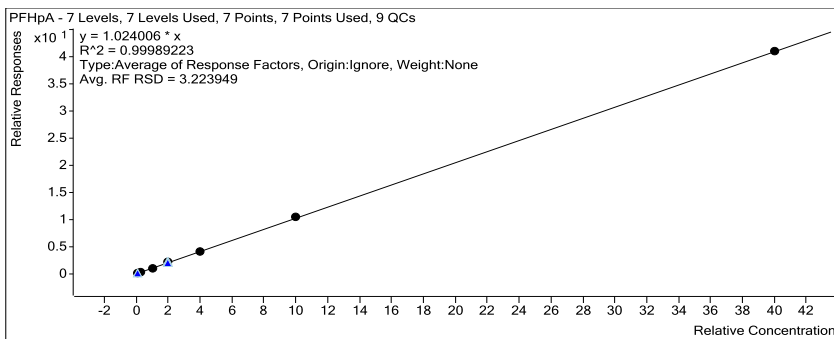
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	204514	5.0000	40902.7369
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	200189	5.0000	40037.8550
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	211960	5.0000	42392.0019
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	199731	5.0000	39946.2642
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	193352	5.0000	38670.3732
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	188415	5.0000	37682.9638
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	181309	5.0000	36261.8410

Target Compound

PFHpA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	20649	0.5000	1.0097
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	49551	1.2500	0.9901
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	207467	5.0000	0.9788
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	426564	10.0000	1.0678
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	802456	20.0000	1.0376
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	1989441	50.0000	1.0559
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	7456953	200.0000	1.0282

Quantitative Analysis Calibration Report



Extracted ISTD

M3PFHxS

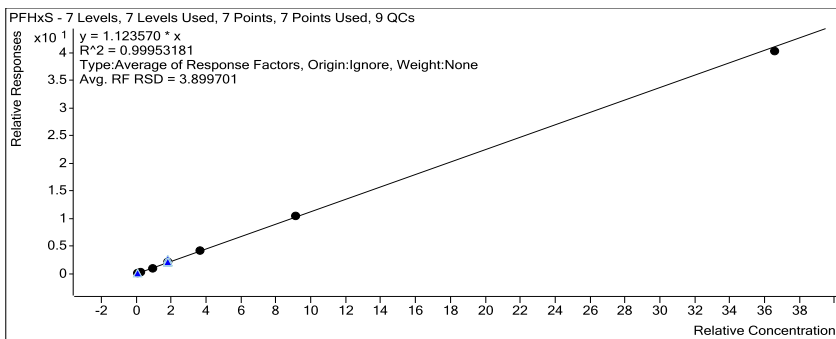
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	43856	5.0000	8771.2086
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	42052	5.0000	8410.4773
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	45162	5.0000	9032.4495
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	42009	5.0000	8401.8778
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	39963	5.0000	7992.5507
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	39101	5.0000	7820.2876
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	37224	5.0000	7444.7426

Target Compound

PFHxS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	4636	0.4570	1.1565
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	10509	1.1425	1.0937
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	43176	4.5700	1.0460
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	88975	9.1400	1.1586
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	169701	18.2800	1.1615
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	409208	45.7000	1.1450
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1501993	182.8000	1.1037

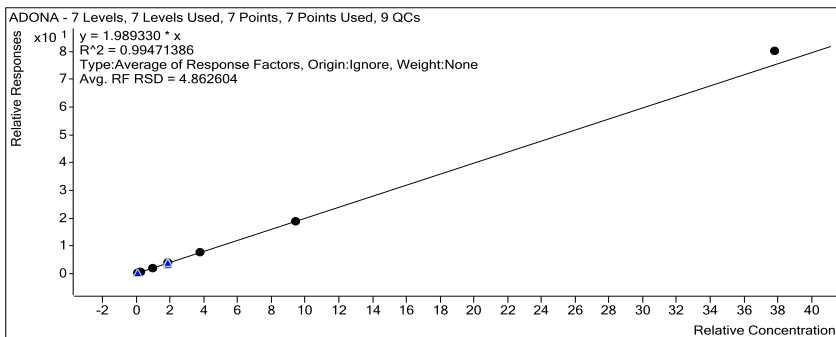
Quantitative Analysis Calibration Report



Target Compound

ADONA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	32742	0.4725	1.9348
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	78070	1.1813	1.8497
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	328858	4.7250	1.9076
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	672093	9.4500	2.0392
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	1282483	18.9000	2.0647
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	3112799	47.2500	2.0034
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	12065305	189.0000	2.1258



Extracted ISTD

M2 6:2 FTS

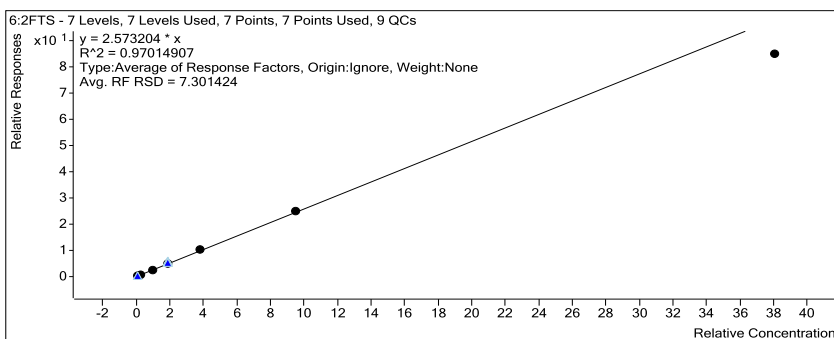
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	26881	5.0000	5376.2046
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	26314	5.0000	5262.8422
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	26263	5.0000	5252.6833
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	24174	5.0000	4834.8844
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	22555	5.0000	4511.0055

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	17990	5.0000	3597.9953
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	13707	5.0000	2741.4906

Target Compound 6:2FTS

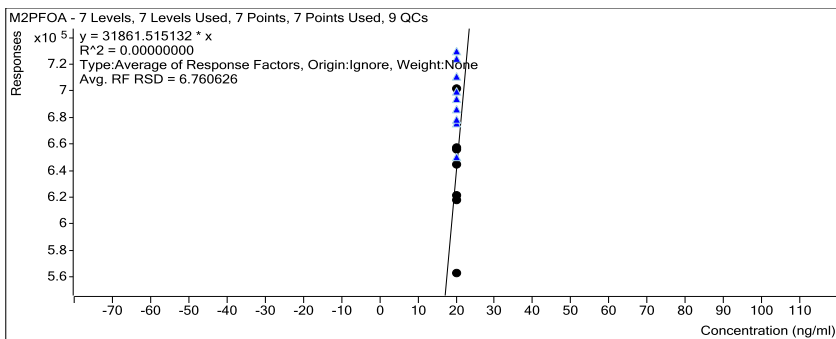
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	7130	0.4755	2.7893
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	15416	1.1888	2.4641
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	62732	4.7550	2.5117
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	124662	9.5100	2.7112
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	230556	19.0200	2.6871
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	447519	47.5500	2.6158
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1164493	190.2000	2.2333



Instrument ISTD M2PFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	701791	20.0000	35089.5252
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	655602	20.0000	32780.1194
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	657064	20.0000	32853.1796
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	644276	20.0000	32213.7902
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	617610	20.0000	30880.4882
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	621589	20.0000	31079.4302
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	562681	20.0000	28134.0730

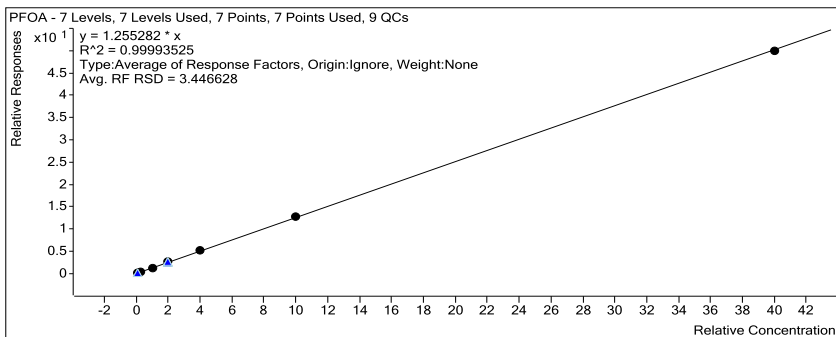
Quantitative Analysis Calibration Report



Target Compound

PFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	22444	0.5000	1.2533
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	53707	1.2500	1.2026
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	218777	5.0000	1.1993
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	452741	10.0000	1.2981
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	862182	20.0000	1.3117
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	2090756	50.0000	1.2716
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	7509670	200.0000	1.2504

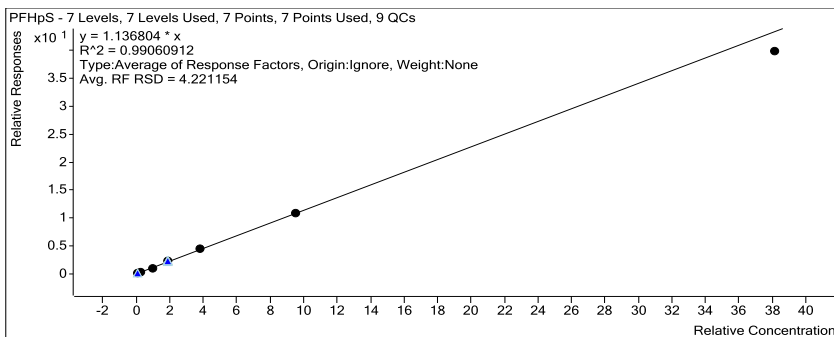


Extracted ISTD

M8PFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	179076	5.0000	35815.2796
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	178642	5.0000	35728.4949
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	182426	5.0000	36485.2767
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	174383	5.0000	34876.6410
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	164324	5.0000	32864.7457

Quantitative Analysis Calibration Report



Extracted ISTD

M9PFNA

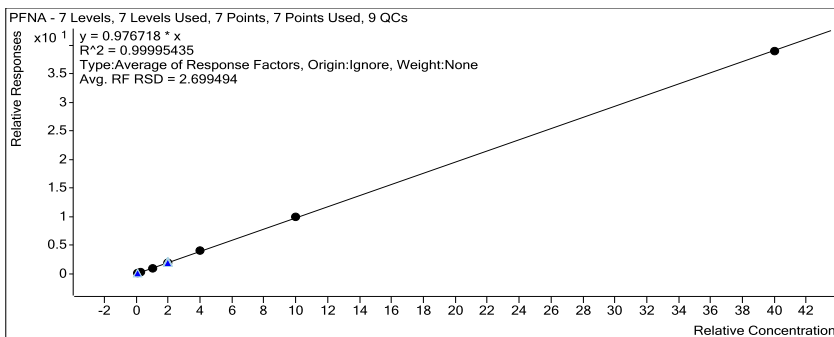
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	210332	5.0000	42066.3305
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	204640	5.0000	40928.0318
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	213131	5.0000	42626.1846
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	201702	5.0000	40340.4565
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	191274	5.0000	38254.8928
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	187621	5.0000	37524.1976
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	171814	5.0000	34362.7915

Target Compound

PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	20447	0.5000	0.9721
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	48265	1.2500	0.9434
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	200950	5.0000	0.9428
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	406714	10.0000	1.0082
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	765222	20.0000	1.0002
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	1867587	50.0000	0.9954
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	6699951	200.0000	0.9749

Quantitative Analysis Calibration Report



Extracted ISTD

M8PFOS

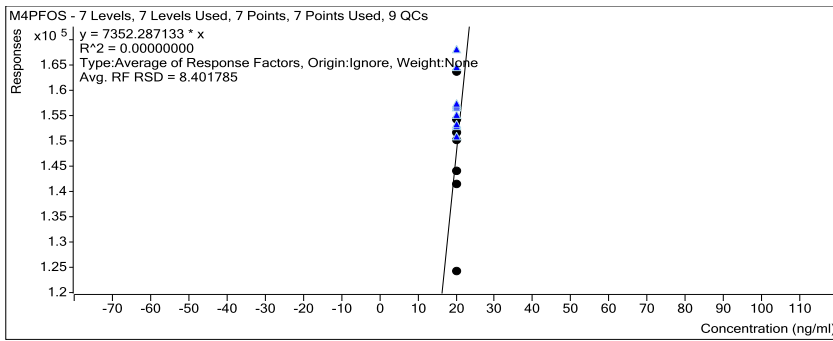
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	40442	5.0000	8088.4262
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	39694	5.0000	7938.8574
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	41345	5.0000	8268.9941
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	38357	5.0000	7671.3771
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	36597	5.0000	7319.3286
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	35638	5.0000	7127.6815
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	31398	5.0000	6279.6877

Instrument ISTD

M4PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	163605	20.0000	8180.2656
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	154162	20.0000	7708.1078
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	151666	20.0000	7583.3143
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	150173	20.0000	7508.6290
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	143986	20.0000	7199.3000
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	141472	20.0000	7073.6010
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	124256	20.0000	6212.7923

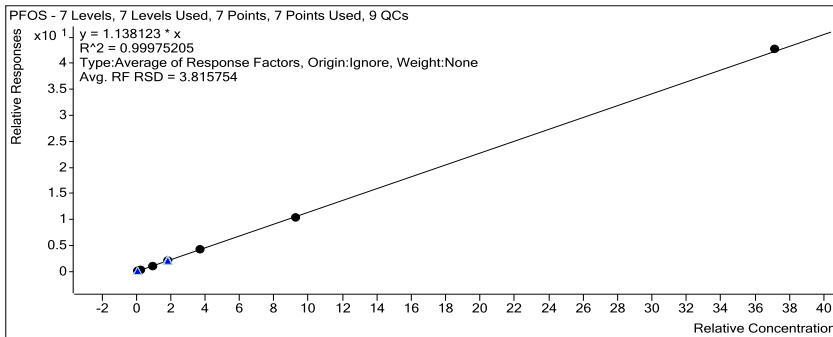
Quantitative Analysis Calibration Report



Target Compound

PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	4483	0.4640	1.1944
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	10140	1.1600	1.1011
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	40916	4.6400	1.0664
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	83194	9.2800	1.1686
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	157059	18.5600	1.1561
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	372556	46.4000	1.1265
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1344577	185.6000	1.1536



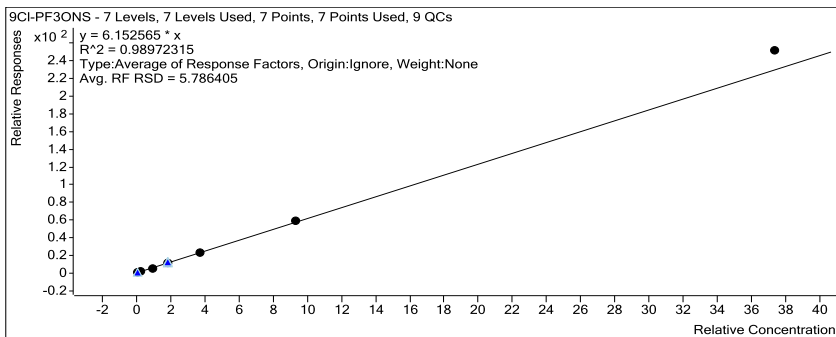
Target Compound

9CI-PF30NS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	22520	0.4665	5.9684
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	53779	1.1663	5.8082
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	220427	4.6650	5.7143
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	449693	9.3300	6.2829
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	848857	18.6600	6.2152

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	2097238	46.5500	6.3209
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	7919038	186.6000	6.7581



Extracted ISTD

M2 8:2 FTS

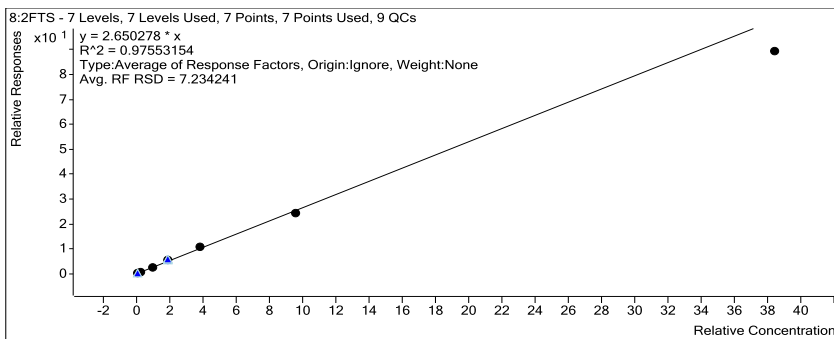
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	18851	5.0000	3770.1442
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	17605	5.0000	3521.0621
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	17515	5.0000	3503.0160
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	15728	5.0000	3145.6258
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	14115	5.0000	2822.9081
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	12547	5.0000	2509.4677
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	8760	5.0000	1751.9226

Target Compound

8:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	4567	0.4800	2.5236
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	11679	1.2000	2.7642
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	45130	4.8000	2.6840
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	86828	9.6000	2.8753
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	152809	19.2000	2.8194
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	307713	48.0000	2.5546
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	784032	192.0000	2.3309

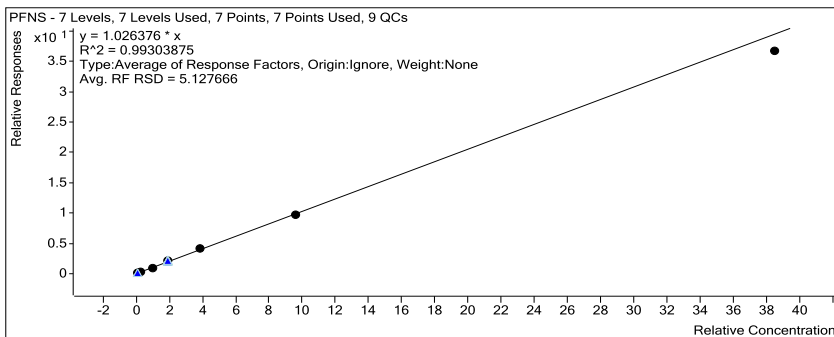
Quantitative Analysis Calibration Report



Target Compound

PFNS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	4123	0.4810	1.0597
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	9507	1.2025	0.9959
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	38974	4.8100	0.9799
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	80013	9.6200	1.0842
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	153564	19.2400	1.0905
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	349069	48.1000	1.0182
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1155499	192.4000	0.9564

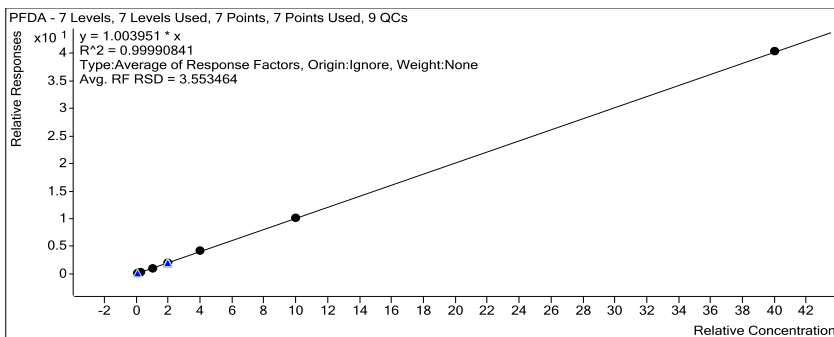


Extracted ISTD

M6PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	216946	5.0000	43389.2861
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	212720	5.0000	42543.9415
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	224844	5.0000	44968.8775
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	205185	5.0000	41037.0182
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	189963	5.0000	37992.5559

Quantitative Analysis Calibration Report



Extracted ISTD

d3-NMeFOSAA

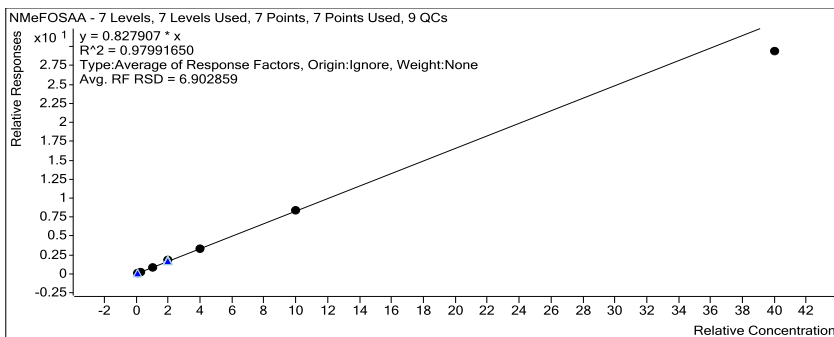
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	23524	5.0000	4704.7023
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	22406	5.0000	4481.2902
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	23373	5.0000	4674.6792
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	21596	5.0000	4319.2465
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	21364	5.0000	4272.8297
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	21721	5.0000	4344.2362
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	23841	5.0000	4768.2423

Target Compound

NMeFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	1865	0.5000	0.7930
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	4930	1.2500	0.8801
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	18739	5.0000	0.8017
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	39166	10.0000	0.9068
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	72169	20.0000	0.8445
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	181001	50.0000	0.8333
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	701911	200.0000	0.7360

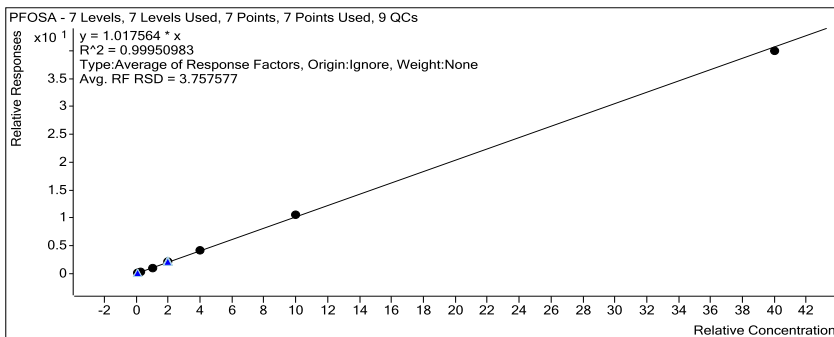
Quantitative Analysis Calibration Report



Target Compound

PFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	7761	0.5000	0.9747
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	19116	1.2500	0.9951
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	78473	5.0000	0.9800
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	159679	10.0000	1.0594
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	303511	20.0000	1.0561
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	756007	50.0000	1.0565
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	2961775	200.0000	1.0012



Extracted ISTD

M8FOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	79619	5.0000	15923.7221
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	76840	5.0000	15367.9117
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	80078	5.0000	16015.6126
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	75362	5.0000	15072.3118
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	71849	5.0000	14369.7297

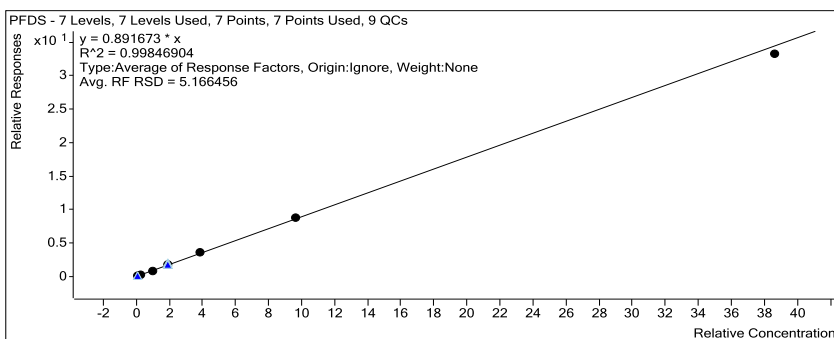
Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	71559	5.0000	14311.8170
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	73959	5.0000	14791.7733

Target Compound

PFDS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	3291	0.4825	0.8433
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	8451	1.2063	0.8825
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	33675	4.8250	0.8440
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	70538	9.6500	0.9529
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	133947	19.3000	0.9482
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	312276	48.2500	0.9080
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1045784	193.0000	0.8629

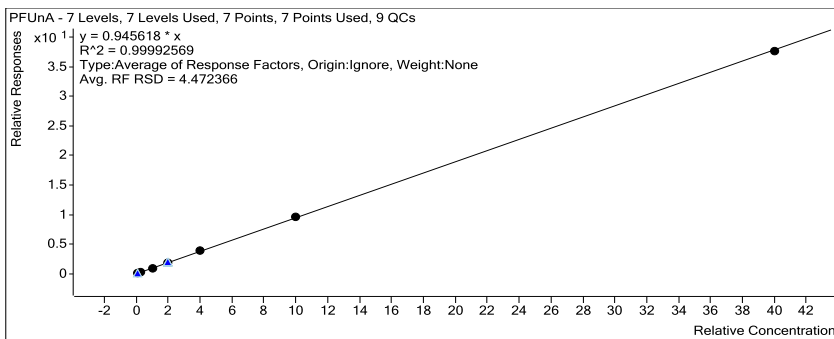


Target Compound

PFUnA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	24075	0.5000	0.9939
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	53925	1.2500	0.8976
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	220972	5.0000	0.8823
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	441991	10.0000	0.9571
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	855087	20.0000	0.9871
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	1975193	50.0000	0.9601
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	7015357	200.0000	0.9413

Quantitative Analysis Calibration Report



Extracted ISTD

d5-NEtFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	39366	5.0000	7873.2108
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	38380	5.0000	7675.9768
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	39512	5.0000	7902.3252
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	36570	5.0000	7314.0774
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	33861	5.0000	6772.2620
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	33622	5.0000	6724.3879
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	26830	5.0000	5366.0660

Extracted ISTD

M7PFUnA

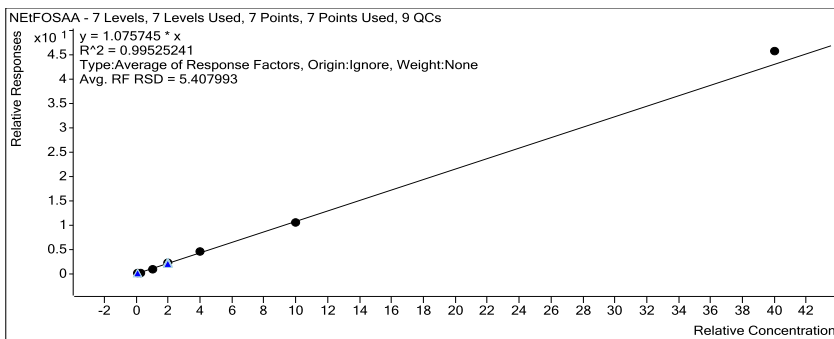
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	242231	5.0000	48446.2333
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	240315	5.0000	48063.0454
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	250456	5.0000	50091.2547
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	230902	5.0000	46180.4405
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	216563	5.0000	43312.6796
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	205738	5.0000	41147.6369
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	186313	5.0000	37262.6017

Target Compound

NEtFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	4239	0.5000	1.0769
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	9542	1.2500	0.9945
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	39932	5.0000	1.0106
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	81649	10.0000	1.1163
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	152752	20.0000	1.1278
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	356018	50.0000	1.0589
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1229025	200.0000	1.1452

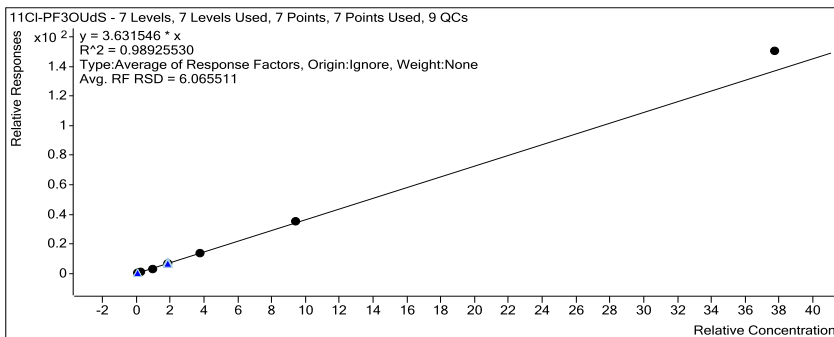
Quantitative Analysis Calibration Report



Target Compound

11CI-PF3OUdS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	13544	0.4715	3.5513
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	31629	1.1788	3.3798
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	131337	4.7150	3.3686
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	266909	9.4300	3.6896
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	512684	18.8600	3.7140
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	1250044	47.1500	3.7196
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	4734969	188.6000	3.9980

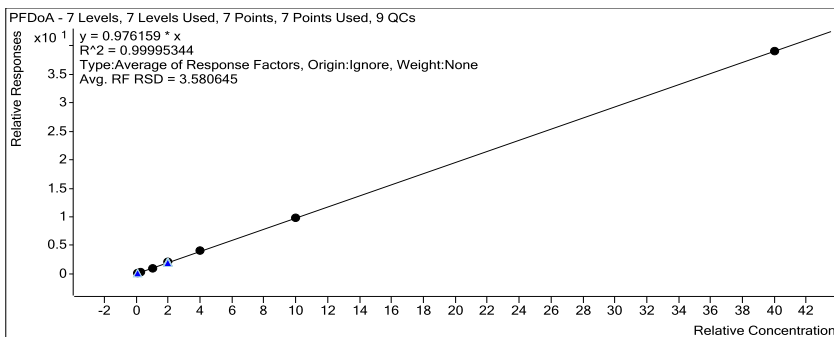


Target Compound

10:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	4969	0.4820	2.7343
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	11866	1.2050	2.7967
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	45222	4.8200	2.6783
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	88082	9.6400	2.9047
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	163117	19.2800	2.9971

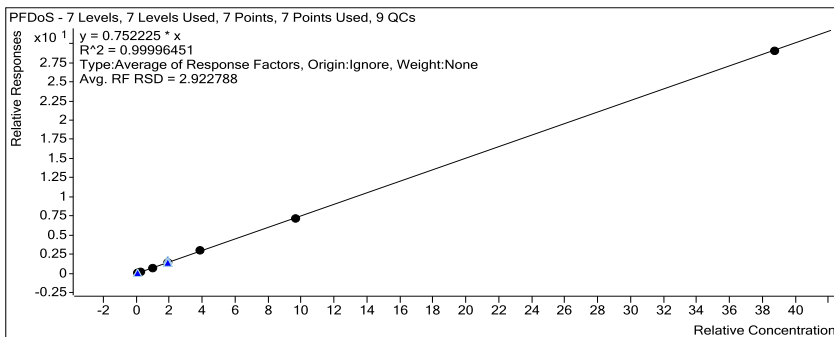
Quantitative Analysis Calibration Report



Target Compound

PFDoS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	3027	0.4840	0.7731
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	7165	1.2100	0.7459
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	28516	4.8400	0.7125
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	57254	9.6800	0.7710
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	109302	19.3600	0.7714
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	255635	48.4000	0.7410
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	912697	193.6000	0.7507



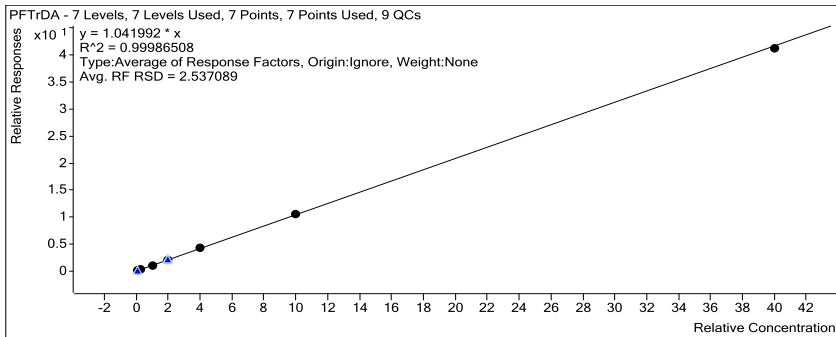
Target Compound

PFTrDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	33427	0.5000	1.0448
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	79116	1.2500	1.0362
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	318052	5.0000	0.9926
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	641095	10.0000	1.0669
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	1211111	20.0000	1.0730

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	3001186	50.0000	1.0483
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	11089608	200.0000	1.0321



Extracted ISTD

d-NMeFOSA

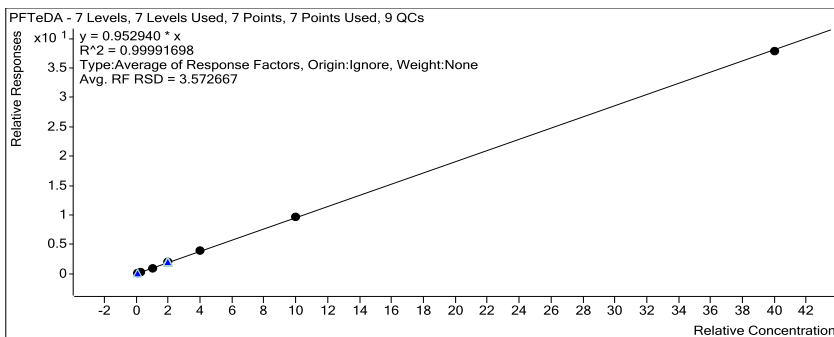
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	16790	5.0000	3358.0532
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	16694	5.0000	3338.7940
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	17665	5.0000	3532.9451
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	16551	5.0000	3310.2910
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	16387	5.0000	3277.3837
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	16701	5.0000	3340.2281
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	18088	5.0000	3617.5488

Target Compound

NMeFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	1913	0.5000	1.1392
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	4574	1.2500	1.0960
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	19164	5.0000	1.0849
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	39119	10.0000	1.1817
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	75577	20.0000	1.1530
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	185166	50.0000	1.1087
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	736974	200.0000	1.0186

Quantitative Analysis Calibration Report



Extracted ISTD

d9-NetFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	14473	5.0000	2894.5981
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	14659	5.0000	2931.8589
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	14798	5.0000	2959.6085
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	13716	5.0000	2743.2648
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	13551	5.0000	2710.1337
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	13917	5.0000	2783.3480
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	13467	5.0000	2693.3266

Extracted ISTD

d-NetFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	17257	5.0000	3451.4249
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	16877	5.0000	3375.4153
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	17682	5.0000	3536.4838
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	16245	5.0000	3249.0203
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	16289	5.0000	3257.8536
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	16008	5.0000	3201.5600
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	15434	5.0000	3086.7362

Target Compound

NetFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	1608	0.5000	1.1114
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	3868	1.2500	1.0553
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	15969	5.0000	1.0791
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	33344	10.0000	1.2155
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	62800	20.0000	1.1586
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	153603	50.0000	1.1037
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	597309	200.0000	1.1089

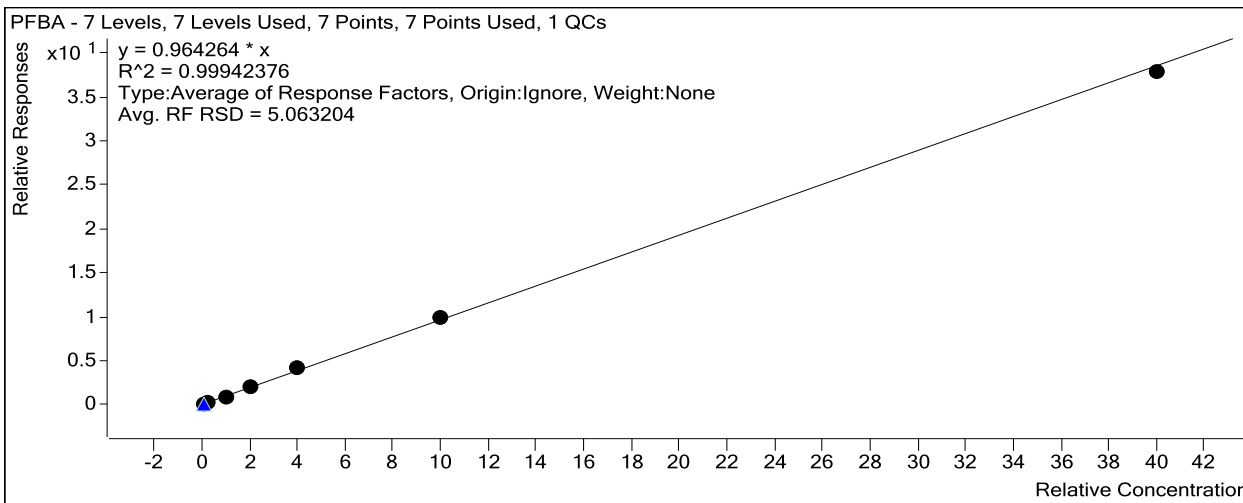
Quantitative Analysis Calibration Report

Batch Data Path	C:\MassHunter\Data\QQQ4\2220412BCAL\QuantResults\2220418B.batch.bin		
Analysis Time	4/19/2022 4:39 PM	Analyst Name	GCAL\jcms
Report Time	4/20/2022 8:56 AM	Reporter Name	GCAL\jcms
Last Calib Update	4/13/2022 9:39 AM	Batch State	Processed

Calibration Info

Target Compound PFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	9253	0.5000	0.9252
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	23259	1.2500	0.9109
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	96924	5.0000	0.9254
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	203327	10.0000	1.0166
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	422714	20.0000	1.0317
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1034877	50.0000	0.9930
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	3674143	200.0000	0.9470



Extracted ISTD

MPFBA

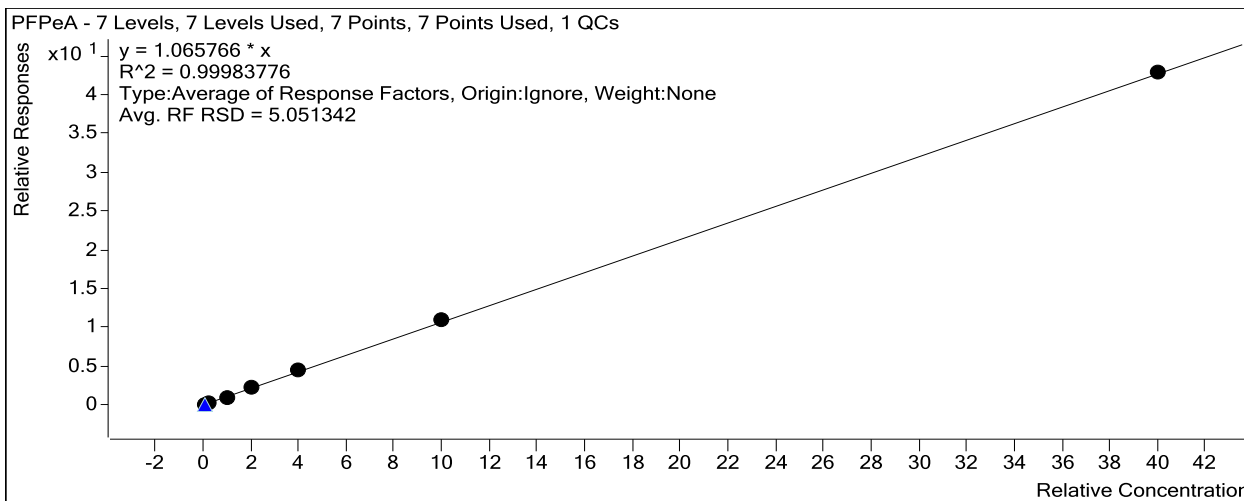
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	100011	5.0000	20002.2128
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	102141	5.0000	20428.2966
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	104739	5.0000	20947.7597
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	100004	5.0000	20000.8618
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	102429	5.0000	20485.7396
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	104212	5.0000	20842.4858
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	96995	5.0000	19398.9391

Target Compound

PFMPA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1454	0.5000	0.1135
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	3758	1.2500	0.1135
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	14822	5.0000	0.1110
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	31144	10.0000	0.1225

Quantitative Analysis Calibration Report



Extracted ISTD

M3PFBS

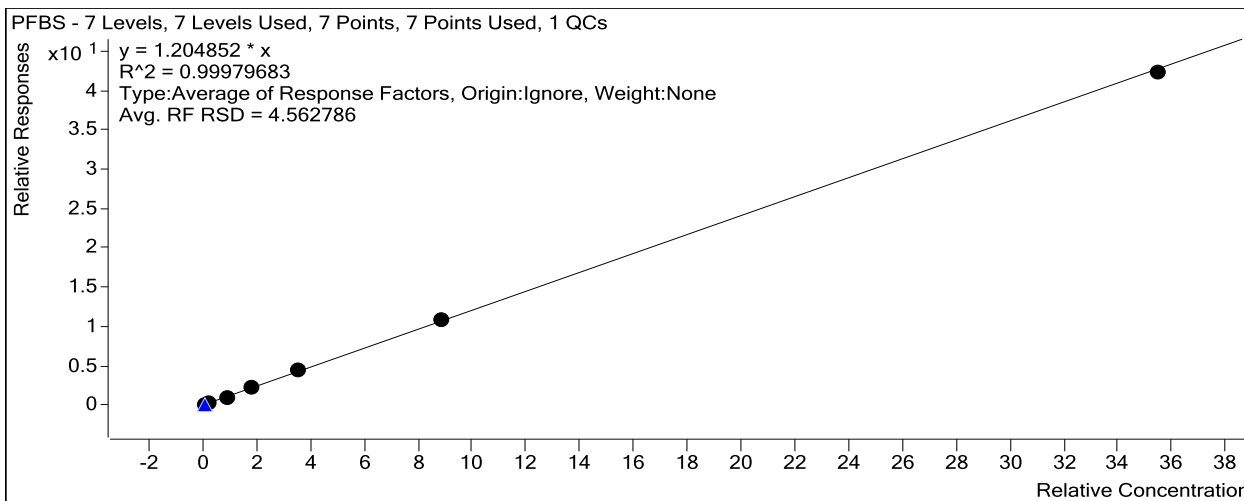
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	42029	5.0000	8405.7706
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	42986	5.0000	8597.2450
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	43420	5.0000	8683.9831
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	41175	5.0000	8235.0330
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	42361	5.0000	8472.2841
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	41929	5.0000	8385.7303
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	36600	5.0000	7320.0804

Target Compound

PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	4454	0.4435	1.1948
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	10704	1.1088	1.1228
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	44643	4.4350	1.1592
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	92581	8.8700	1.2675
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	191544	17.7400	1.2744
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	454675	44.3500	1.2225
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1548893	177.4000	1.1928

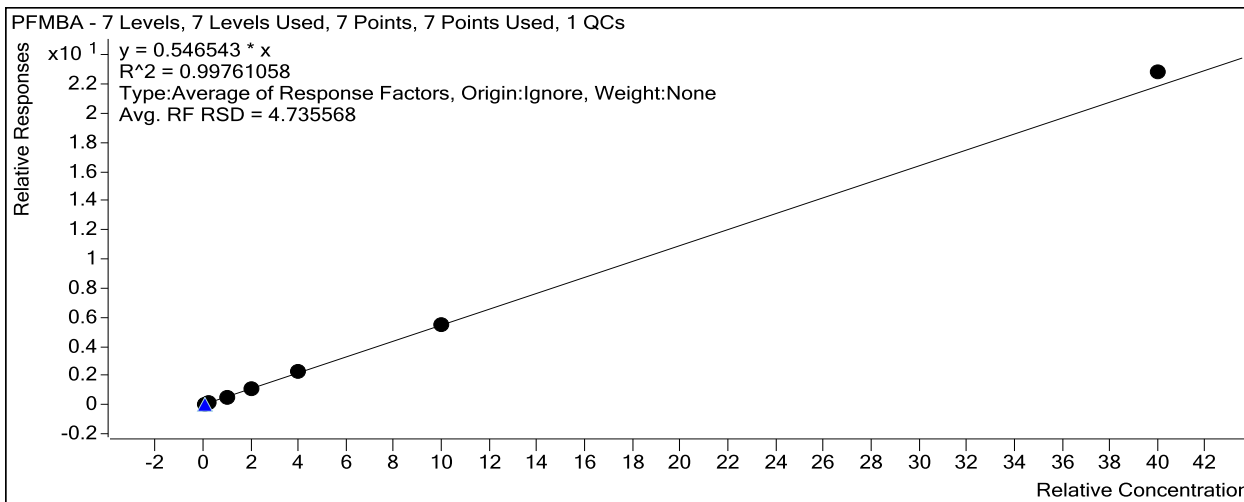
Quantitative Analysis Calibration Report



Target Compound

PFMBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	7889	0.5000	0.5204
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	20153	1.2500	0.5169
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	83650	5.0000	0.5218
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	172898	10.0000	0.5637
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	360705	20.0000	0.5761
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	867336	50.0000	0.5559
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	3240737	200.0000	0.5709



Target Compound

PFEESA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	12715	0.4450	4.2364
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	31812	1.1125	4.1420
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	131655	4.4500	4.2119
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	277652	8.9000	4.6069
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	568170	17.8000	4.7096

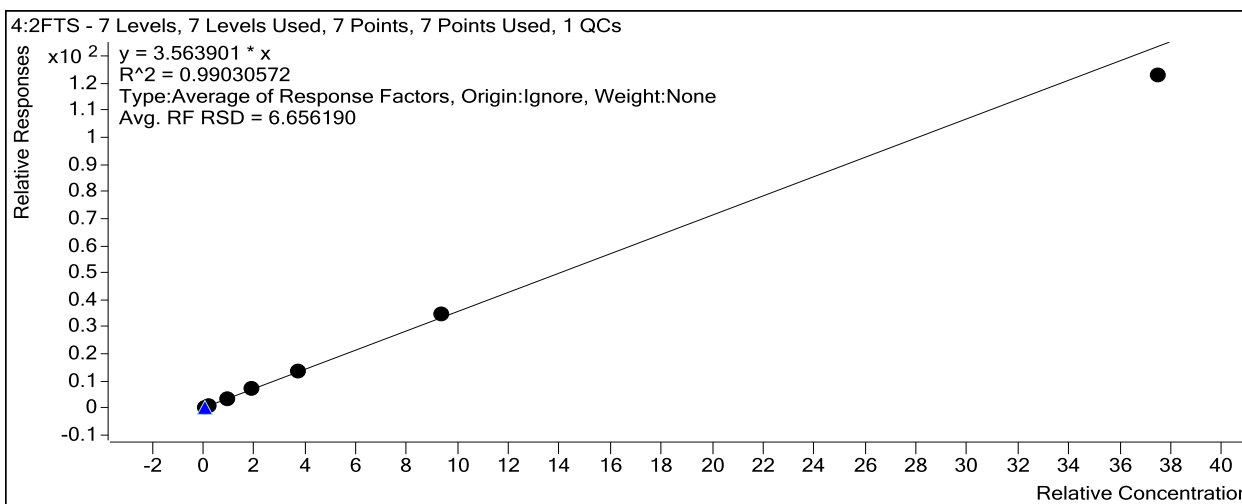
Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	9591	5.0000	1918.2633
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	9673	5.0000	1934.6001
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	8846	5.0000	1769.1046
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	7507	5.0000	1501.4075

Target Compound

4:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3485	0.4685	3.8349
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	7589	1.1713	3.2505
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	32349	4.6850	3.4336
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	66565	9.3700	3.7034
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	135109	18.7400	3.7267
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	308049	46.8500	3.7167
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	923323	187.4000	3.2816



Extracted ISTD

M5PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	151601	5.0000	30320.2217
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	155947	5.0000	31189.4354
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	160297	5.0000	32059.3330
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	153352	5.0000	30670.3382
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	156537	5.0000	31307.3865
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	156022	5.0000	31204.4245
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	141909	5.0000	28381.8407

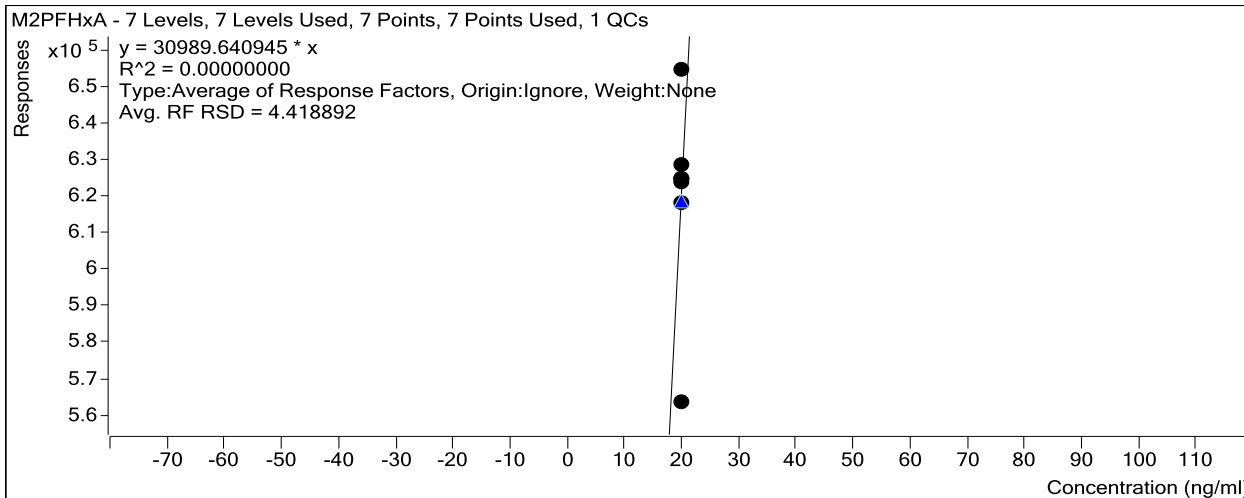
Instrument ISTD

M2PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	624643	20.0000	31232.1384
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	625011	20.0000	31250.5375
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	628415	20.0000	31420.7321
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	618332	20.0000	30916.6060
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	654568	20.0000	32728.4237

Quantitative Analysis Calibration Report

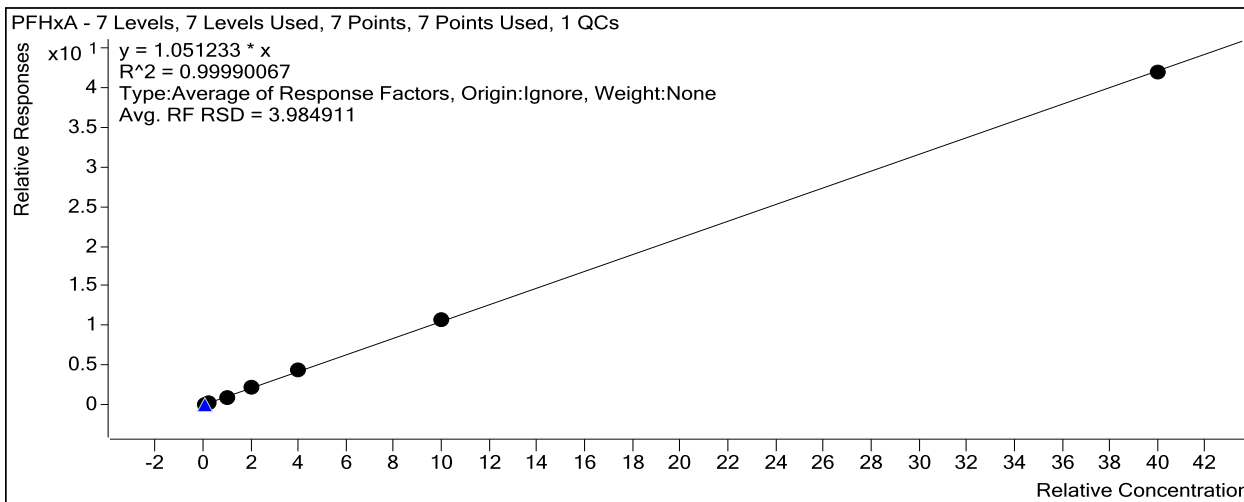
D:\MassHunter\Data\2220412BCAL\2220412B_7.d Calibration 6 623889 20.0000 31194.4333
 D:\MassHunter\Data\2220412BCAL\2220412B_8.d Calibration 7 563692 20.0000 28184.6157



Target Compound

PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	15671	0.5000	1.0337
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	38676	1.2500	0.9920
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	162398	5.0000	1.0131
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	336150	10.0000	1.0960
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	691036	20.0000	1.1036
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1674790	50.0000	1.0734
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5941361	200.0000	1.0467



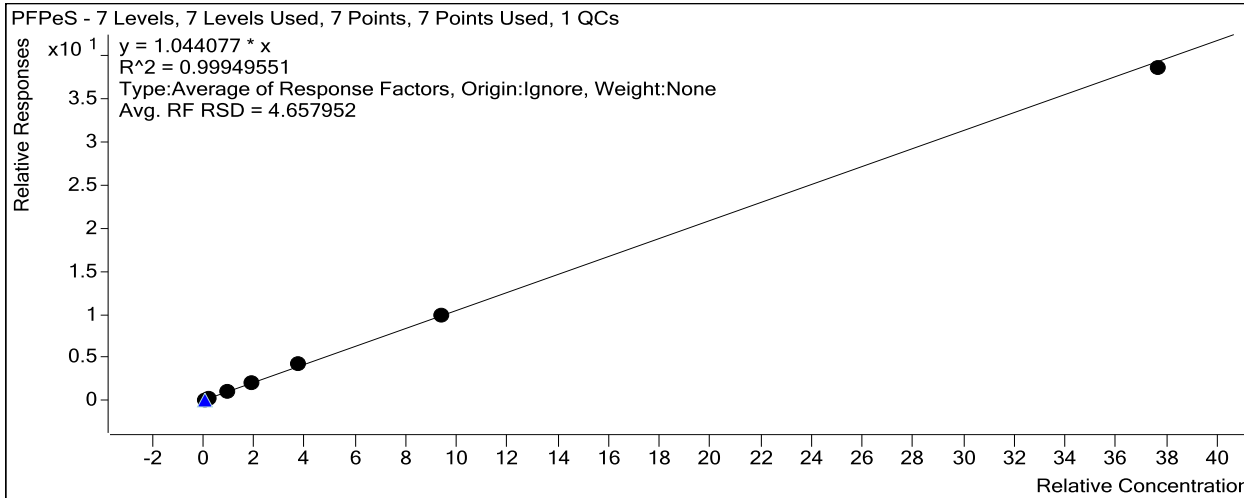
Target Compound

PFPeS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3826	0.4705	0.9675
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	10426	1.1763	1.0309
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	41793	4.7050	1.0229

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	84848	9.4100	1.0949
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	177340	18.8200	1.1122
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	416190	47.0500	1.0549
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1412471	188.2000	1.0253



Extracted ISTD

M3HFPODA

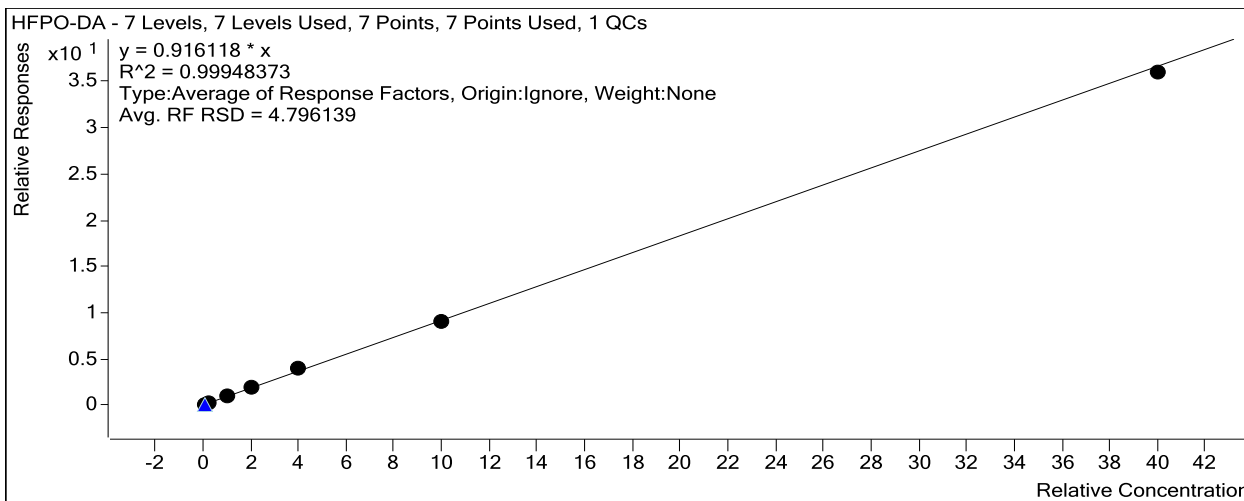
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	40354	10.0000	4035.4393
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	41561	10.0000	4156.0677
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	42390	10.0000	4238.9540
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	41622	10.0000	4162.1844
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	41824	10.0000	4182.4352
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	42297	10.0000	4229.7297
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	37047	10.0000	3704.6775

Target Compound

HFPO-DA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3590	1.0000	0.8895
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	8939	2.5000	0.8603
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	38510	10.0000	0.9085
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	81189	20.0000	0.9753
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	163491	40.0000	0.9772
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	381611	100.0000	0.9022
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1333344	400.0000	0.8998

Quantitative Analysis Calibration Report



Extracted ISTD

M4PFHpA

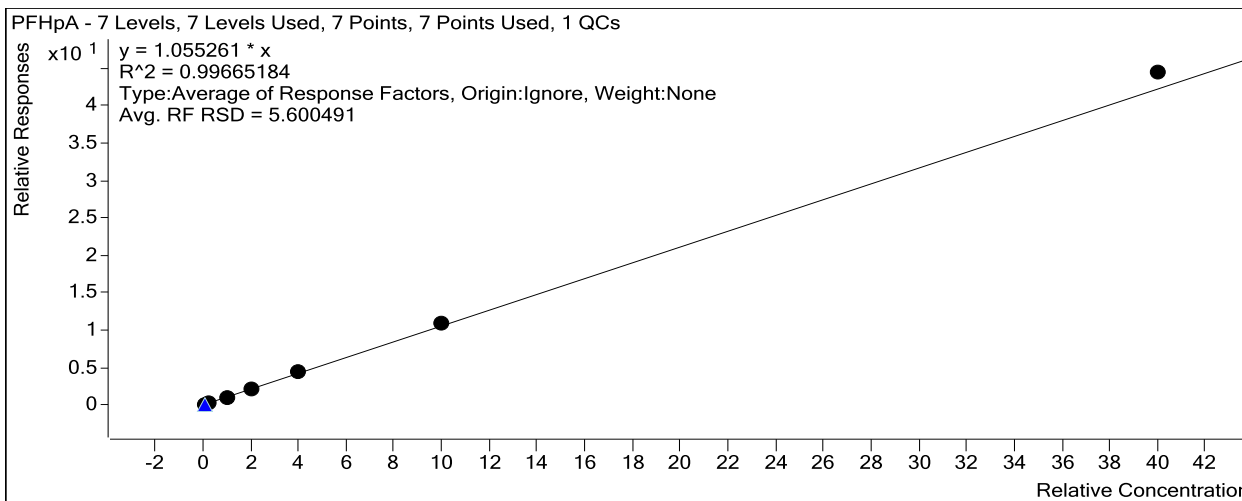
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	243014	5.0000	48602.7171
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	249678	5.0000	49935.6601
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	254223	5.0000	50844.6714
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	244352	5.0000	48870.3472
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	247395	5.0000	49479.0159
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	250747	5.0000	50149.3404
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	224690	5.0000	44938.0909

Target Compound

PFHpA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	23994	0.5000	0.9874
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	61731	1.2500	0.9890
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	255469	5.0000	1.0049
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	533199	10.0000	1.0910
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1108600	20.0000	1.1203
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2715480	50.0000	1.0830
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	9988057	200.0000	1.1113

Quantitative Analysis Calibration Report



Extracted ISTD

M3PFHXS

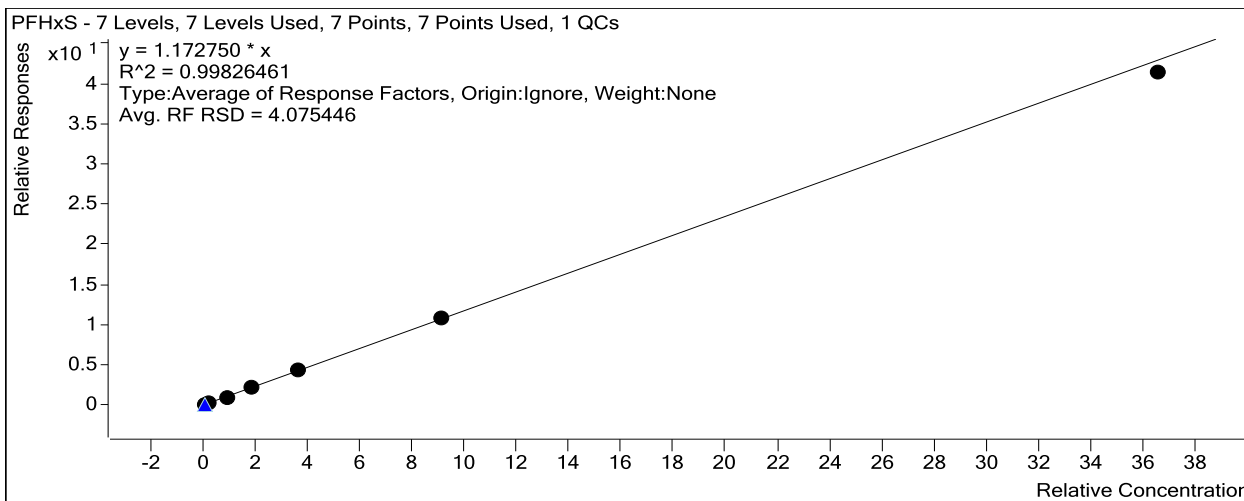
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	33722	5.0000	6744.4753
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	34519	5.0000	6903.7246
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	35121	5.0000	7024.2097
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	33859	5.0000	6771.8178
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	33888	5.0000	6777.5628
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	33519	5.0000	6703.7593
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	29731	5.0000	5946.1925

Target Compound

PFHXS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3797	0.4570	1.2319
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	9013	1.1425	1.1427
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	35487	4.5700	1.1055
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	73232	9.1400	1.1832
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	151730	18.2800	1.2247
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	364438	45.7000	1.1896
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1230080	182.8000	1.1317

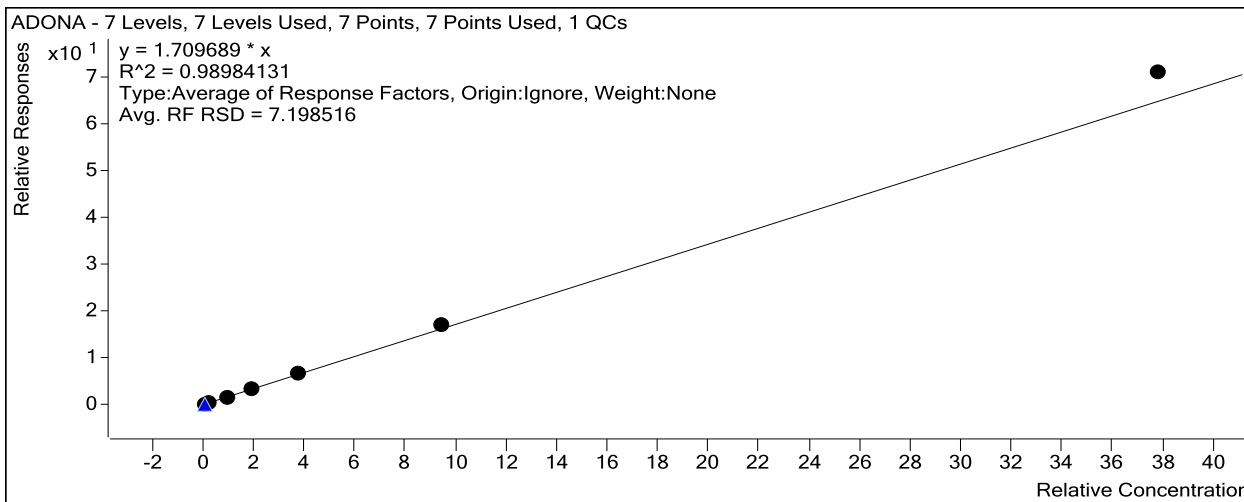
Quantitative Analysis Calibration Report



Target Compound

ADONA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	28980	0.4725	1.5725
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	73699	1.1813	1.5718
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	309297	4.7250	1.6086
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	643290	9.4500	1.7611
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1332142	18.9000	1.7907
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	3315259	47.2500	1.7874
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	12415155	189.0000	1.8758



Extracted ISTD

M2 6:2 FTS

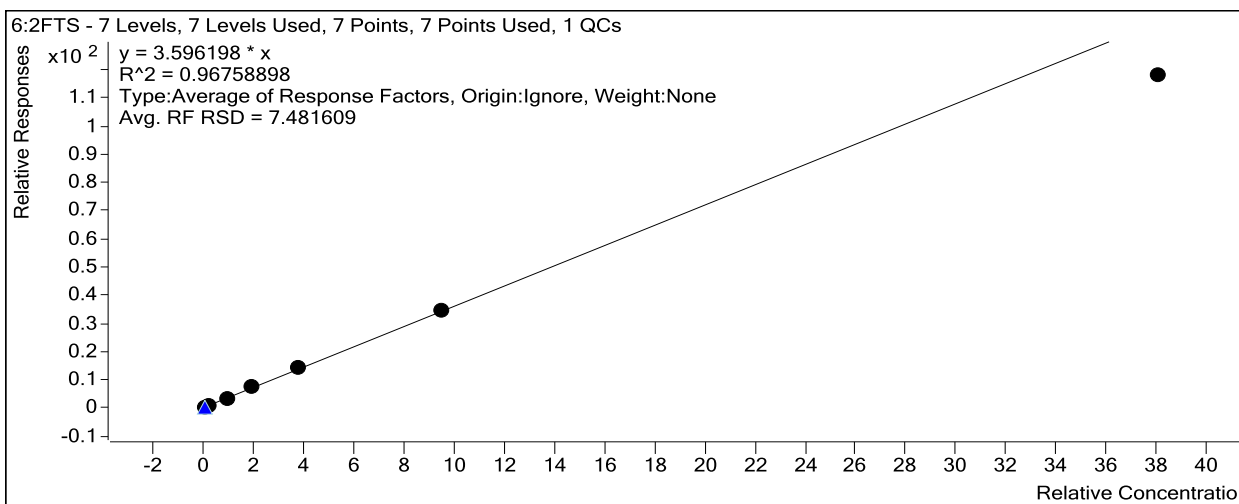
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	8908	5.0000	1781.6614
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	8686	5.0000	1737.2151
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	8901	5.0000	1780.2649
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	8199	5.0000	1639.7658
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	8629	5.0000	1725.8529

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	8369	5.0000	1673.8530
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	7324	5.0000	1464.7487

Target Compound 6:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3083	0.4755	3.6386
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	7156	1.1888	3.4649
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	30459	4.7550	3.5982
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	62017	9.5100	3.9769
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	123483	19.0200	3.7618
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	288807	47.5500	3.6286
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	864869	190.2000	3.1044



Extracted ISTD M8PFOA

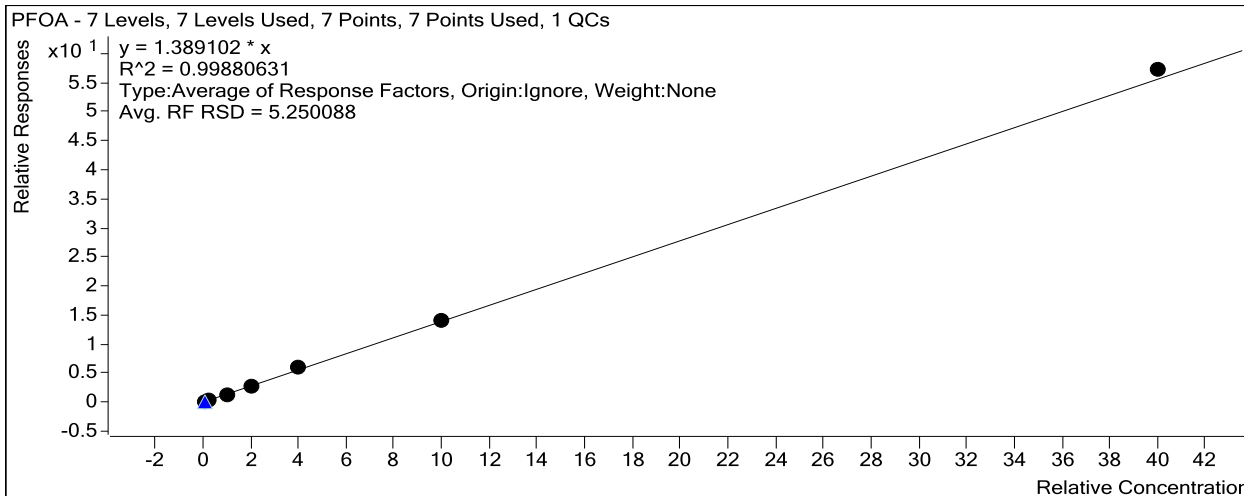
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	195016	5.0000	39003.1458
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	198460	5.0000	39692.0985
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	203471	5.0000	40694.2280
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	193272	5.0000	38654.3547
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	196805	5.0000	39361.0846
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	196280	5.0000	39255.9963
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	175094	5.0000	35018.8531

Instrument ISTD MPFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1332011	25.0000	53280.4408
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	1320598	25.0000	52823.9029
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	1367361	25.0000	54694.4584
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	1349269	25.0000	53970.7650
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1348694	25.0000	53947.7573
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1290257	25.0000	51610.2611
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1174327	25.0000	46973.0945

Quantitative Analysis Calibration Report

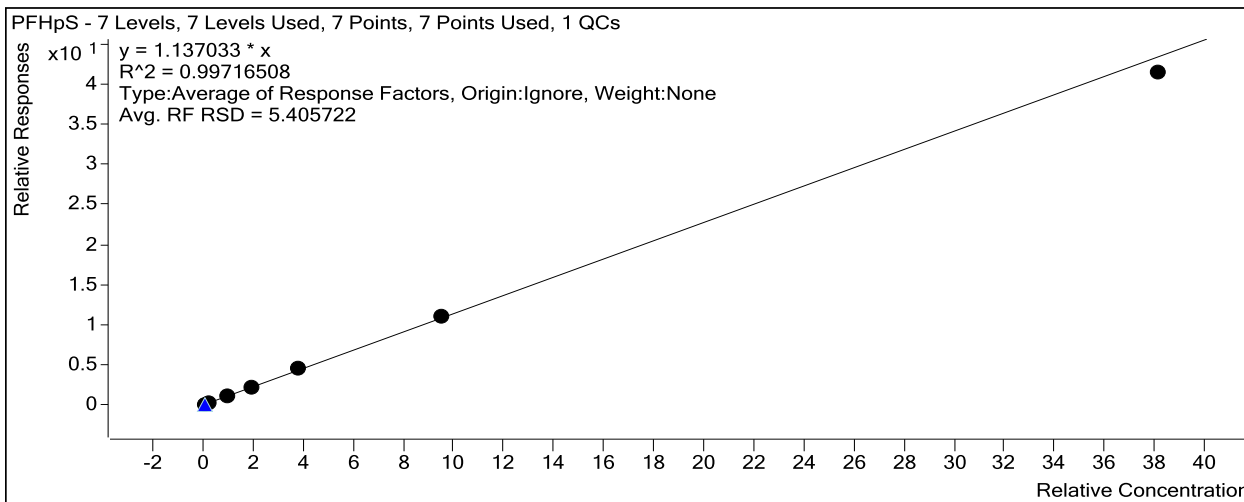
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2791083	50.0000	1.4220
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	10021638	200.0000	1.4309



Target Compound

PFHpS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3543	0.4765	1.1024
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	8829	1.1913	1.0736
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	36779	4.7650	1.0988
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	77939	9.5300	1.2077
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	158276	19.0600	1.2252
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	371881	47.6500	1.1642
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1232268	190.6000	1.0873



Extracted ISTD

M9PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	239155	5.0000	47831.0083
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	240281	5.0000	48056.2176
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	246747	5.0000	49349.4280

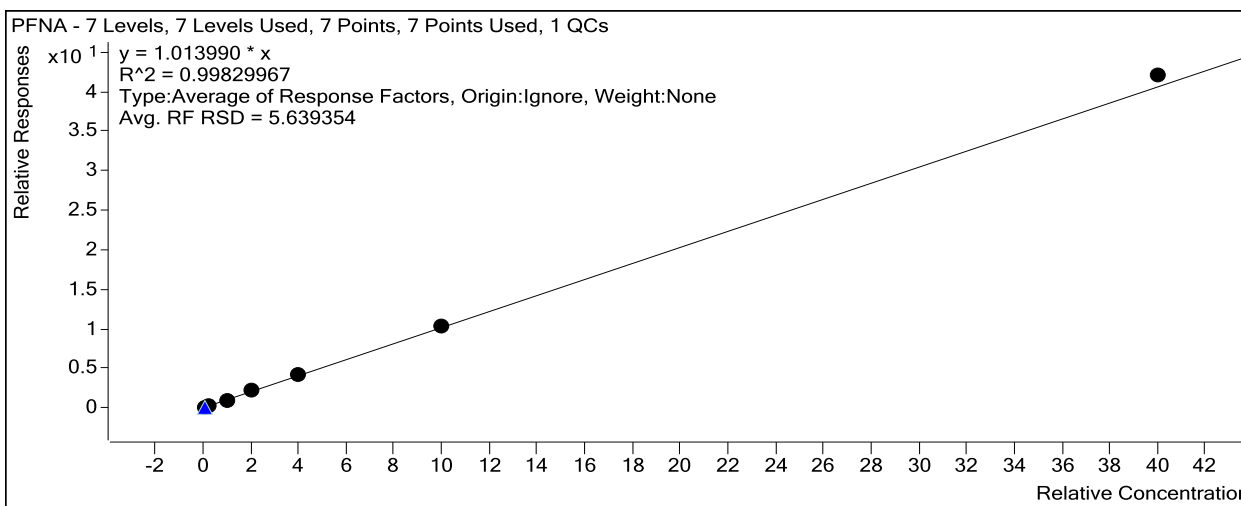
Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	233815	5.0000	46763.0292
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	241084	5.0000	48216.7290
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	239324	5.0000	47864.8157
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	208117	5.0000	41623.4094

Target Compound

PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	22664	0.5000	0.9477
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	56694	1.2500	0.9438
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	240070	5.0000	0.9729
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	502165	10.0000	1.0738
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1030245	20.0000	1.0683
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2489216	50.0000	1.0401
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	8751208	200.0000	1.0512

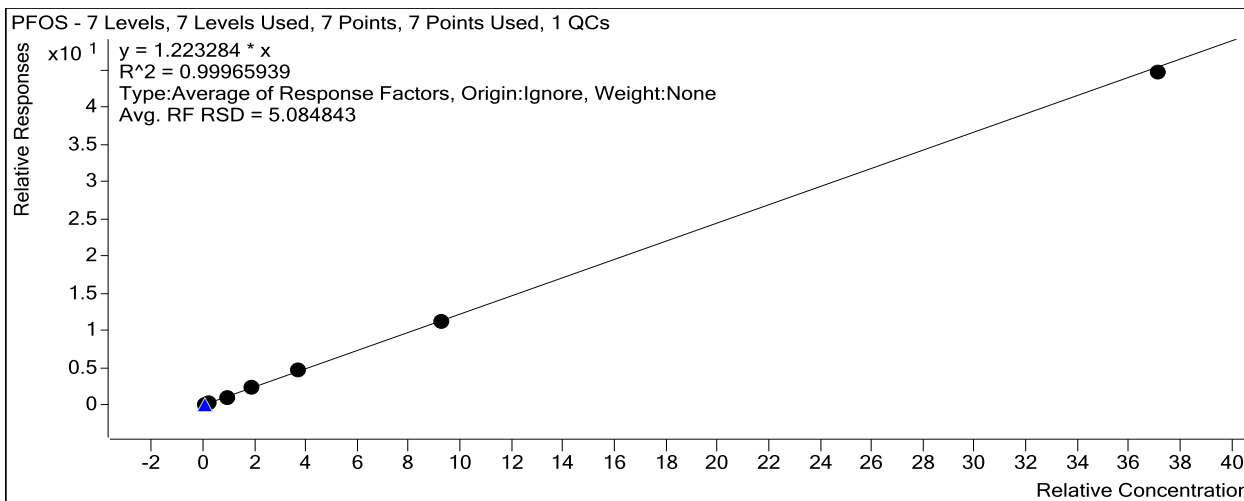


Target Compound

PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3850	0.4640	1.3270
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	8736	1.1600	1.1831
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	33870	4.6400	1.1309
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	70866	9.2800	1.2440
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	145514	18.5600	1.2608
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	348129	46.4000	1.2127
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1157687	185.6000	1.2044

Quantitative Analysis Calibration Report



Extracted ISTD

M8PFOS

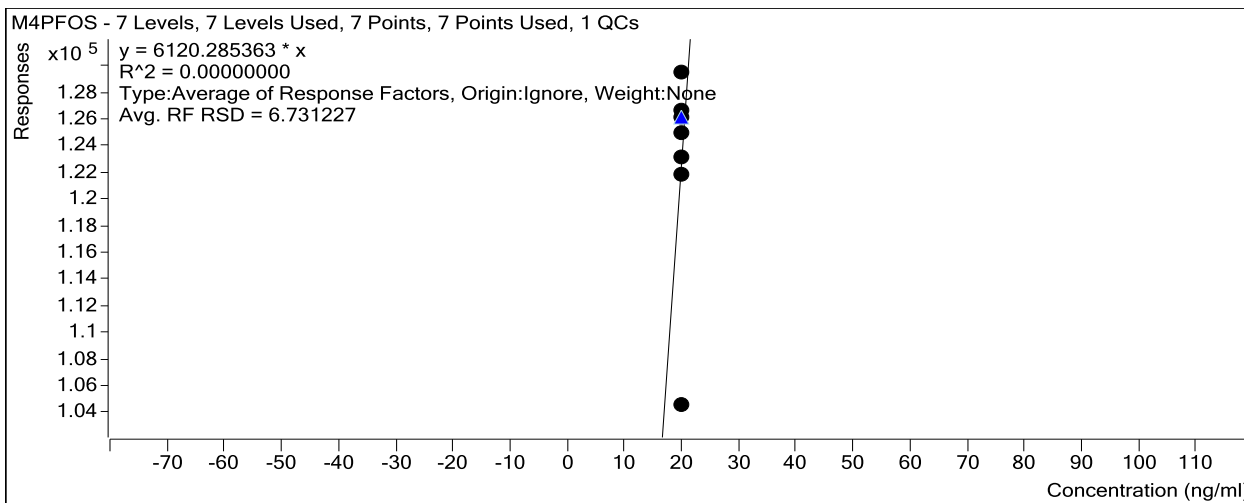
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	31267	5.0000	6253.3879
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	31827	5.0000	6365.4808
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	32272	5.0000	6454.4055
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	30692	5.0000	6138.4129
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	31092	5.0000	6218.3245
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	30934	5.0000	6186.8648
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	25896	5.0000	5179.1510

Instrument ISTD

M4PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	125019	20.0000	6250.9427
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	126663	20.0000	6333.1407
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	126096	20.0000	6304.7775
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	123092	20.0000	6154.5751
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	129493	20.0000	6474.6326
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	121900	20.0000	6095.0044
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	104578	20.0000	5228.9245

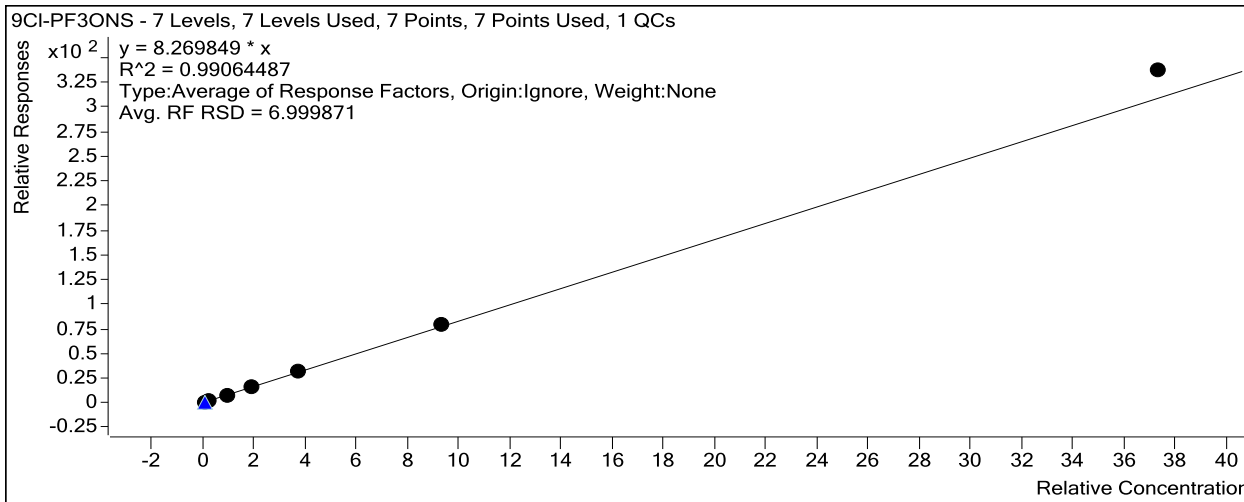
Quantitative Analysis Calibration Report



Target Compound

9CI-PF3ONS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	22357	0.4665	7.6640
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	56733	1.1663	7.6418
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	232870	4.6650	7.7340
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	494405	9.3300	8.6327
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1011489	18.6600	8.7172
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2435946	46.5500	8.4582
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	8737559	186.6000	9.0411



Extracted ISTD

M2 8:2 FTS

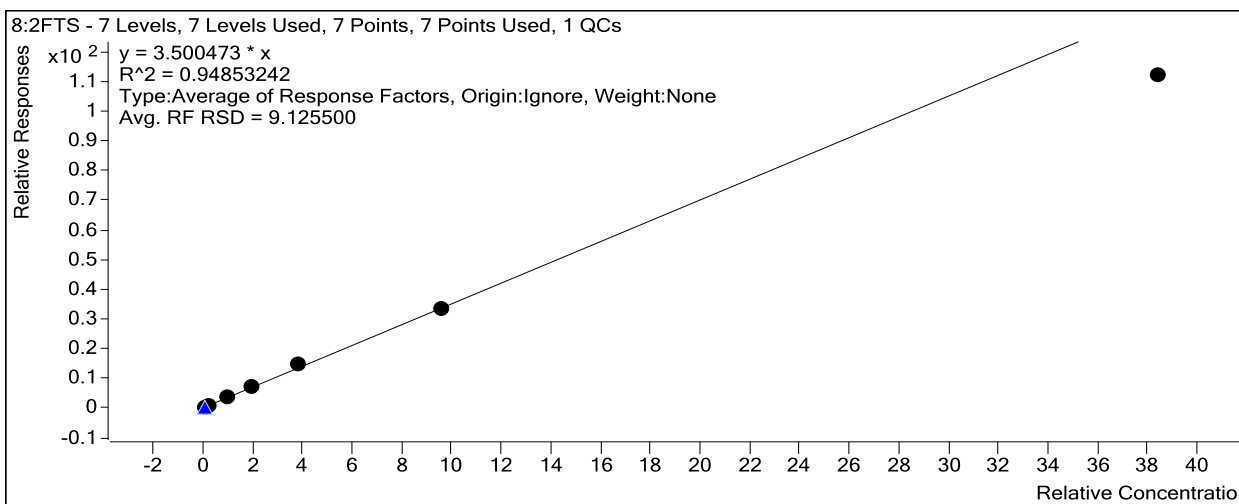
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	7753	5.0000	1550.6118
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	7584	5.0000	1516.7639
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	7534	5.0000	1506.7569
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	7029	5.0000	1405.7546
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	6975	5.0000	1394.9771

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	6864	5.0000	1372.8405
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5871	5.0000	1174.2222

Target Compound 8:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2584	0.4800	3.4717
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	6092	1.2000	3.3470
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	26068	4.8000	3.6043
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	50368	9.6000	3.7322
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	105294	19.2000	3.9313
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	230465	48.0000	3.4974
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	658163	192.0000	2.9193



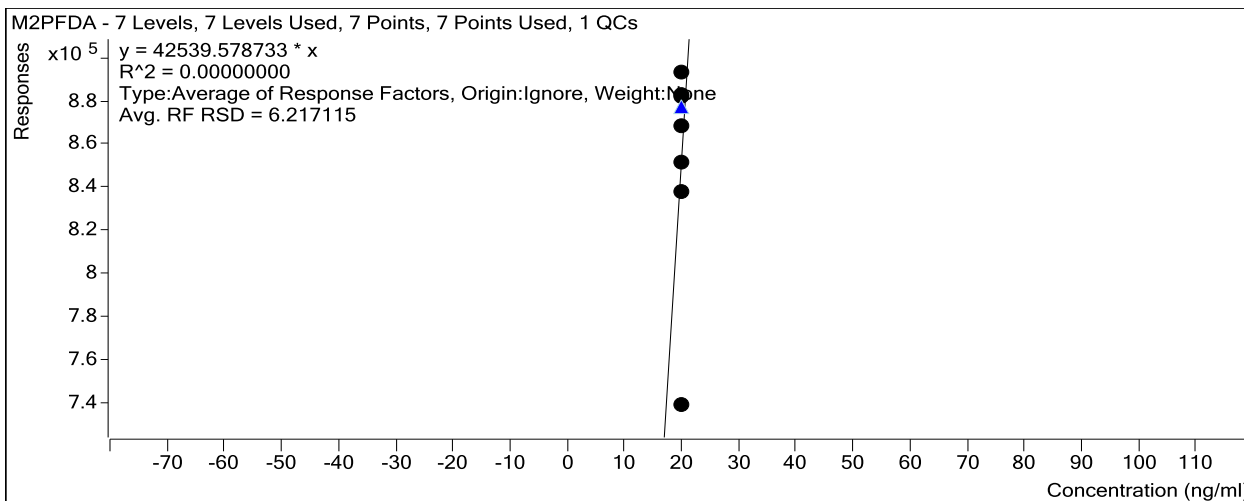
Extracted ISTD M6PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	231683	5.0000	46336.6962
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	237826	5.0000	47565.2317
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	242150	5.0000	48429.9165
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	229091	5.0000	45818.2577
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	233179	5.0000	46635.7574
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	230373	5.0000	46074.6473
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	197605	5.0000	39520.9962

Instrument ISTD M2PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	882032	20.0000	44101.5876
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	868829	20.0000	43441.4709
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	883235	20.0000	44161.7268
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	837626	20.0000	41881.3143
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	893216	20.0000	44660.8202
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	851434	20.0000	42571.6872
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	739169	20.0000	36958.4441

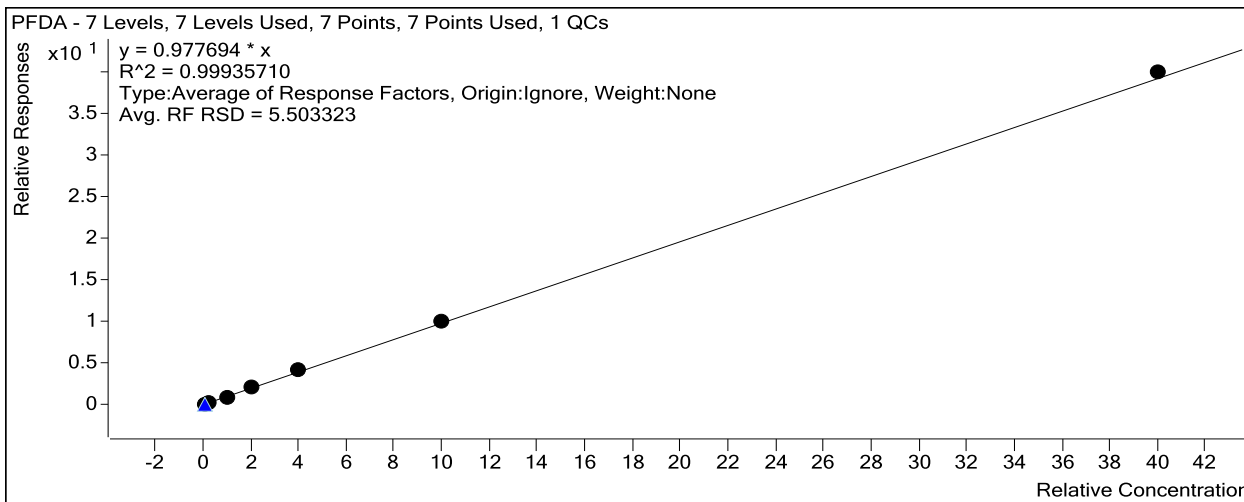
Quantitative Analysis Calibration Report



Target Compound

PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	21293	0.5000	0.9191
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	53831	1.2500	0.9054
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	228953	5.0000	0.9455
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	470895	10.0000	1.0277
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	968915	20.0000	1.0388
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2326508	50.0000	1.0099
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	7884136	200.0000	0.9975



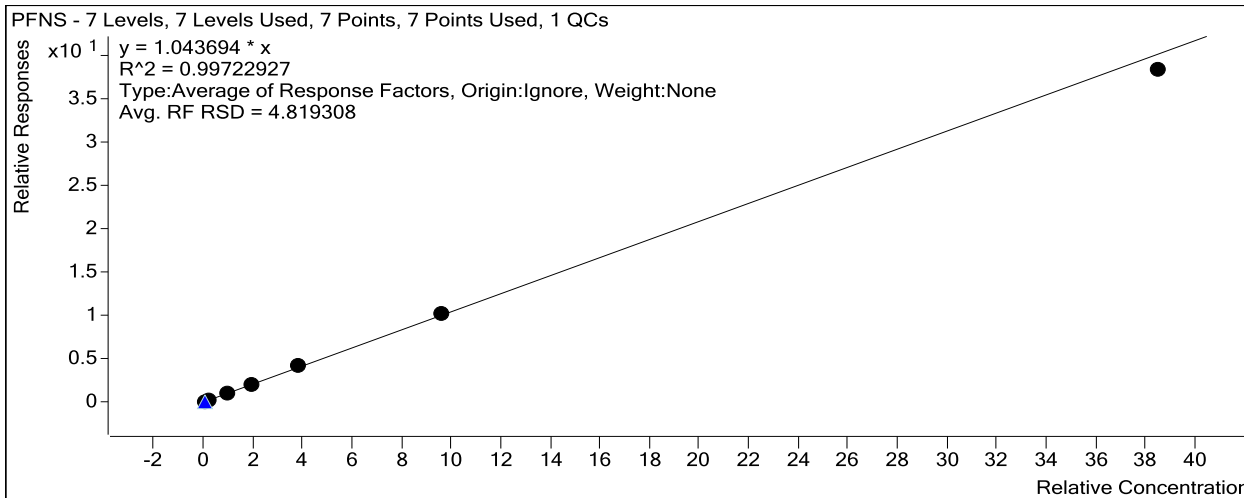
Target Compound

PFNS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3100	0.4810	1.0307
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	7475	1.2025	0.9766
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	31953	4.8100	1.0292
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	65231	9.6200	1.1046
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	132722	19.2400	1.1093

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	314657	48.1000	1.0574
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	994493	192.4000	0.9980



Extracted *ISTD*

d3-NMeFOSAA

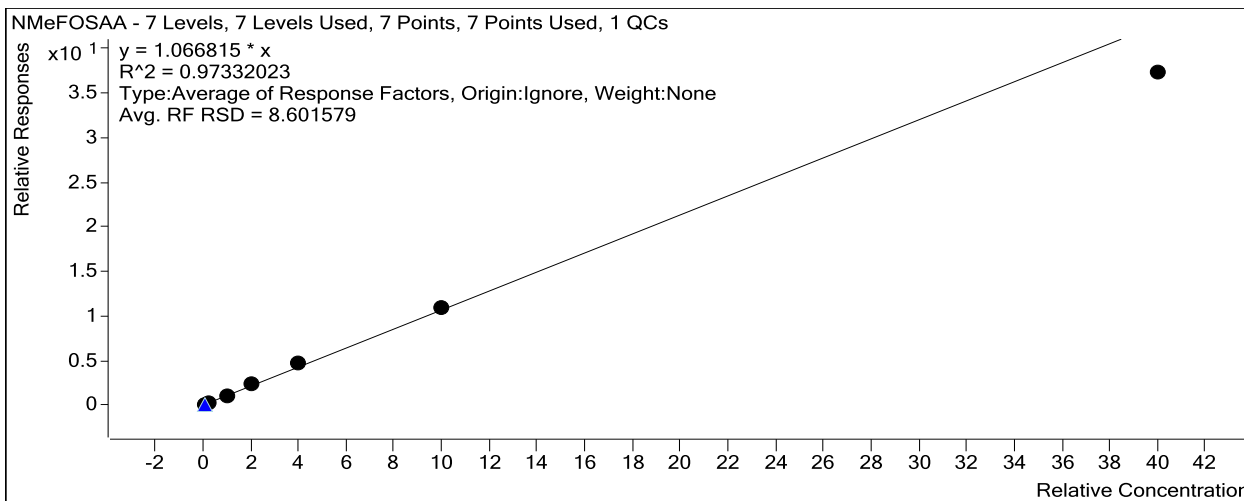
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	20703	5.0000	4140.5546
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	21146	5.0000	4229.1622
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	20901	5.0000	4180.2810
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	20463	5.0000	4092.6835
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	20532	5.0000	4106.4617
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	21391	5.0000	4278.2761
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	22953	5.0000	4590.5040

Target Compound

NMeFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2210	0.5000	1.0673
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	5064	1.2500	0.9580
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	22489	5.0000	1.0760
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	47264	10.0000	1.1548
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	96486	20.0000	1.1748
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	236071	50.0000	1.1036
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	856817	200.0000	0.9332

Quantitative Analysis Calibration Report



Extracted ISTD

M8FOSA

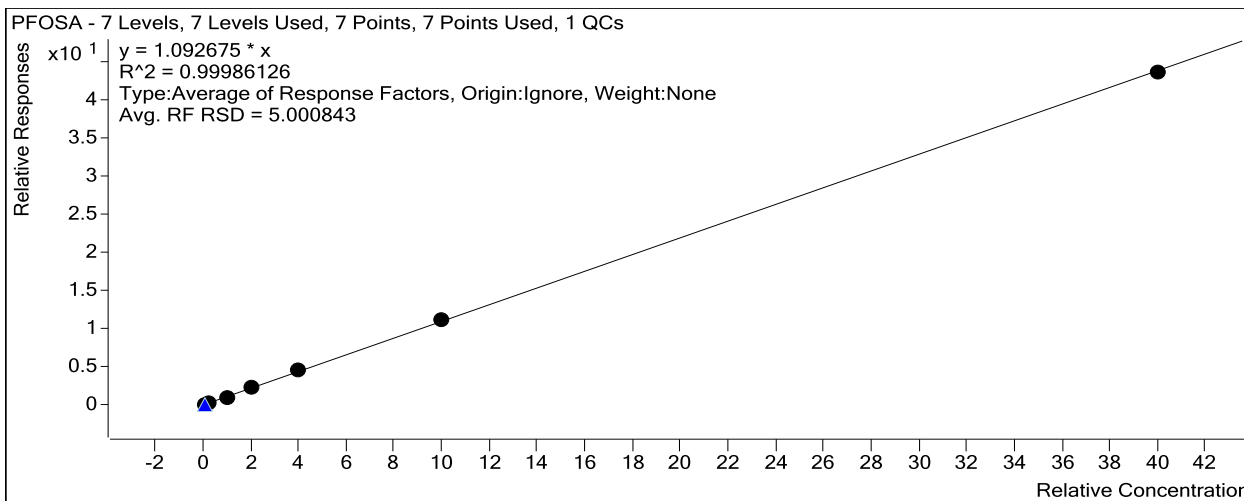
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	68968	5.0000	13793.6639
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	70184	5.0000	14036.8706
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	71361	5.0000	14272.2200
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	67753	5.0000	13550.6883
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	70264	5.0000	14052.7657
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	70636	5.0000	14127.1881
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	66135	5.0000	13227.0100

Target Compound

PFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	7219	0.5000	1.0467
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	17713	1.2500	1.0095
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	76689	5.0000	1.0747
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	156263	10.0000	1.1532
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	325091	20.0000	1.1567
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	791565	50.0000	1.1206
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	2876408	200.0000	1.0873

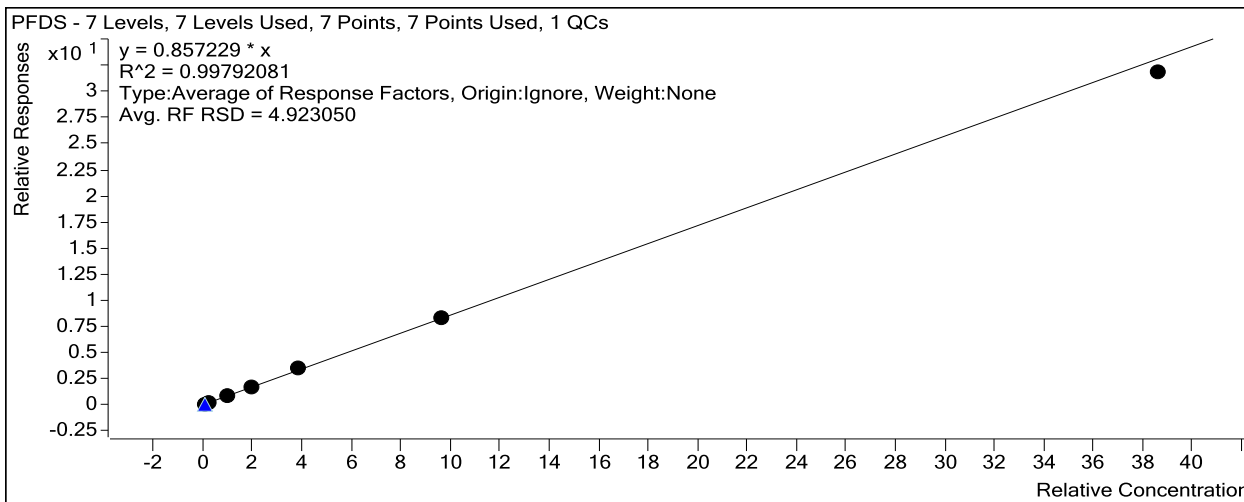
Quantitative Analysis Calibration Report



Target Compound

PFDS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2574	0.4825	0.8531
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	6161	1.2063	0.8023
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	25881	4.8250	0.8311
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	52942	9.6500	0.8937
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	110816	19.3000	0.9234
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	260334	48.2500	0.8721
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	824602	193.0000	0.8250



Extracted ISTD

d5-NEtFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	36388	5.0000	7277.5643
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	38043	5.0000	7608.6025
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	38995	5.0000	7799.0804
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	34662	5.0000	6932.4079
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	35829	5.0000	7165.8338

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	34906	5.0000	6981.2452
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	29052	5.0000	5810.3979

Extracted ISTD

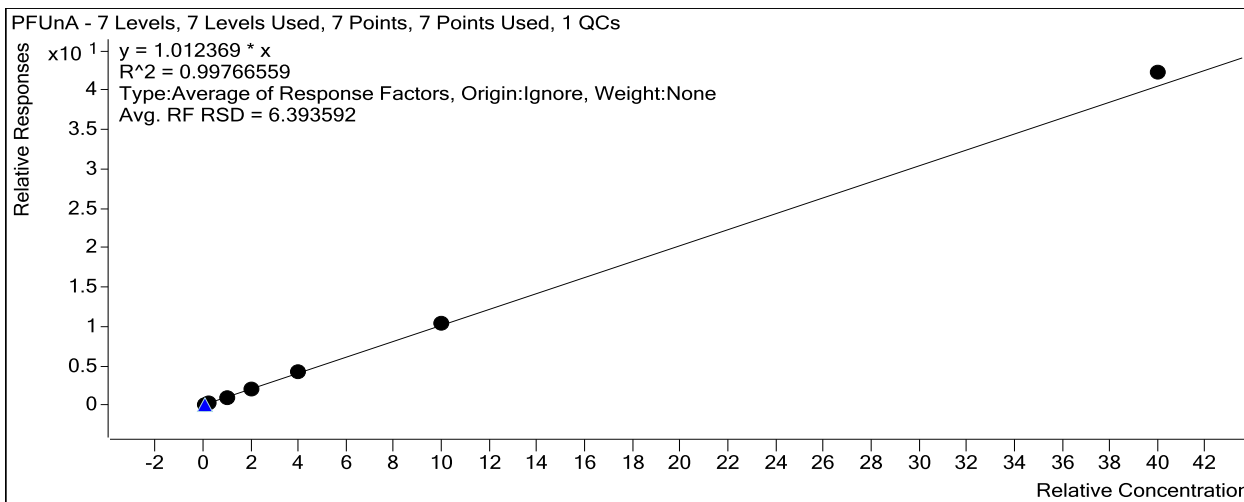
M7PFUnA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	217908	5.0000	43581.5544
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	224184	5.0000	44836.8285
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	228060	5.0000	45611.9457
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	215458	5.0000	43091.5630
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	219045	5.0000	43808.9167
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	217989	5.0000	43597.8899
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	183758	5.0000	36751.6456

Target Compound

PFUnA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	20663	0.5000	0.9483
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	52768	1.2500	0.9415
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	215178	5.0000	0.9435
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	462522	10.0000	1.0733
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	947069	20.0000	1.0809
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2273326	50.0000	1.0429
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	7763299	200.0000	1.0562

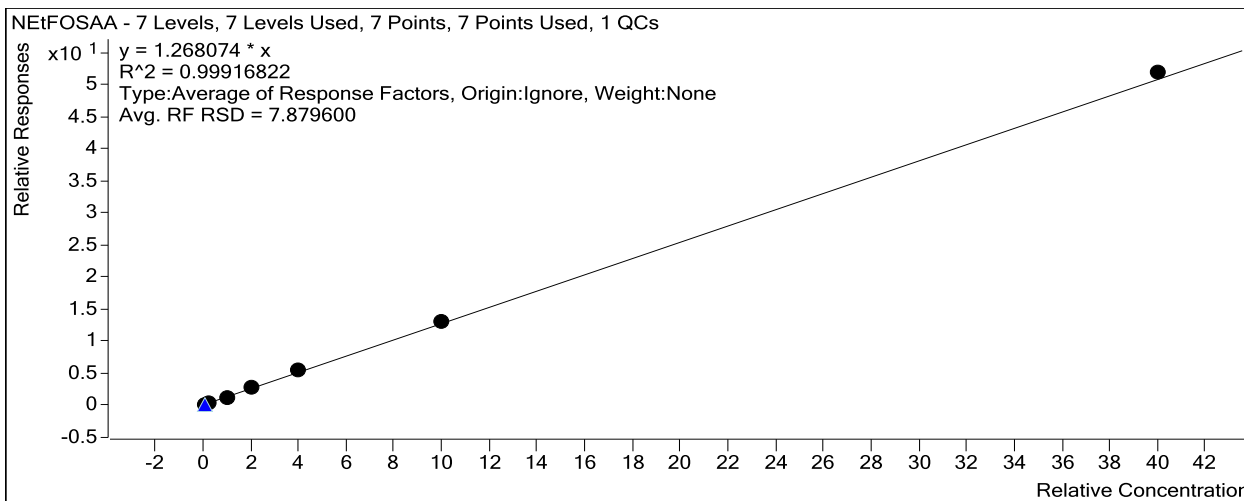


Target Compound

NETFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	4407	0.5000	1.2110
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	10773	1.2500	1.1327
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	45387	5.0000	1.1639
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	95968	10.0000	1.3843
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	196672	20.0000	1.3723
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	459343	50.0000	1.3159
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1506455	200.0000	1.2963

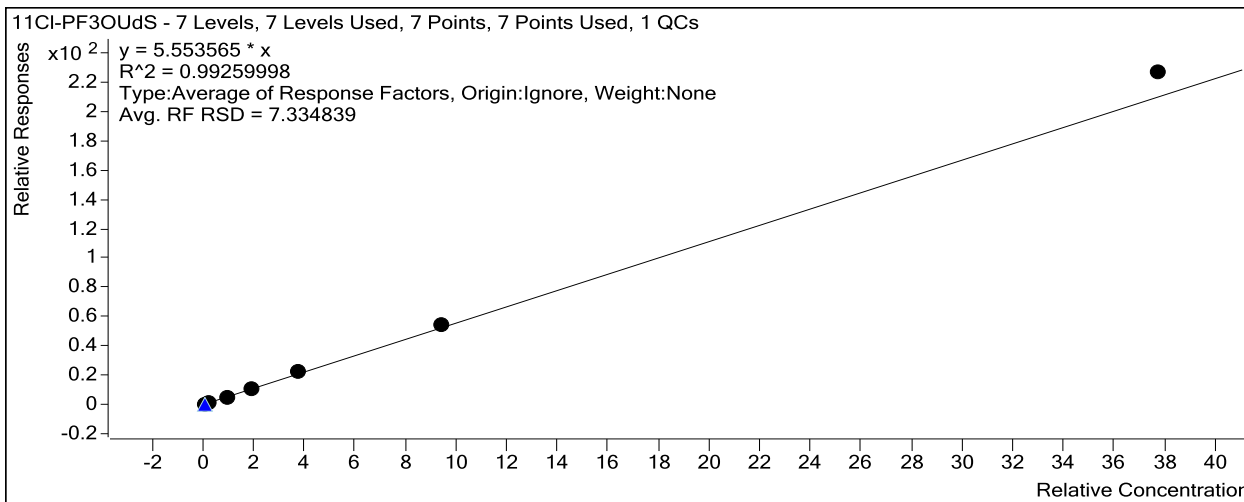
Quantitative Analysis Calibration Report



Target Compound

11CI-PF3OUdS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	15174	0.4715	5.1463
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	37527	1.1788	5.0012
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	160176	4.7150	5.2633
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	335478	9.4300	5.7956
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	696240	18.8600	5.9367
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1669967	47.1500	5.7247
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5867683	188.6000	6.0071



Extracted ISTD

MPFDoA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	256993	5.0000	51398.5359
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	261920	5.0000	52383.9758
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	263677	5.0000	52735.3005
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	251322	5.0000	50264.3603
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	257099	5.0000	51419.7898

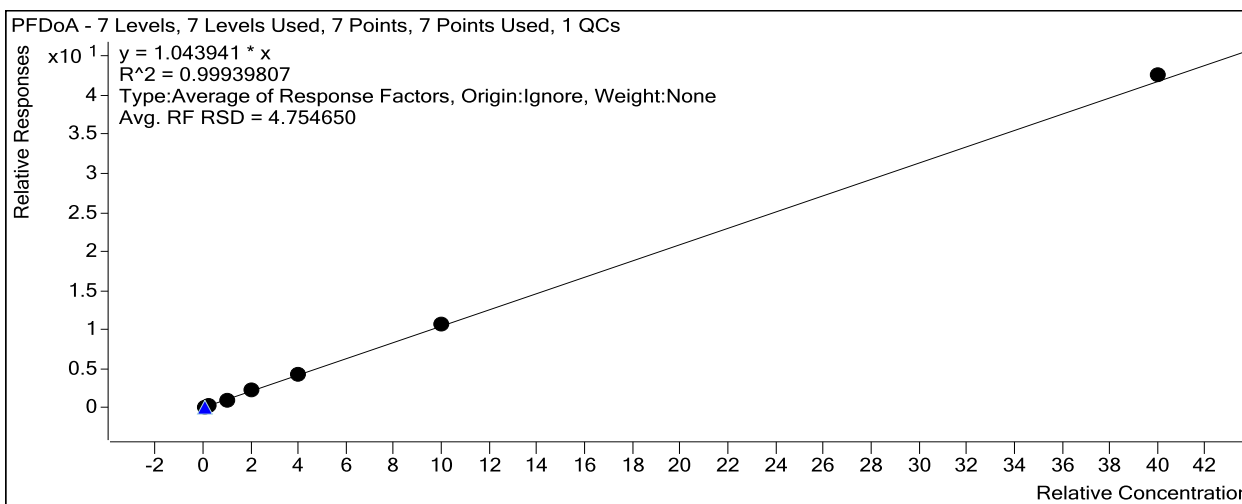
Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	262183	5.0000	52436.6053
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	234205	5.0000	46840.9257

Target Compound

PFD_oA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	25567	0.5000	0.9948
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	64504	1.2500	0.9851
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	263061	5.0000	0.9977
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	551399	10.0000	1.0970
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1127405	20.0000	1.0963
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2809427	50.0000	1.0716
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	9978657	200.0000	1.0652

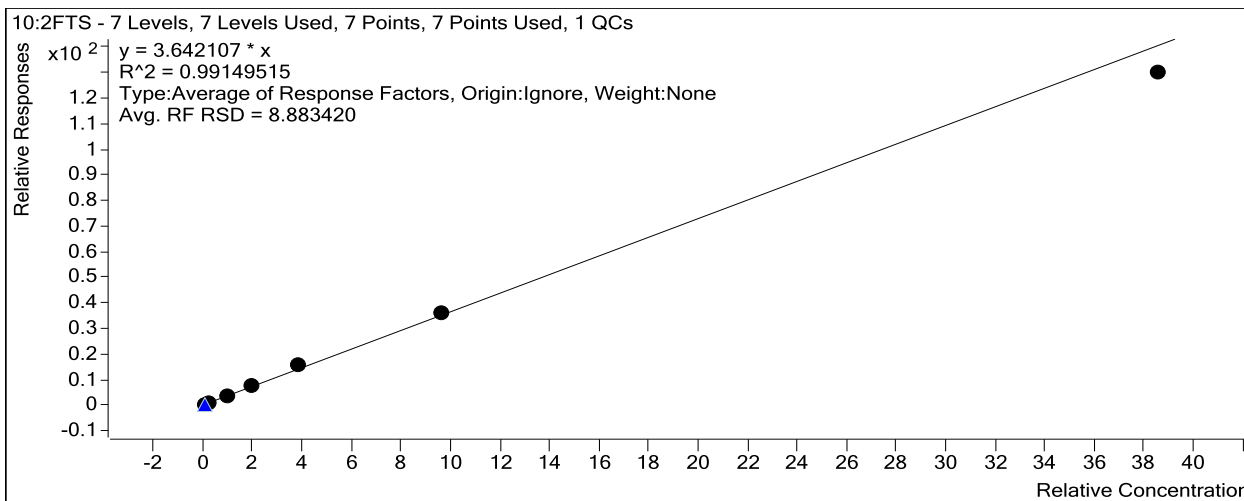


Target Compound

10:2F7S

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2417	0.4820	3.2346
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	6374	1.2050	3.4873
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	25851	4.8200	3.5595
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	55275	9.6400	4.0789
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	108781	19.2800	4.0446
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	245980	48.2000	3.7173
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	763493	192.8000	3.3725

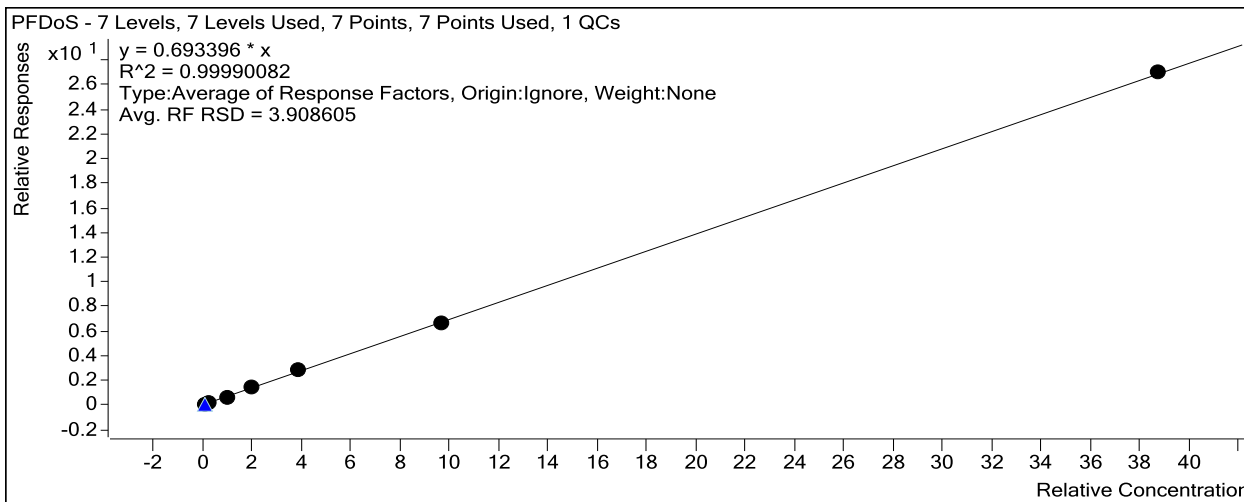
Quantitative Analysis Calibration Report



Target Compound

PFDoS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2019	0.4840	0.6671
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	5150	1.2100	0.6687
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	21036	4.8400	0.6734
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	43550	9.6800	0.7329
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	87443	19.3600	0.7263
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	205850	48.4000	0.6874
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	699791	193.6000	0.6979



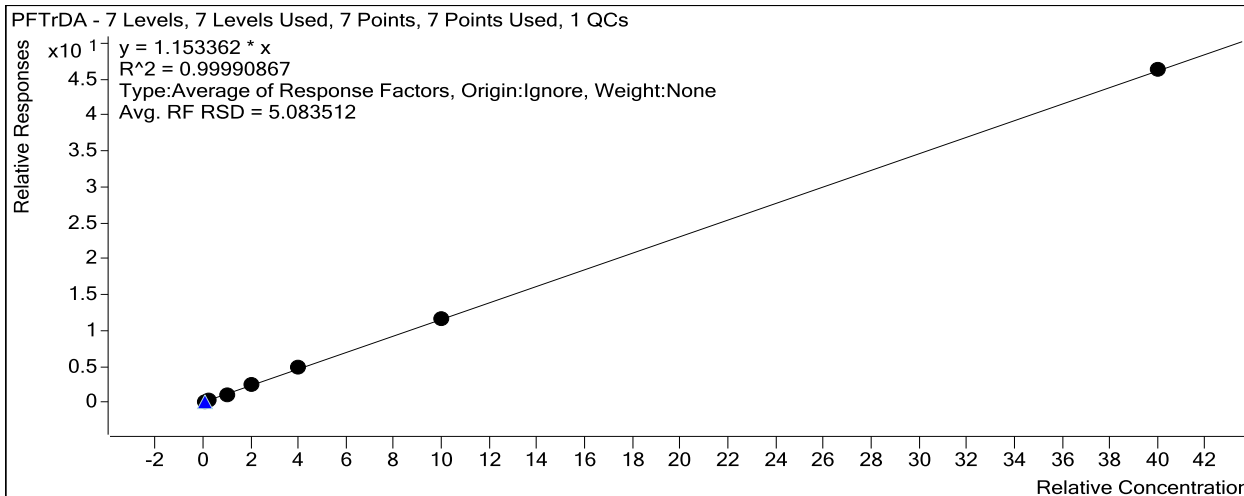
Target Compound

PFTrDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	27640	0.5000	1.0755
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	72515	1.2500	1.1074
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	293940	5.0000	1.1148
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	619556	10.0000	1.2326
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1255526	20.0000	1.2209

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	3051346	50.0000	1.1638
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	10853168	200.0000	1.1585



Extracted *ISTD*

d-NMeFOSA

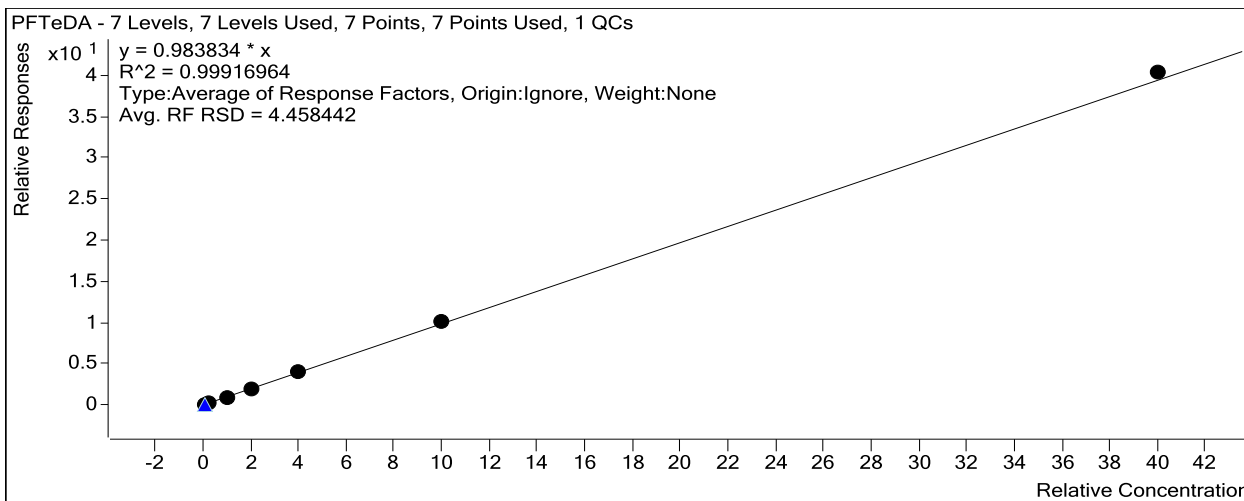
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	16869	5.0000	3373.7638
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	16463	5.0000	3292.6839
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	17243	5.0000	3448.6356
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	16689	5.0000	3337.8883
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	17192	5.0000	3438.3630
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	17299	5.0000	3459.8927
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	18496	5.0000	3699.1412

Target Compound

NMeFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1949	0.5000	1.1555
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4817	1.2500	1.1703
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	19061	5.0000	1.1054
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	39363	10.0000	1.1793
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	82605	20.0000	1.2012
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	201247	50.0000	1.1633
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	756759	200.0000	1.0229

Quantitative Analysis Calibration Report



Extracted ISTD

d9-NEtFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	16910	5.0000	3381.9360
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	17031	5.0000	3406.2199
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	17098	5.0000	3419.5692
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	16557	5.0000	3311.4341
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	16500	5.0000	3299.9232
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	16632	5.0000	3326.3168
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	15148	5.0000	3029.5586

Extracted ISTD

d-NEtFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	17713	5.0000	3542.6043
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	17778	5.0000	3555.6324
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	19098	5.0000	3819.5703
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	17409	5.0000	3481.7105
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	17991	5.0000	3598.1808
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	18425	5.0000	3685.0992
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	17115	5.0000	3423.0415

Target Compound

NEtFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1881	0.5000	1.1125
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4634	1.2500	1.0883
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	19102	5.0000	1.1172
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	39862	10.0000	1.2038
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	82680	20.0000	1.2528
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	200353	50.0000	1.2047
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	742750	200.0000	1.2258

Quantitative Analysis Calibration Report

Batch Data Path
Analysis Time
Report Time
Last Calib Update

C:\MassHunter\Data\QQQ4\2220419CCAL\QuantResults\2220421A.batch.bin
 4/22/2022 10:29 AM **Analyst Name** GCAL\lcms
 4/25/2022 12:25 PM **Reporter Name** GCAL\lcms
 4/20/2022 7:10 AM **Batch State** Processed

Calibration Info
Extracted ISTD

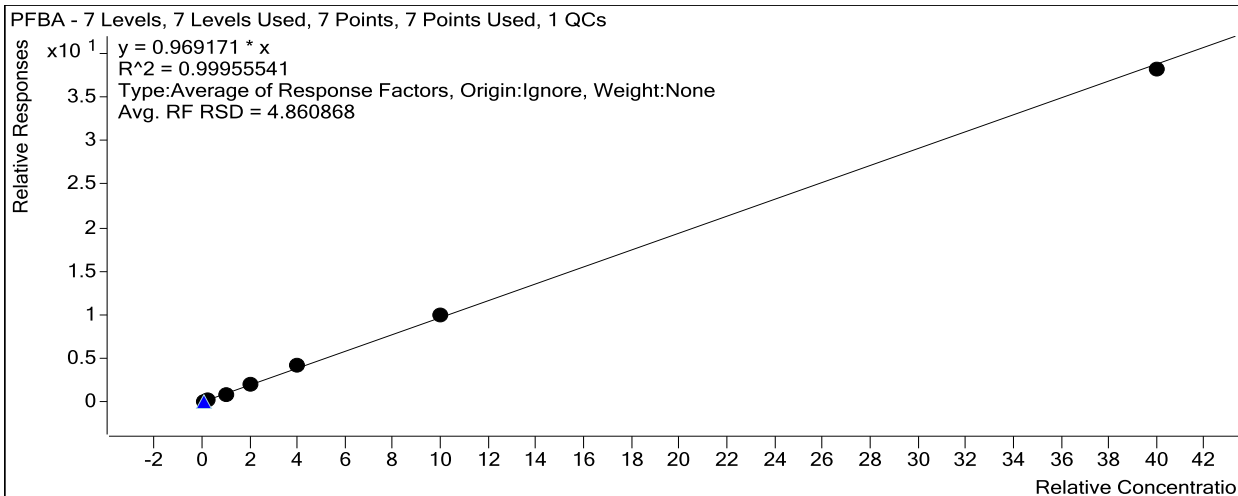
MPFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	92611	5.0000	18522.1608
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	95457	5.0000	19091.4296
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	94859	5.0000	18971.8508
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	92036	5.0000	18407.1601
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	96361	5.0000	19272.1797
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	98021	5.0000	19604.1980
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	89697	5.0000	17939.4917

Target Compound

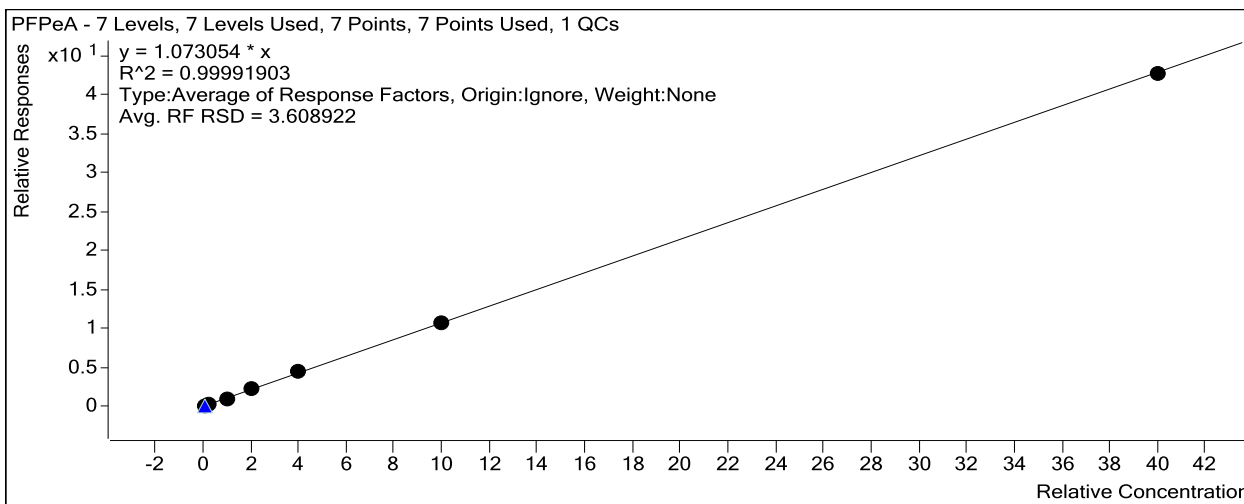
PFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	8666	0.5000	0.9358
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	21816	1.2500	0.9142
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	88569	5.0000	0.9337
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	186493	10.0000	1.0132
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	401498	20.0000	1.0417
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	971986	50.0000	0.9916
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	3423334	200.0000	0.9541



Quantitative Analysis Calibration Report

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	12104	0.5000	1.0424
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	31466	1.2500	1.0428
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	123921	5.0000	1.0307
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	260236	10.0000	1.1076
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	556584	20.0000	1.1366
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	1338673	50.0000	1.0829
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	4634631	200.0000	1.0684



Extracted ISTD

M3PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	39455	5.0000	7891.0657
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	40722	5.0000	8144.3733
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	39935	5.0000	7987.0348
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	39098	5.0000	7819.6104
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	40378	5.0000	8075.6670
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	40069	5.0000	8013.8729
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	34046	5.0000	6809.2610

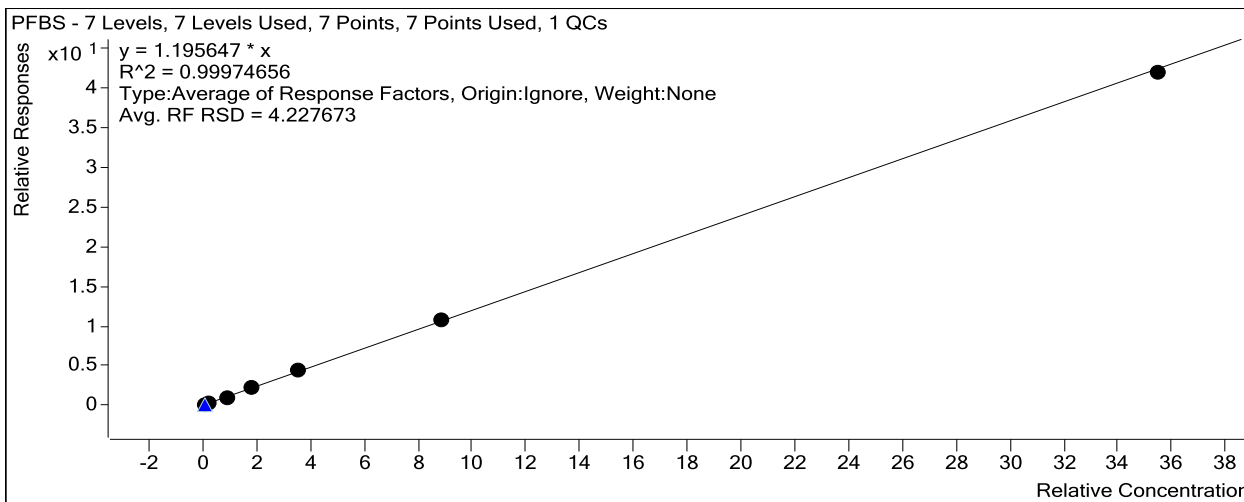
Target Compound

PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	4074	0.4435	1.1641

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	10195	1.1088	1.1290
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	41142	4.4350	1.1615
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	85647	8.8700	1.2348
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	182685	17.7400	1.2752
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	434365	44.3500	1.2221
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1428780	177.4000	1.1828



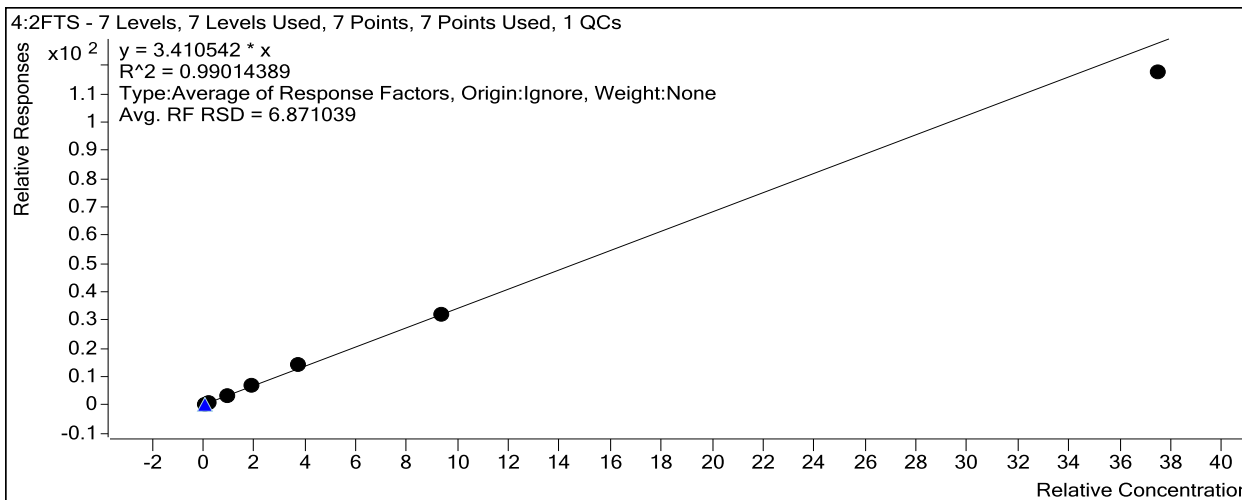
Target Compound

PFMBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	7536	0.5000	0.5305
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	19293	1.2500	0.5231
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	77304	5.0000	0.5220
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	163127	10.0000	0.5791
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	347599	20.0000	0.5843
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	836929	50.0000	0.5617
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	3062476	200.0000	0.5829

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	57015	9.3700	3.5982
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	122531	18.7400	3.7816
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	278956	46.8500	3.4466
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	846307	187.4000	3.1386



Extracted ISTD

M5PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	142046	5.0000	28409.2057
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	147525	5.0000	29504.9559
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	148090	5.0000	29618.0075
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	140853	5.0000	28170.5886
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	148717	5.0000	29743.3261
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	149001	5.0000	29800.2262
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	131337	5.0000	26267.3953

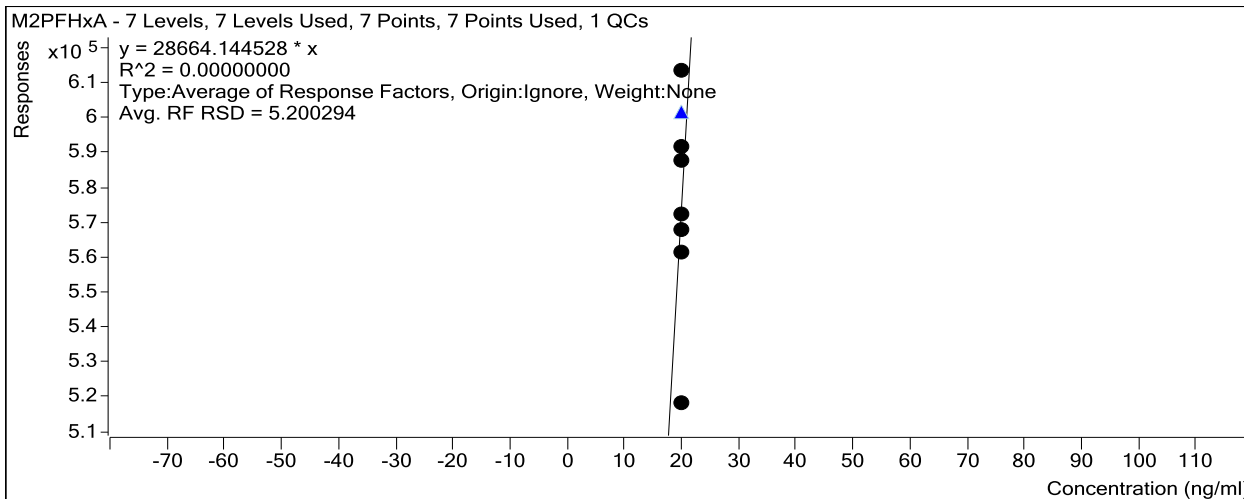
Instrument ISTD

M2PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	572548	20.0000	28627.3869
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	591614	20.0000	29580.6971
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	567975	20.0000	28398.7386
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	561613	20.0000	28080.6659
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	613401	20.0000	30670.0269
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	587503	20.0000	29375.1340

Quantitative Analysis Calibration Report

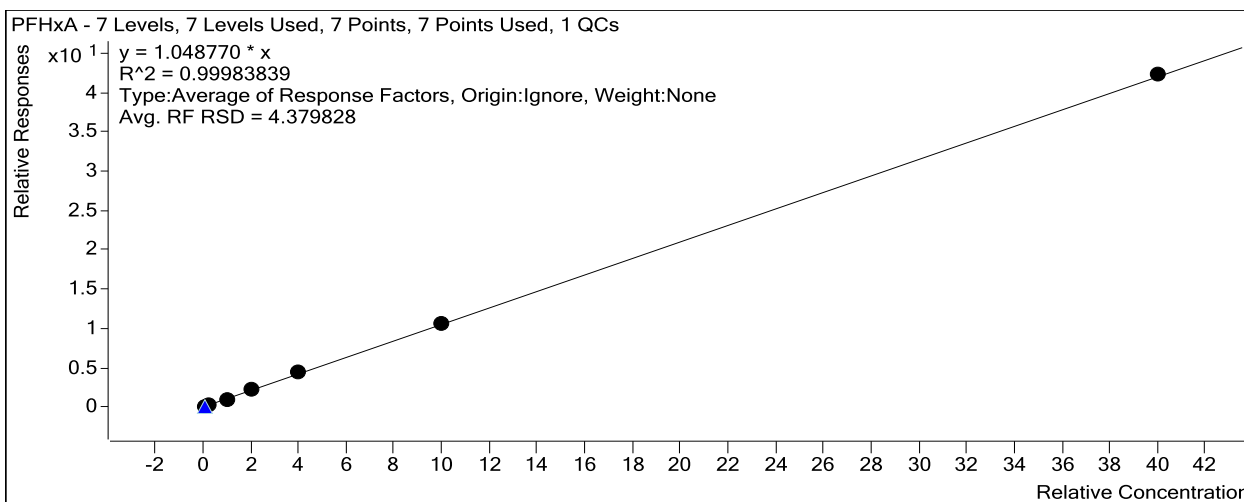
D:\MassHunter\Data\2220419CCAL\2220419C_7.d Calibration 7 518327 20.0000 25916.3623



Target Compound

PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	14548	0.5000	1.0242
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	36754	1.2500	0.9965
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	147165	5.0000	0.9938
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	306077	10.0000	1.0865
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	663499	20.0000	1.1154
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	1591377	50.0000	1.0680
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	5553003	200.0000	1.0570

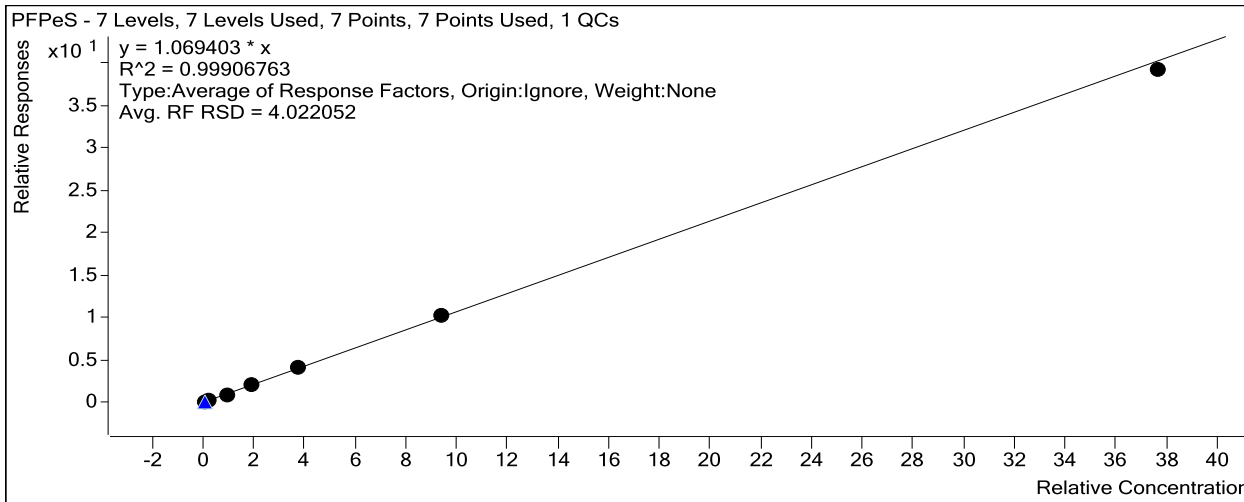


Target Compound

PFPeS

Quantitative Analysis Calibration Report

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	4093	0.4705	1.1025
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	9837	1.1763	1.0268
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	37954	4.7050	1.0100
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	80794	9.4100	1.0980
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	170719	18.8200	1.1233
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	408427	47.0500	1.0832
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1335457	188.2000	1.0421



Extracted ISTD

M3HFPODA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	42194	10.0000	4219.3856
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	40750	10.0000	4075.0451
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	42480	10.0000	4247.9864
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	41369	10.0000	4136.9224
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	44155	10.0000	4415.4935
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	44543	10.0000	4454.3494
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	37481	10.0000	3748.0812

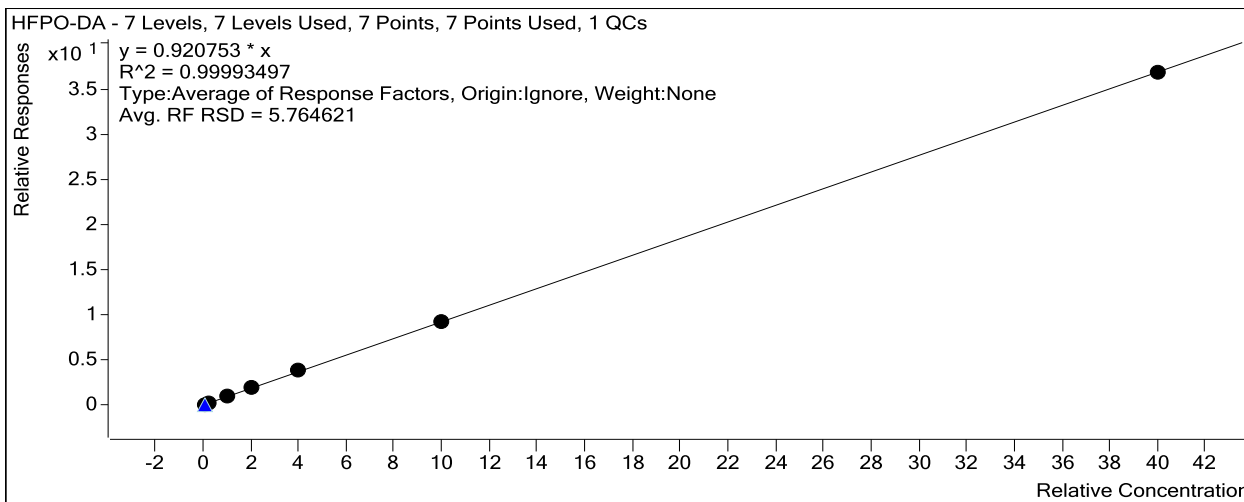
Target Compound

HFPO-DA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	3427	1.0000	0.8122

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	9593	2.5000	0.9416
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	38833	10.0000	0.9142
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	78523	20.0000	0.9491
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	173542	40.0000	0.9826
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	412417	100.0000	0.9259
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1378962	400.0000	0.9198



Extracted *ISTD*

M4PFHpA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	228197	5.0000	45639.4045
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	234132	5.0000	46826.3334
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	231987	5.0000	46397.4018
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	225771	5.0000	45154.1928
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	235287	5.0000	47057.4230
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	237412	5.0000	47482.4784
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	209016	5.0000	41803.1715

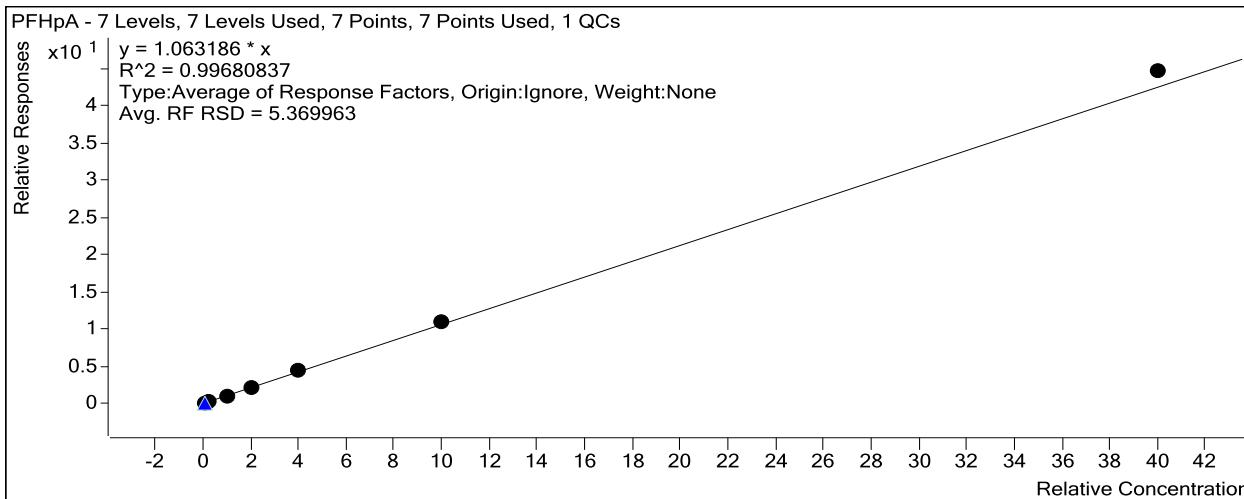
Target Compound

PFHpA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	22709	0.5000	0.9952
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	58169	1.2500	0.9938
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	237386	5.0000	1.0233
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	496011	10.0000	1.0985

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1055787	20.0000	1.1218
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2591386	50.0000	1.0915
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	9349567	200.0000	1.1183



Extracted ISTD

M3PFHxS

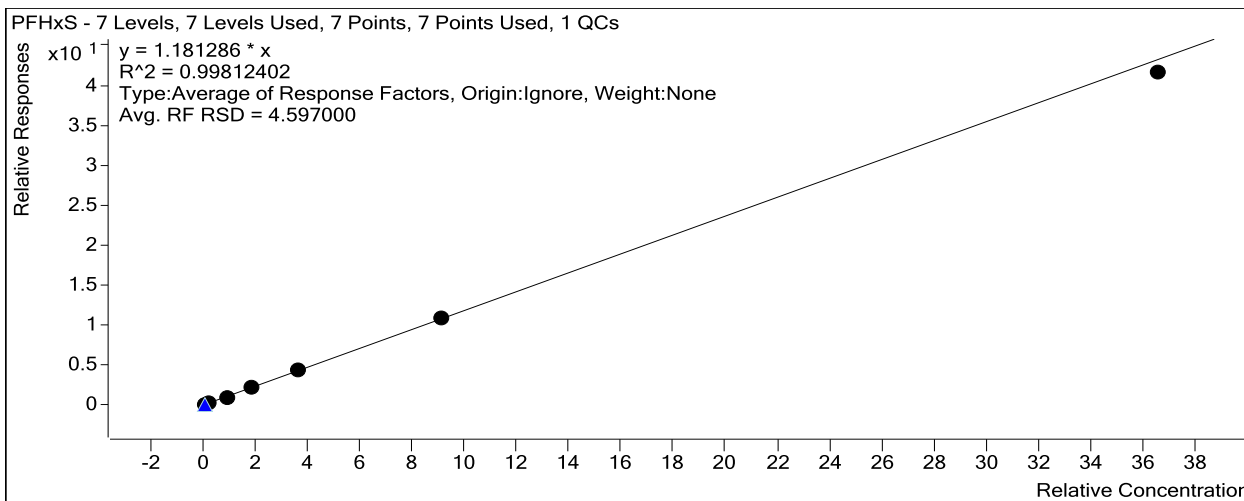
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	32336	5.0000	6467.1344
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	32927	5.0000	6585.3063
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	32879	5.0000	6575.7524
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	31498	5.0000	6299.6760
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	33158	5.0000	6631.6631
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	32606	5.0000	6521.1910
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	28254	5.0000	5650.8259

Target Compound

PFHxS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	3717	0.4570	1.2575
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	8672	1.1425	1.1526
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	33122	4.5700	1.1022
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	69483	9.1400	1.2067
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	149004	18.2800	1.2291
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	352477	45.7000	1.1827
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1175590	182.8000	1.1381

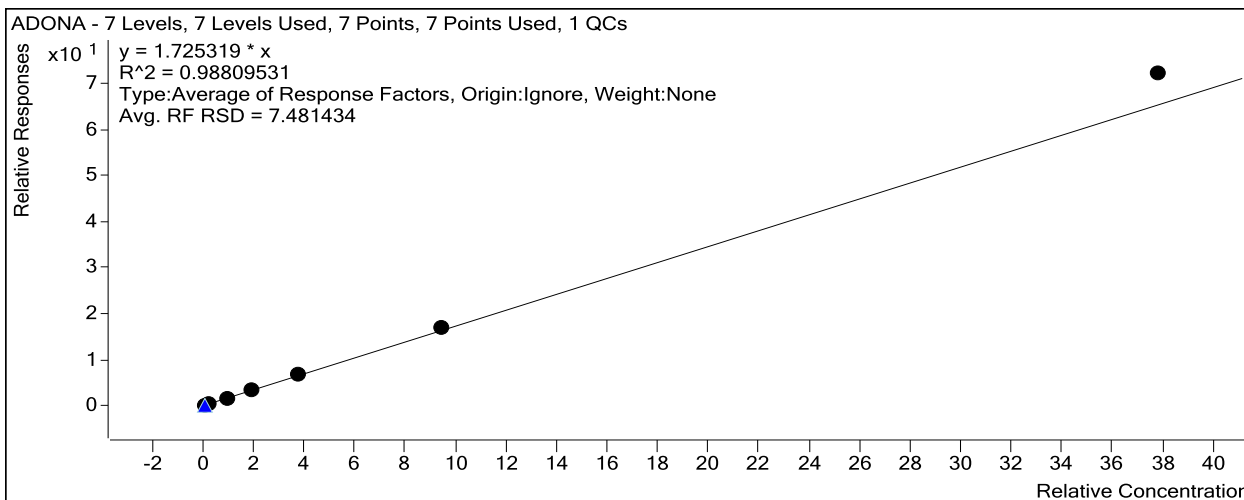
Quantitative Analysis Calibration Report



Target Compound

ADONA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	27814	0.4725	1.6309
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	69953	1.1813	1.5595
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	282249	4.7250	1.6008
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	600439	9.4500	1.7719
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1286473	18.9000	1.8144
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	3162746	47.2500	1.7907
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	11547943	189.0000	1.9089



Extracted ISTD

M2 6:2 FTS

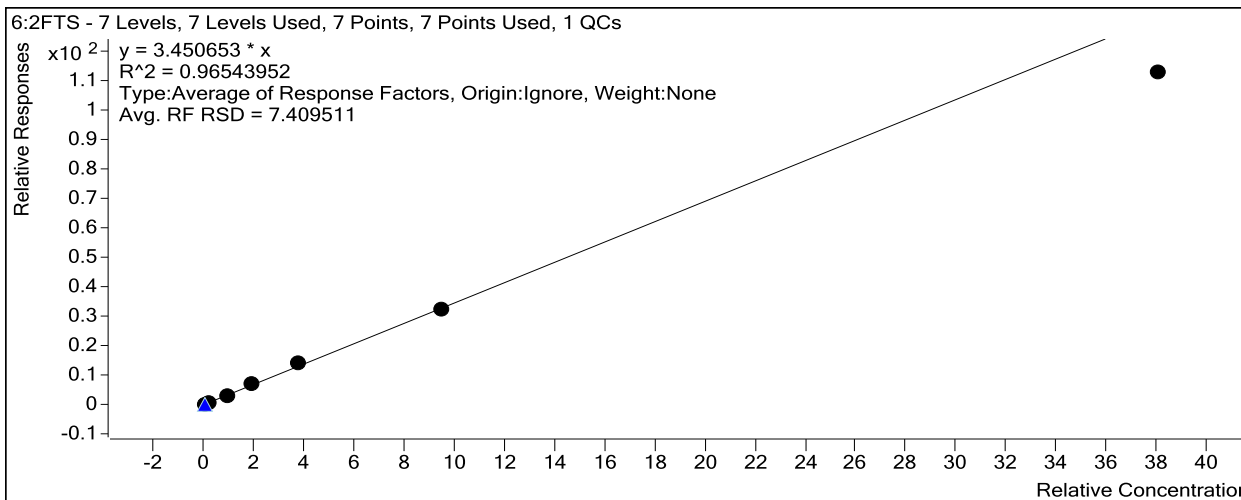
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

File Path	Calibration	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	9399	5.0000	1879.7798
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	9350	5.0000	1869.9532
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	9136	5.0000	1827.2275
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	8810	5.0000	1761.9490
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	10163	5.0000	2032.5324
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	9330	5.0000	1866.0877
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	7648	5.0000	1529.5508

Target Compound *6:2FTS*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	3041	0.4755	3.4022
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	7639	1.1888	3.4363
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	30131	4.7550	3.4679
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	62042	9.5100	3.7026
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	145037	19.0200	3.7517
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	304146	47.5500	3.4277
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	862927	190.2000	2.9662

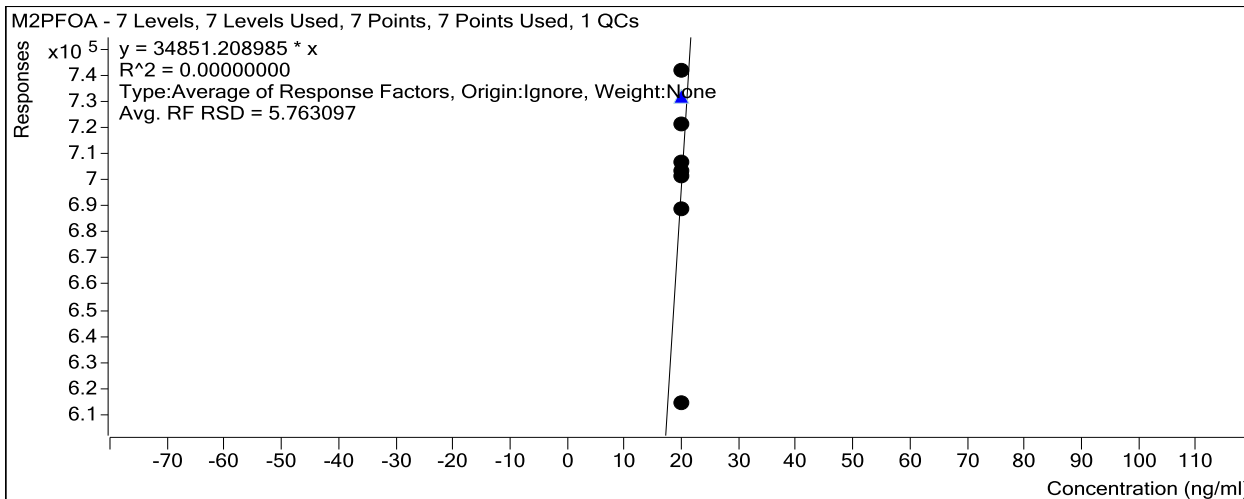


Extracted ISTD *M8PFOA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	180467	5.0000	36093.3479
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	189858	5.0000	37971.5443
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	186574	5.0000	37314.8346

Quantitative Analysis Calibration Report

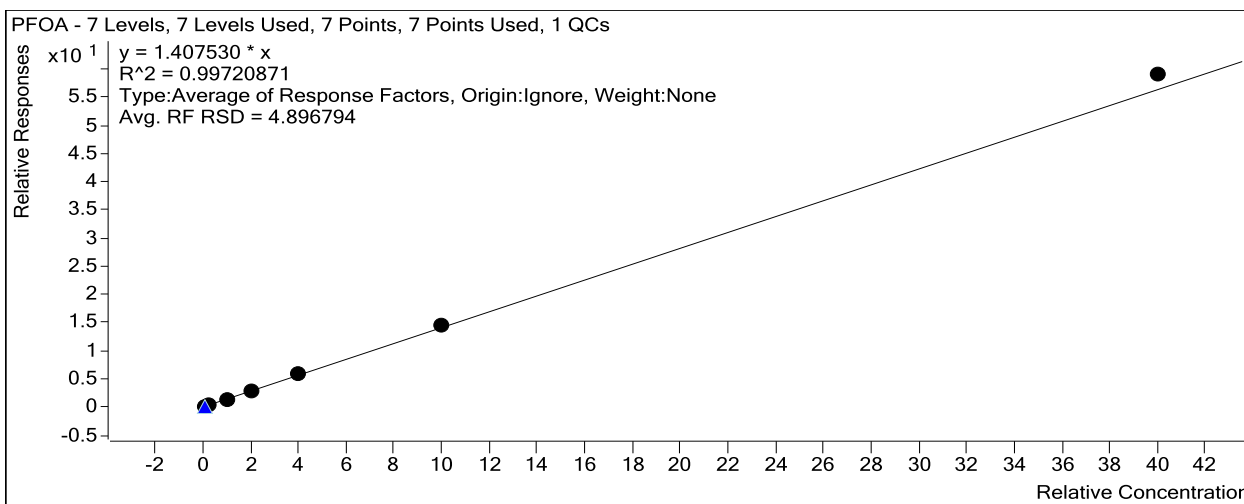
D:\MassHunter\Data\2220419CCAL\2220419C_7.d Calibration 7 614483 20.0000 30724.1385



Target Compound

PFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	24722	0.5000	1.3699
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	62111	1.2500	1.3086
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	248764	5.0000	1.3333
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	521370	10.0000	1.4540
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1102301	20.0000	1.4692
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2695346	50.0000	1.4422
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	9446597	200.0000	1.4756

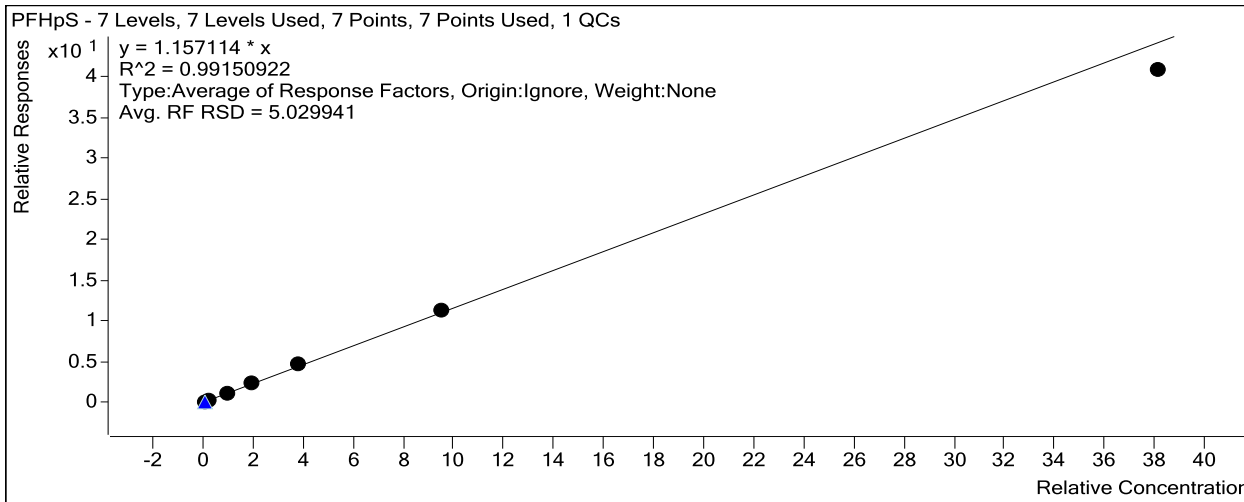


Target Compound

PFHpS

Quantitative Analysis Calibration Report

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	3518	0.4765	1.1417
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	8824	1.1913	1.1248
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	35256	4.7650	1.1252
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	73320	9.5300	1.2213
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	155846	19.0600	1.2330
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	367668	47.6500	1.1832
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1153171	190.6000	1.0707



Extracted ISTD

M9PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	235052	5.0000	47010.3855
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	238004	5.0000	47600.8571
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	237730	5.0000	47545.9366
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	224711	5.0000	44942.2686
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	234540	5.0000	46907.9558
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	232888	5.0000	46577.5024
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	199412	5.0000	39882.3043

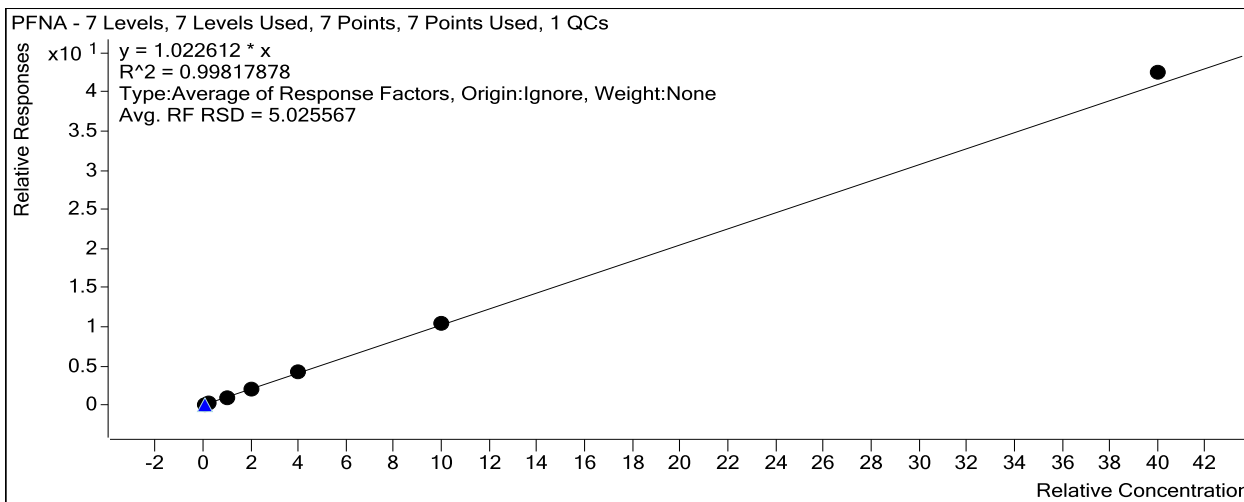
Target Compound

PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	22761	0.5000	0.9684

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	57510	1.2500	0.9665
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	231673	5.0000	0.9745
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	469835	10.0000	1.0454
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1022791	20.0000	1.0902
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2449602	50.0000	1.0518
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	8466113	200.0000	1.0614



Extracted *ISTD*

M8PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	29867	5.0000	5973.4299
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	31677	5.0000	6335.4171
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	30768	5.0000	6153.6074
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	28922	5.0000	5784.4729
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	30548	5.0000	6109.6443
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	29172	5.0000	5834.4134
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	26263	5.0000	5252.5288

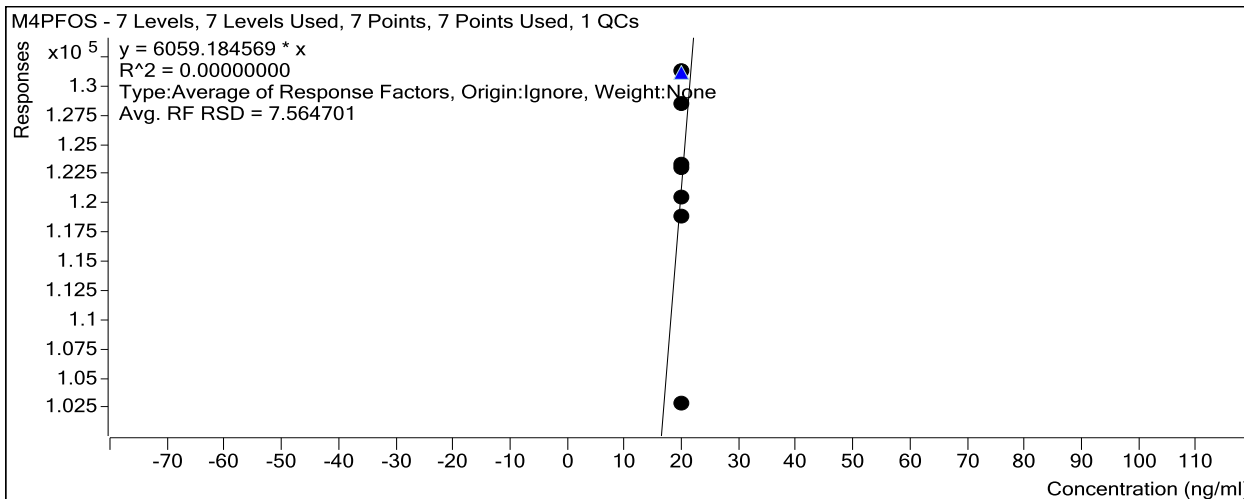
Instrument *ISTD*

M4PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	123261	20.0000	6163.0425
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	128546	20.0000	6427.3158
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	122960	20.0000	6147.9971
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	118889	20.0000	5944.4463

Quantitative Analysis Calibration Report

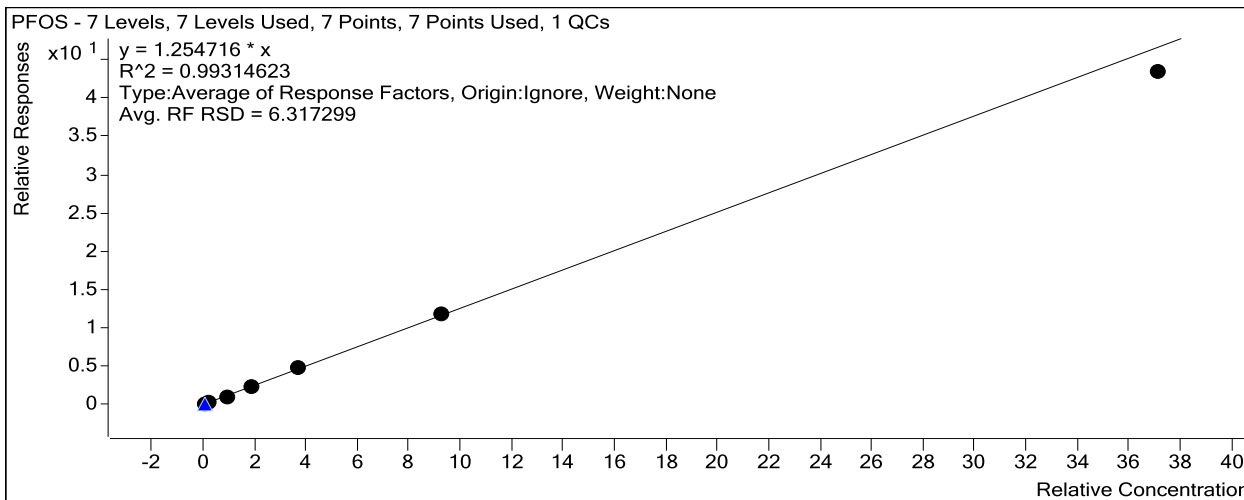
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	131286	20.0000	6564.3061
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	120454	20.0000	6022.7248
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	102889	20.0000	5144.4593



Target Compound

PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	3863	0.4640	1.3939
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	8914	1.1600	1.2130
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	33432	4.6400	1.1709
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	68185	9.2800	1.2702
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	147175	18.5600	1.2979
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	343193	46.4000	1.2677
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1140008	185.6000	1.1694

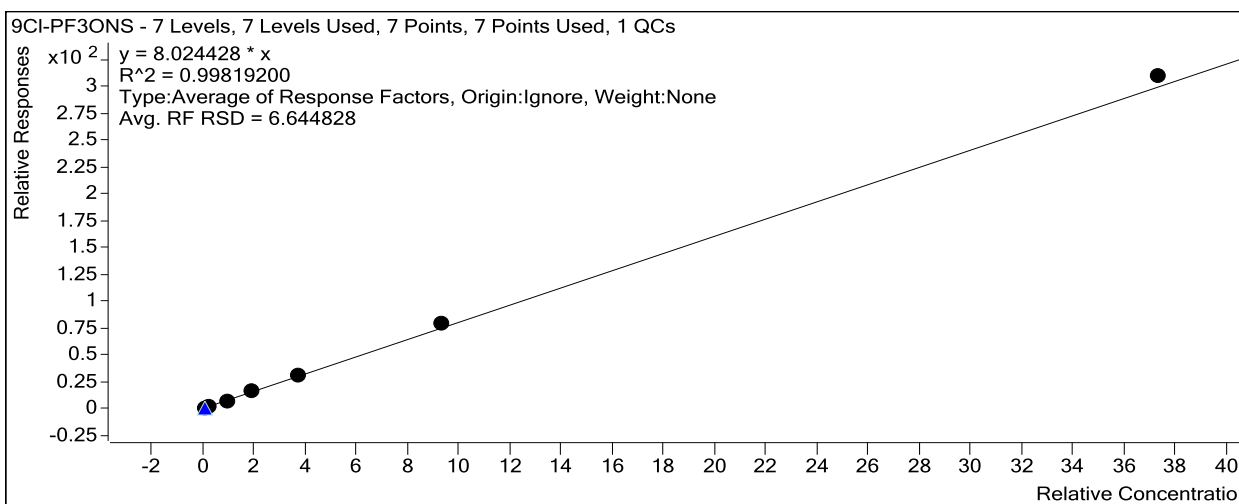


Quantitative Analysis Calibration Report

Target Compound

9CI-PF3ONS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	20833	0.4665	7.4762
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	53881	1.1663	7.2921
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	219742	4.6650	7.6548
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	463719	9.3300	8.5923
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	951759	18.6600	8.3483
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2307622	46.5500	8.4967
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	8145469	186.6000	8.3107



Extracted ISTD

M2 8:2 FTS

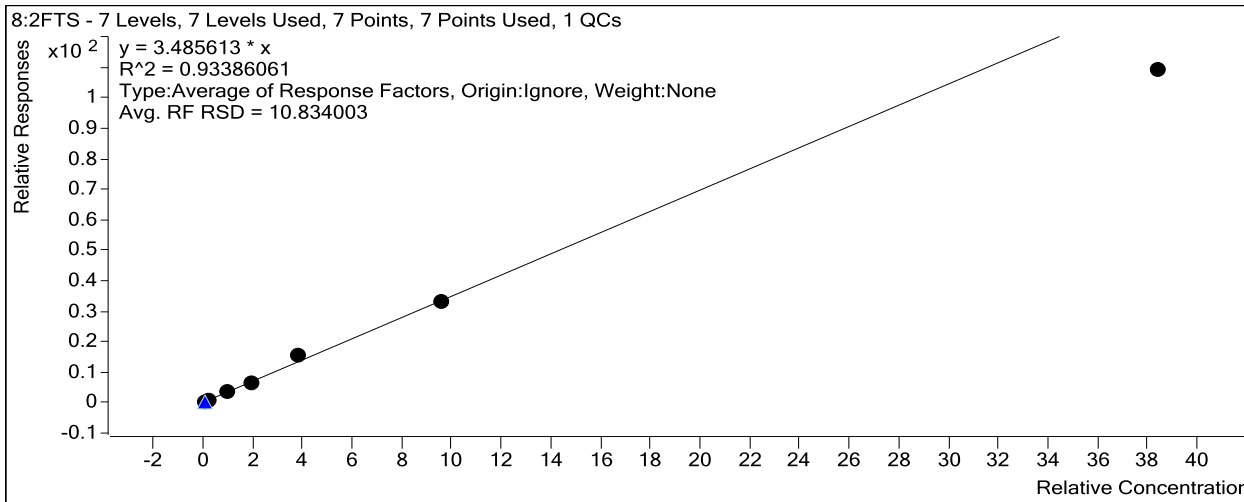
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	7539	5.0000	1507.7491
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	7569	5.0000	1513.8296
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	7241	5.0000	1448.1211
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	7329	5.0000	1465.7307
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	6454	5.0000	1290.8327
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	6819	5.0000	1363.7921
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	5629	5.0000	1125.7537

Target Compound

8:2FTS

Quantitative Analysis Calibration Report

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	2682	0.4800	3.7053
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	5929	1.2000	3.2637
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	24849	4.8000	3.5748
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	48834	9.6000	3.4705
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	100810	19.2000	4.0675
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	227349	48.0000	3.4730
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	614804	192.0000	2.8444

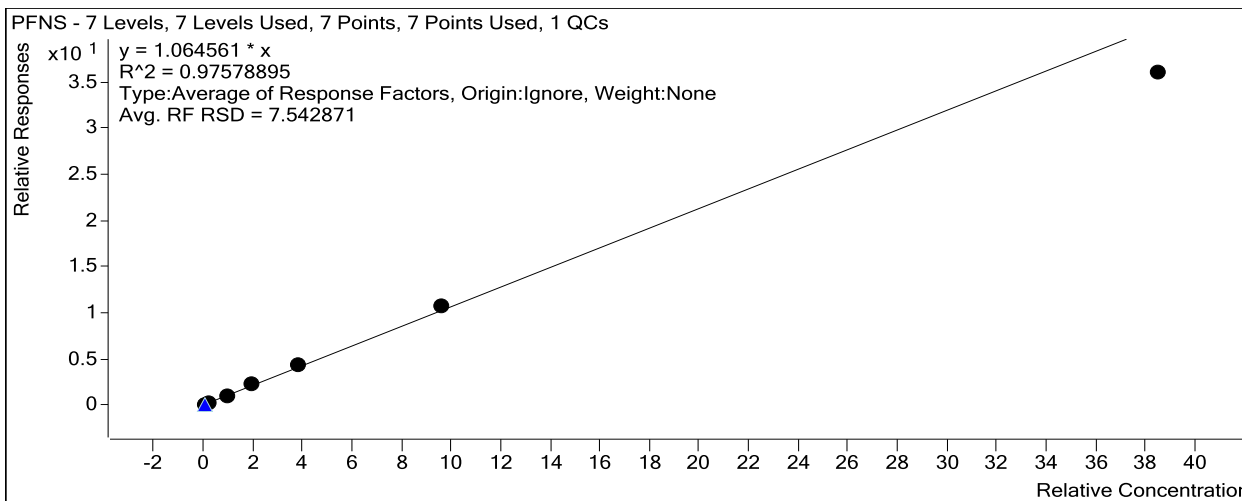


Target Compound

PFNS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	3183	0.4810	1.1077
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	7594	1.2025	0.9968
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	30261	4.8100	1.0224
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	64546	9.6200	1.1599
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	131606	19.2400	1.1196
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	311190	48.1000	1.1089
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	946543	192.4000	0.9366

Quantitative Analysis Calibration Report



Extracted ISTD

M6PFDA

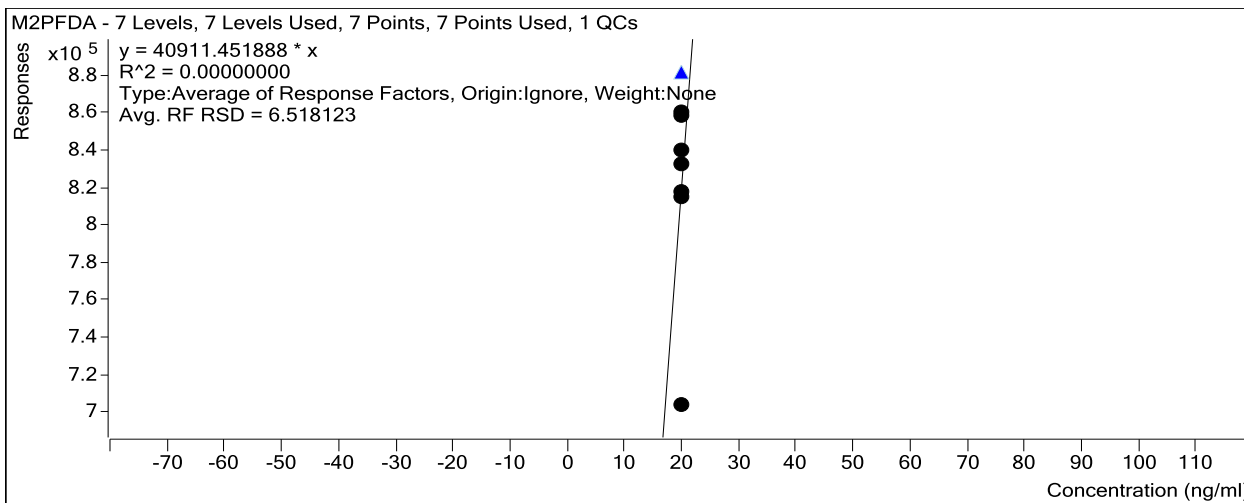
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	225169	5.0000	45033.7144
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	230773	5.0000	46154.5051
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	227846	5.0000	45569.1033
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	220219	5.0000	44043.7703
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	227731	5.0000	45546.2698
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	225191	5.0000	45038.2308
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	188342	5.0000	37668.3353

Instrument ISTD

M2PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	840349	20.0000	42017.4366
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	858123	20.0000	42906.1265
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	832780	20.0000	41639.0169
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	814704	20.0000	40735.1980
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	859831	20.0000	42991.5395
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	817740	20.0000	40886.9951
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	704077	20.0000	35203.8507

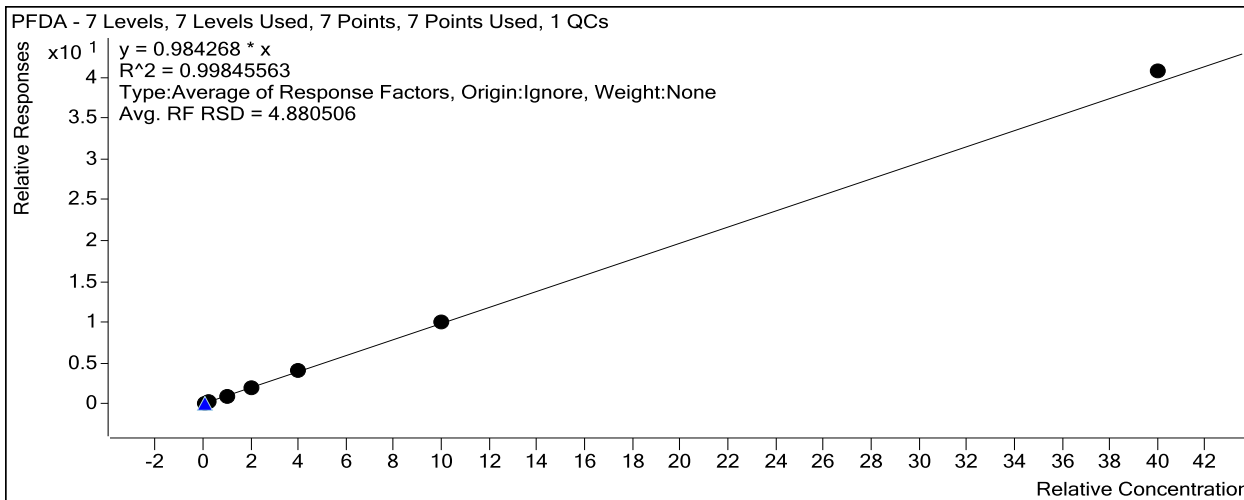
Quantitative Analysis Calibration Report



Target Compound

PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	21374	0.5000	0.9493
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	52948	1.2500	0.9178
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	214004	5.0000	0.9393
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	453731	10.0000	1.0302
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	943441	20.0000	1.0357
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2249006	50.0000	0.9987
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	7676993	200.0000	1.0190



Extracted ISTD

d3-NMeFOSAA

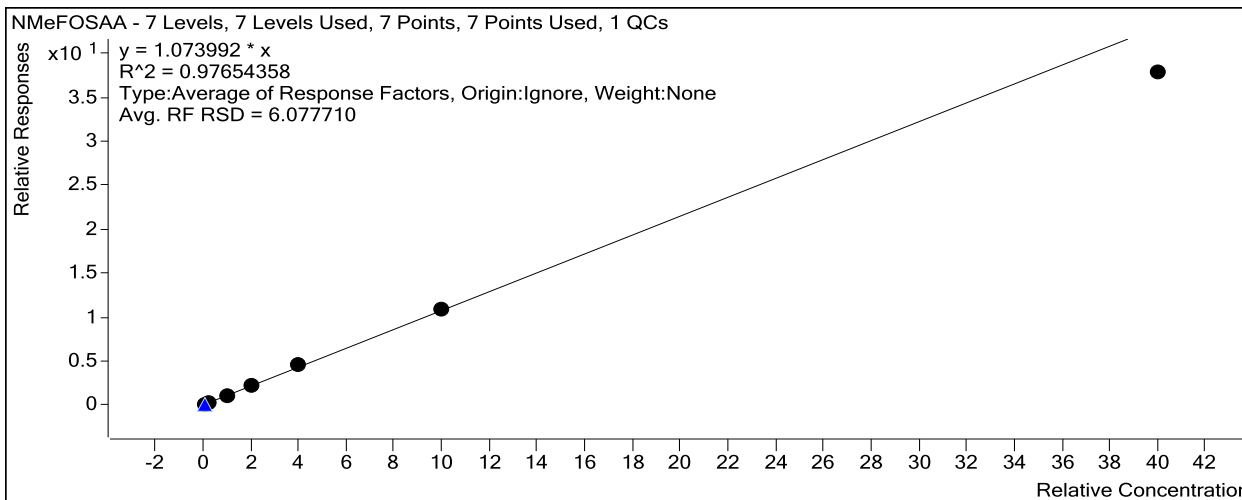
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

File Path	Calibration	Level	Enabled	Response	Exp Conc	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	21525	5.0000	4304.9577
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	22268	5.0000	4453.5590
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	21512	5.0000	4302.4052
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	21431	5.0000	4286.2426
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	22478	5.0000	4495.5840
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	23030	5.0000	4605.9403
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	23011	5.0000	4602.1751

Target Compound *NMeFOSAA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	2357	0.5000	1.0950
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	5814	1.2500	1.0443
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	22915	5.0000	1.0652
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	48796	10.0000	1.1384
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	101604	20.0000	1.1300
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	252970	50.0000	1.0985
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	871129	200.0000	0.9464



Extracted ISTD *M8FOSA*

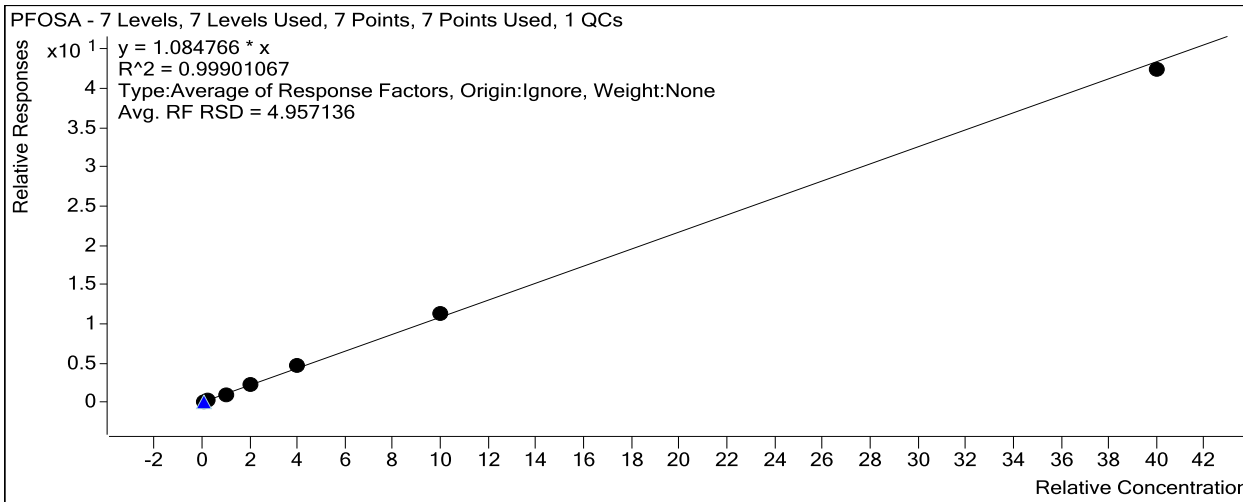
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	69601	5.0000	13920.1599
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	71464	5.0000	14292.7376
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	70811	5.0000	14162.1947

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	69628	5.0000	13925.5143
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	71618	5.0000	14323.5434
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	71582	5.0000	14316.3979
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	66182	5.0000	13236.4347

Target Compound *PFOSA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	7412	0.5000	1.0649
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	18238	1.2500	1.0208
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	72891	5.0000	1.0294
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	157277	10.0000	1.1294
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	329087	20.0000	1.1488
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	816257	50.0000	1.1403
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	2805371	200.0000	1.0597

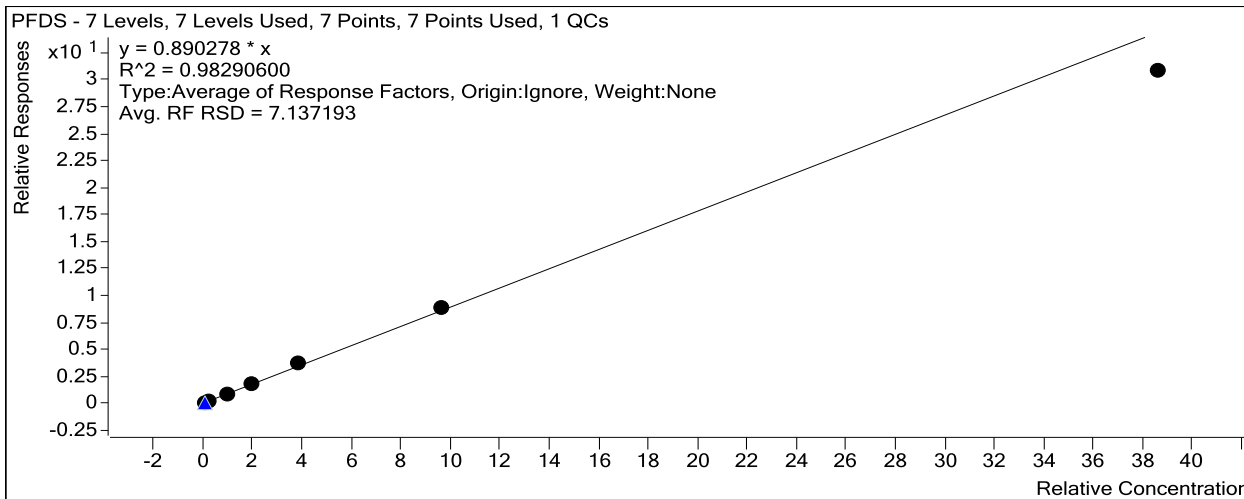


Target Compound *PFDS*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	2495	0.4825	0.8657
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	6328	1.2063	0.8280
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	26401	4.8250	0.8892
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	53738	9.6500	0.9627
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	113053	19.3000	0.9588
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	261412	48.2500	0.9286

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_7.d Calibration 7 809918 193.0000 0.7989



Extracted ISTD

d5-NEtFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	39401	5.0000	7880.1685
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	39808	5.0000	7961.6970
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	38761	5.0000	7752.2049
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	37019	5.0000	7403.8556
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	37232	5.0000	7446.3849
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	36744	5.0000	7348.8153
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	28340	5.0000	5667.9212

Extracted ISTD

M7PFUnA

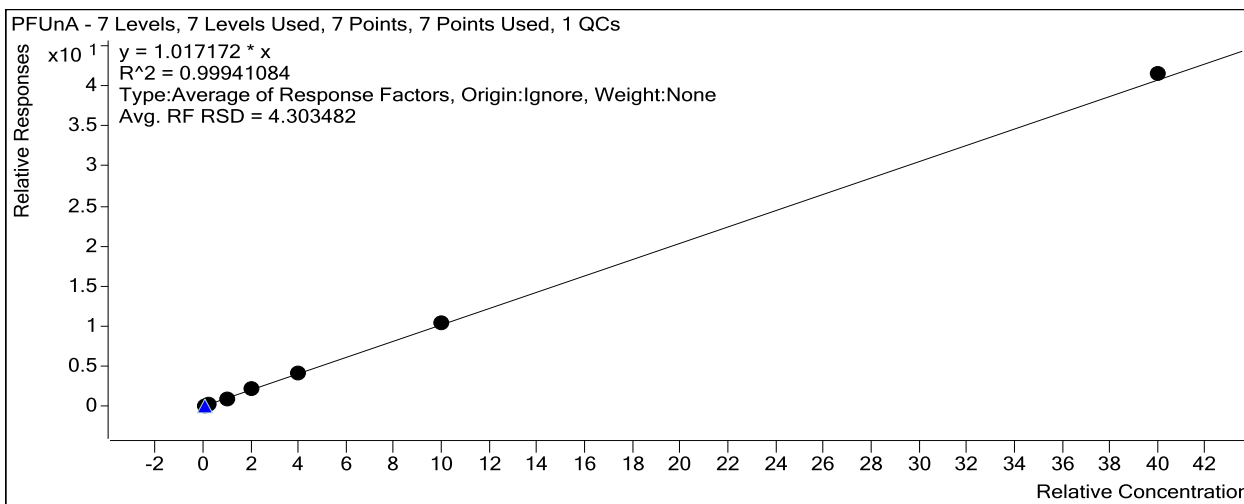
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	222872	5.0000	44574.3282
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	228414	5.0000	45682.8224
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	222765	5.0000	44553.0059
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	218576	5.0000	43715.2540
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	220396	5.0000	44079.2511
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	215184	5.0000	43036.7670
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	182264	5.0000	36452.7033

Target Compound

PFUnA

Quantitative Analysis Calibration Report

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	21627	0.5000	0.9704
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	55351	1.2500	0.9693
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	216904	5.0000	0.9737
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	463222	10.0000	1.0596
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	935193	20.0000	1.0608
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2257267	50.0000	1.0490
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	7562966	200.0000	1.0374

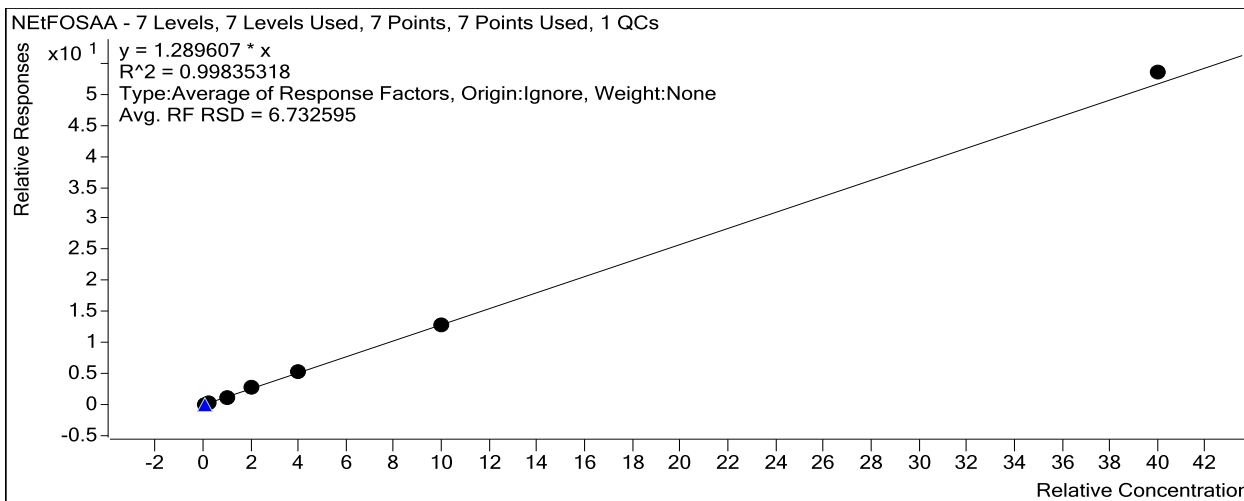


Target Compound

NETFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	5078	0.5000	1.2887
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	11438	1.2500	1.1493
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	46532	5.0000	1.2005
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	102942	10.0000	1.3904
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	202695	20.0000	1.3610
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	477961	50.0000	1.3008
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1515170	200.0000	1.3366

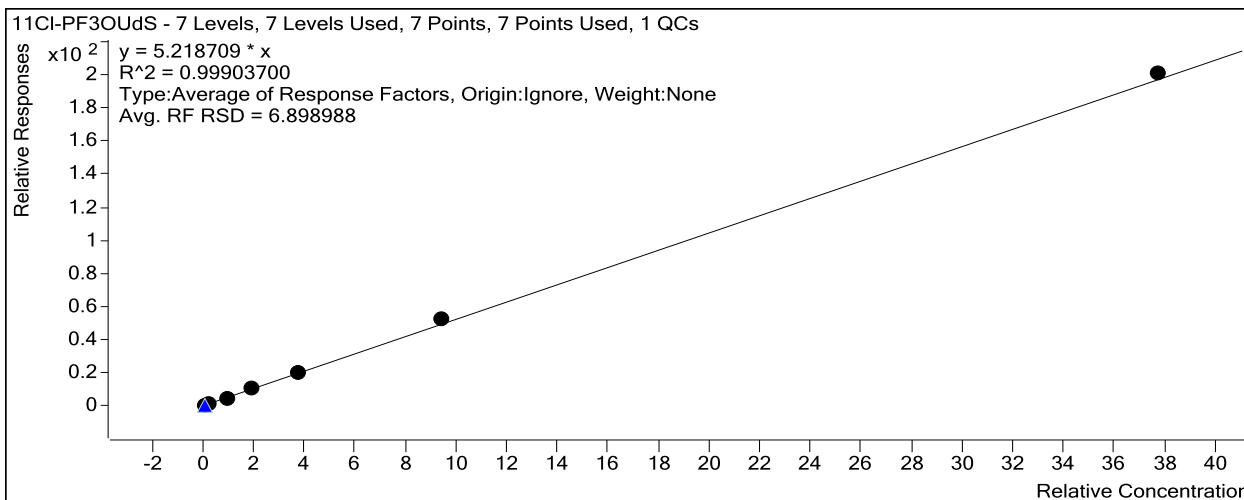
Quantitative Analysis Calibration Report



Target Compound

11CI-PF3OUdS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	14056	0.4715	4.9907
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	34531	1.1788	4.6238
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	144834	4.7150	4.9918
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	303415	9.4300	5.5624
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	626931	18.8600	5.4408
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	1538985	47.1500	5.5944
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	5277143	188.6000	5.3271



Extracted ISTD

MPFD0A

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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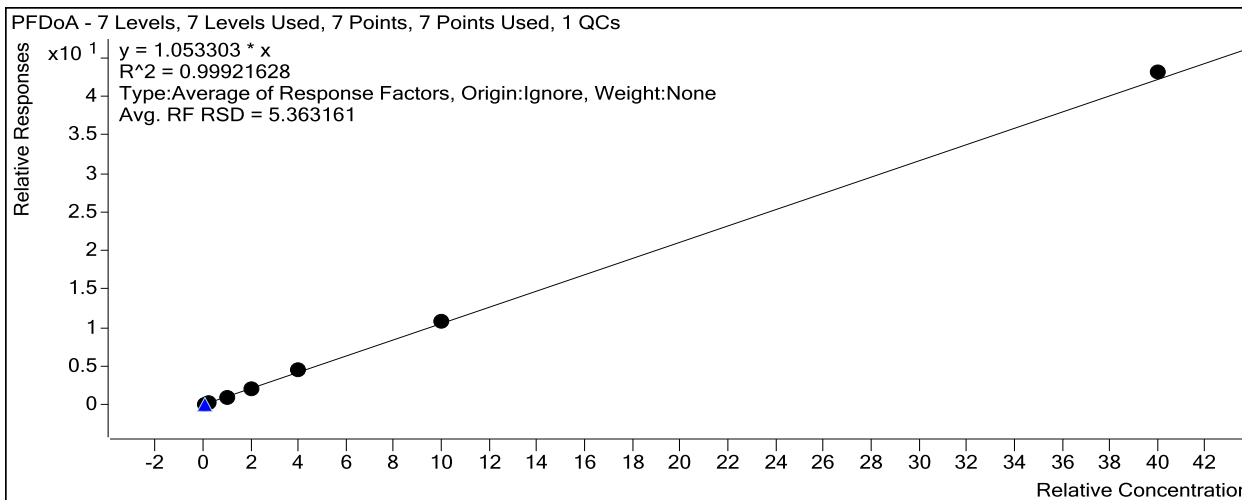
Quantitative Analysis Calibration Report

File Path	Calibration	Level	Enabled	Response	Exp Conc	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	249372	5.0000	49874.3402
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	256021	5.0000	51204.2502
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	251711	5.0000	50342.2372
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	246298	5.0000	49259.6706
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	250582	5.0000	50116.3079
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	253866	5.0000	50773.1348
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	227494	5.0000	45498.7039

Target Compound

PFD_oA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	24330	0.5000	0.9756
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	64017	1.2500	1.0002
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	254730	5.0000	1.0120
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	539301	10.0000	1.0948
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1126644	20.0000	1.1240
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2765043	50.0000	1.0892
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	9803035	200.0000	1.0773

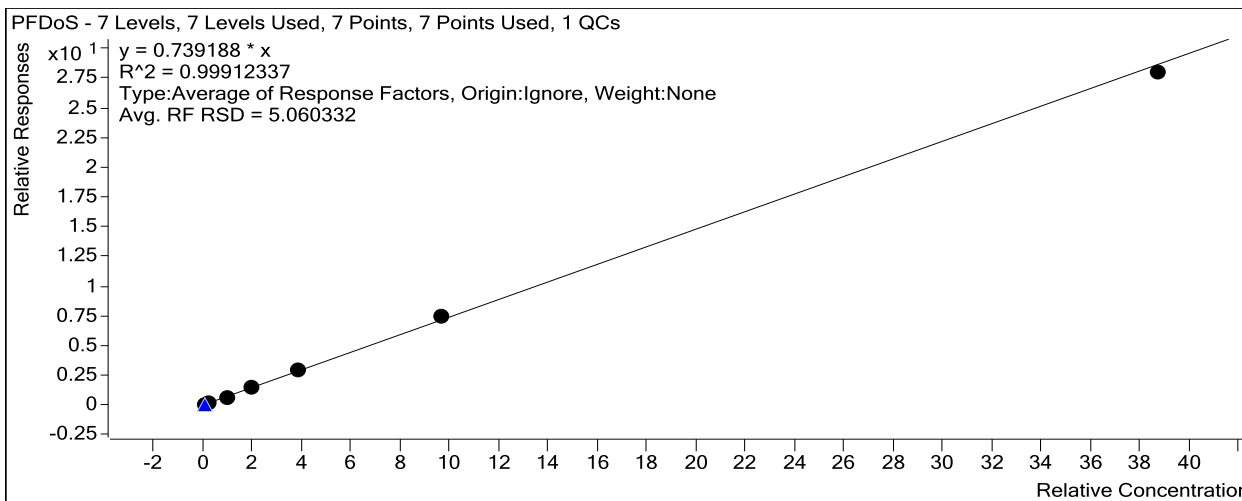


Target Compound

10:2F_{TS}

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	2570	0.4820	3.5361
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	6517	1.2050	3.5727
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	25512	4.8200	3.6551

Quantitative Analysis Calibration Report



Extracted ISTD

d-NMeFOSA

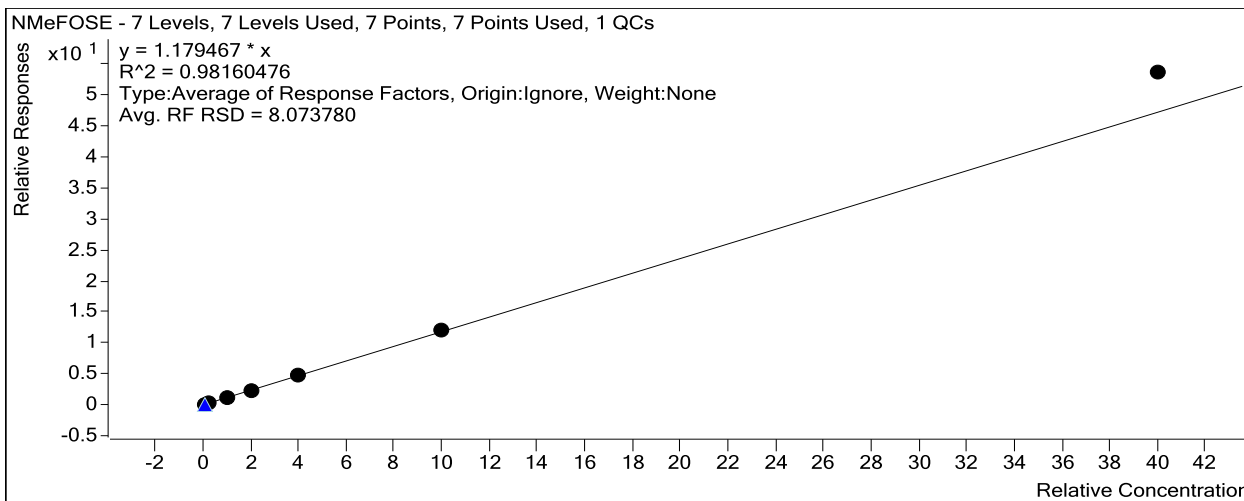
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	15484	5.0000	3096.7532
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	16013	5.0000	3202.5094
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	16253	5.0000	3250.6588
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	15657	5.0000	3131.3035
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	16204	5.0000	3240.7414
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	16205	5.0000	3241.0542
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	15151	5.0000	3030.1415

Target Compound

NMeFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	1794	0.5000	1.1587
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	4297	1.2500	1.0735
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	17781	5.0000	1.0940
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	38249	10.0000	1.2215
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	78478	20.0000	1.2108
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	189532	50.0000	1.1696
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	634634	200.0000	1.0472

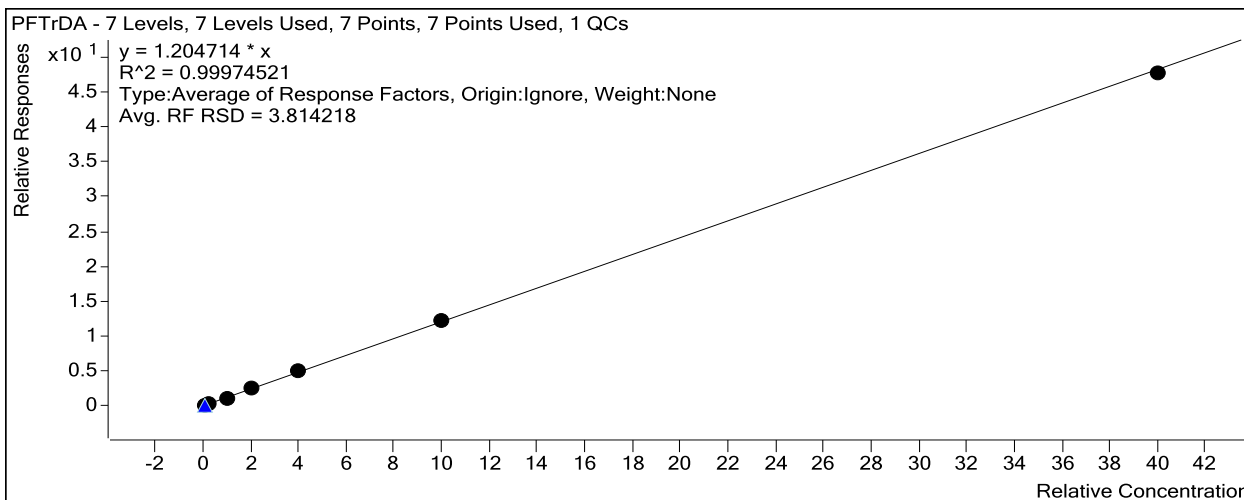
Quantitative Analysis Calibration Report



Target Compound

PFTrDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	29507	0.5000	1.1832
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	74511	1.2500	1.1641
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	288551	5.0000	1.1464
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	609904	10.0000	1.2381
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1278365	20.0000	1.2754
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	3133165	50.0000	1.2342
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	10842763	200.0000	1.1915



Extracted ISTD

d9-NEtFOSE

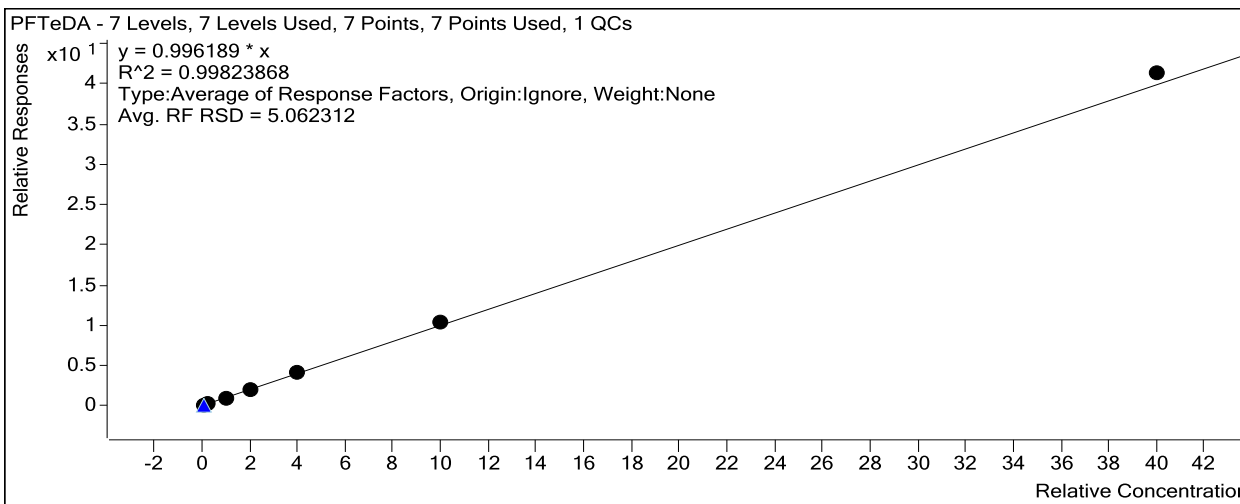
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_7.d Calibration 7 317141 5.0000 63428.1559

Target Compound *PFTeDA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	33469	0.5000	0.9626
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	81489	1.2500	0.9329
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	323712	5.0000	0.9345
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	680592	10.0000	1.0331
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1430425	20.0000	1.0412
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	3556936	50.0000	1.0361
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	13102668	200.0000	1.0329



Target Compound *PFHxDA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	44742	0.5000	12.0312
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	104596	1.2500	10.8632
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	419227	5.0000	10.8710
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	840385	10.0000	11.6059
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1872004	20.0000	12.1666
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	4738735	50.0000	11.9293
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	17907227	200.0000	12.2367

Quantitative Analysis Calibration Report

Batch Data Path	C:\MassHunter\Data\QQQ5\2220506BCAL\QuantResults\2220508A.batch.bin		
Analysis Time	5/12/2022 8:45 AM	Analyst Name	GCAL\jcms
Report Time	5/12/2022 8:53 AM	Reporter Name	GCAL\jcms
Last Calib Update	5/8/2022 9:52 AM	Batch State	Processed

Calibration Info

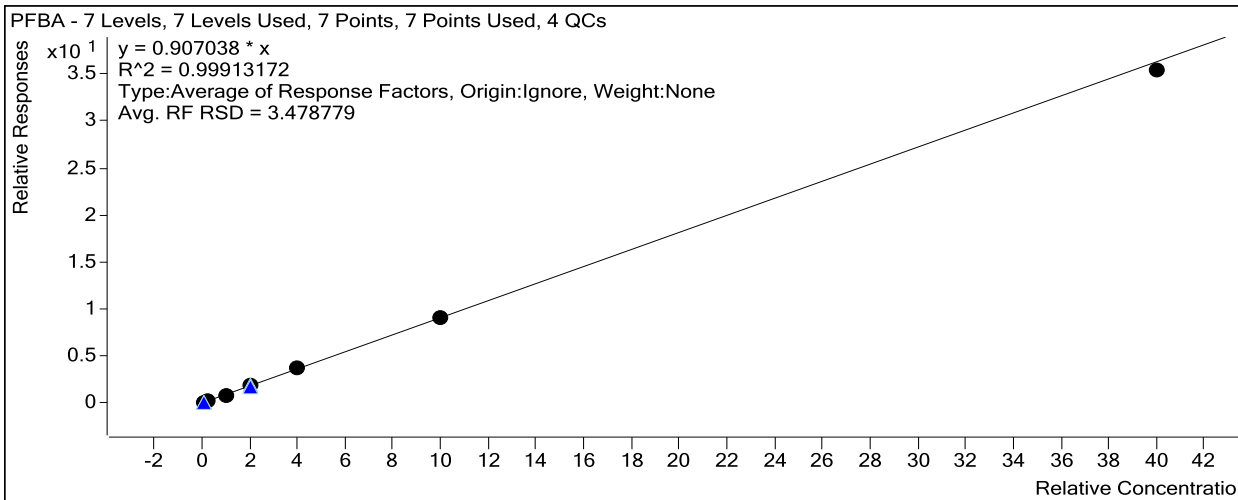
Extracted ISTD MPFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	48498	5.0000	9699.5087
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	49436	5.0000	9887.1005
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	51058	5.0000	10211.5437
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	49174	5.0000	9834.7534
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	48142	5.0000	9628.4626
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	50087	5.0000	10017.4420
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	48144	5.0000	9628.8700

Target Compound

PFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	4510	0.5000	0.9300
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	10879	1.2500	0.8802
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	43945	5.0000	0.8607
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	91970	10.0000	0.9351
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	181274	20.0000	0.9413
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	459494	50.0000	0.9174
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1703319	200.0000	0.8845

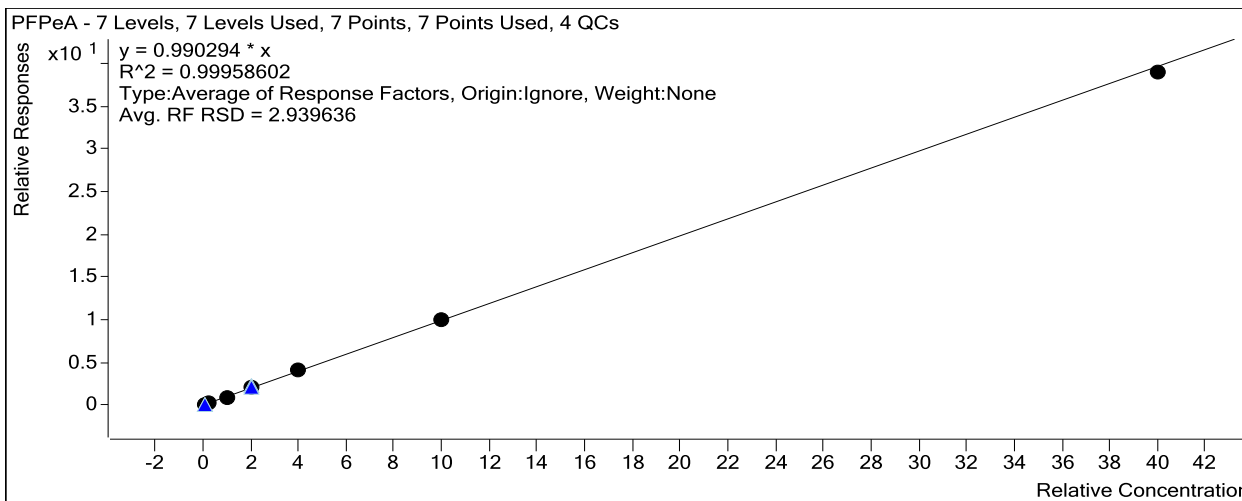


Target Compound

PFMPA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	896	0.5000	0.1283
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	2183	1.2500	0.1221
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	8636	5.0000	0.1182
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	17757	10.0000	0.1266

Quantitative Analysis Calibration Report



Extracted ISTD

M3PFBS

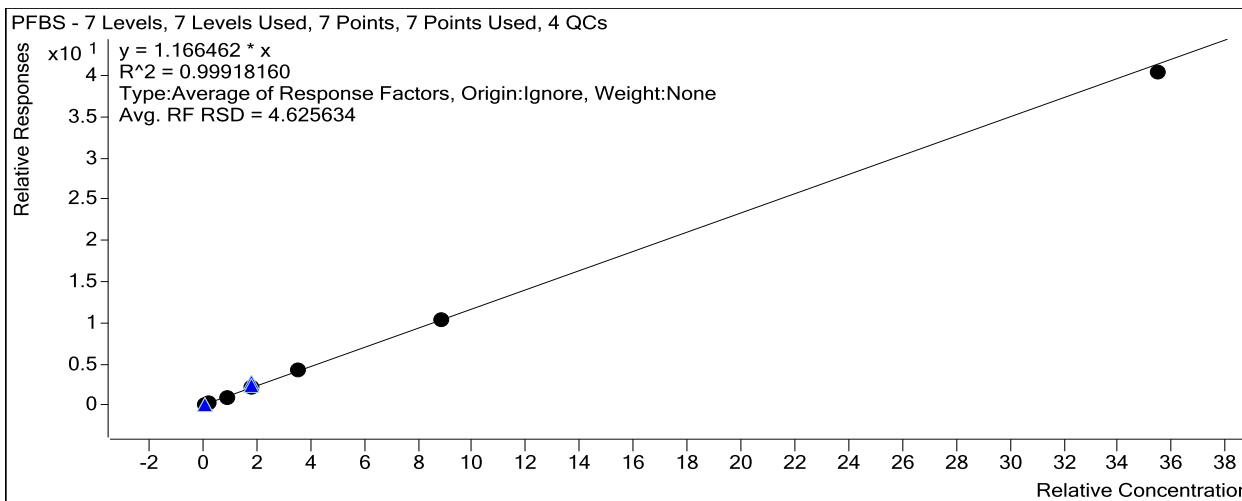
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	23831	5.0000	4766.2230
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	23678	5.0000	4735.6883
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	24269	5.0000	4853.7435
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	23426	5.0000	4685.2584
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	22001	5.0000	4400.1435
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	22766	5.0000	4553.2437
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	20543	5.0000	4108.5370

Target Compound

PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2576	0.4435	1.2185
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	5805	1.1088	1.1055
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	23630	4.4350	1.0977
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	50126	8.8700	1.2062
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	95960	17.7400	1.2293
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	236163	44.3500	1.1695
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	829816	177.4000	1.1385

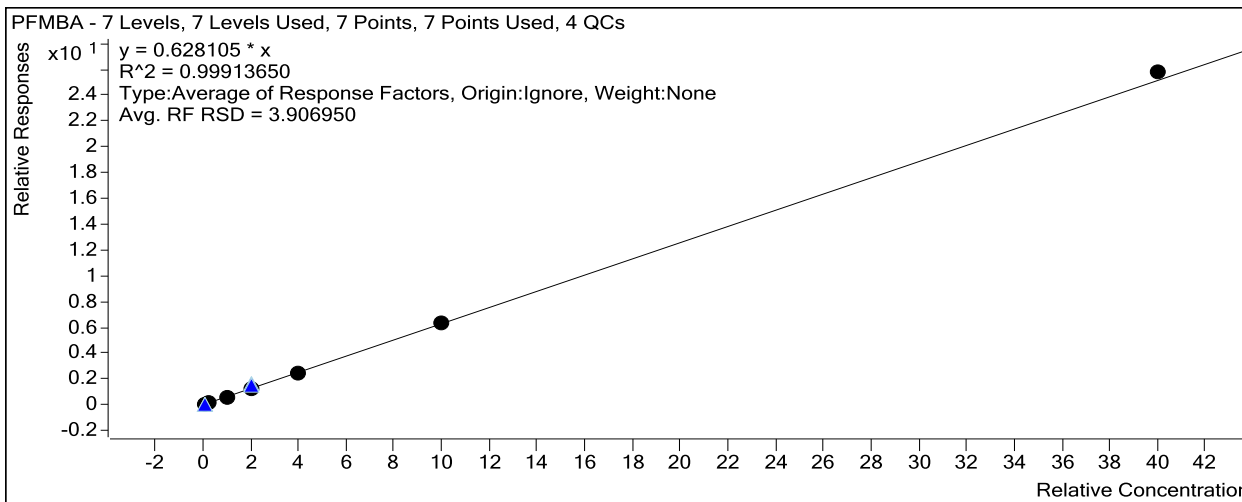
Quantitative Analysis Calibration Report



Target Compound

PFMBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	5531	0.5000	0.6411
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	13053	1.2500	0.5927
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	54660	5.0000	0.5976
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	114389	10.0000	0.6566
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	212450	20.0000	0.6238
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	552765	50.0000	0.6405
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	2064143	200.0000	0.6445



Target Compound

PFEESA

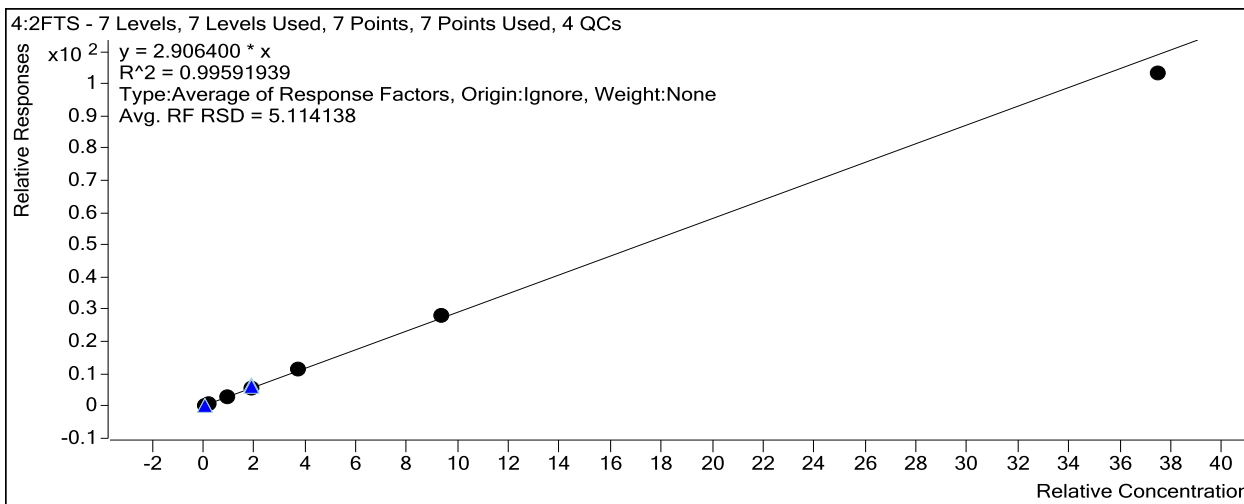
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	6023	0.4450	3.8629
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	14929	1.1125	3.7021
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	59880	4.4500	3.6768
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	125319	8.9000	3.8933
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	239414	17.8000	3.9164

Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	6191	5.0000	1238.2018
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	5806	5.0000	1161.1817
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	5626	5.0000	1125.1809
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	4872	5.0000	974.4213

Target Compound 4:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1710	0.4685	2.8489
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4140	1.1713	2.6845
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	17242	4.6850	2.9344
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	35276	9.3700	3.0405
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	66831	18.7400	3.0712
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	158722	46.8500	3.0110
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	502948	187.4000	2.7543



Extracted ISTD M5PFHxA

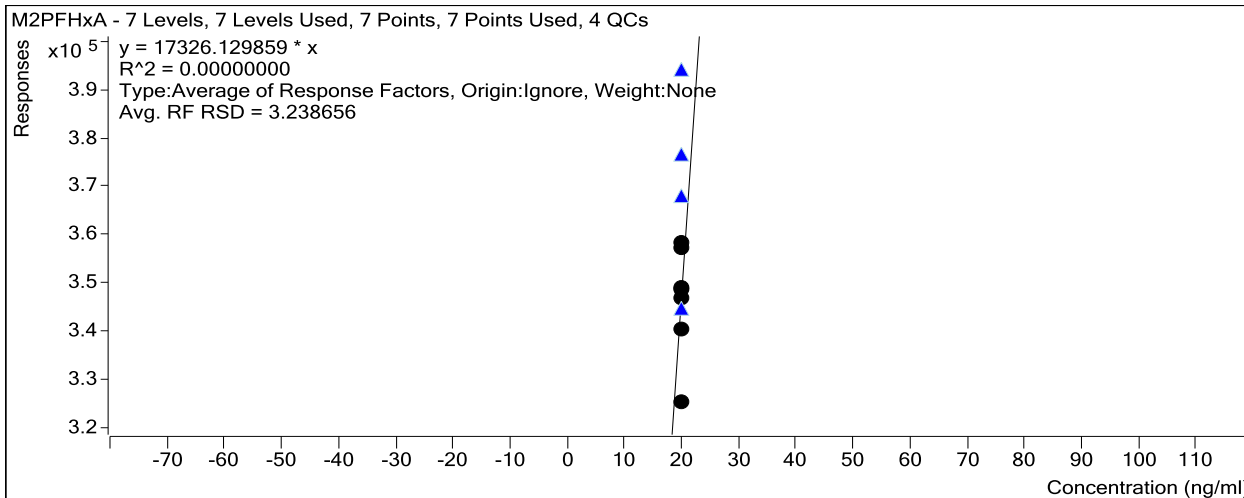
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	86264	5.0000	17252.7822
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	88094	5.0000	17618.7334
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	91472	5.0000	18294.4766
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	87105	5.0000	17420.9561
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	85150	5.0000	17030.0503
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	86301	5.0000	17260.2065
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	80069	5.0000	16013.8074

Instrument ISTD M2PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	358465	20.0000	17923.2500
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	357133	20.0000	17856.6508
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	346773	20.0000	17338.6534
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	348629	20.0000	17431.4679
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	340218	20.0000	17010.9204

Quantitative Analysis Calibration Report

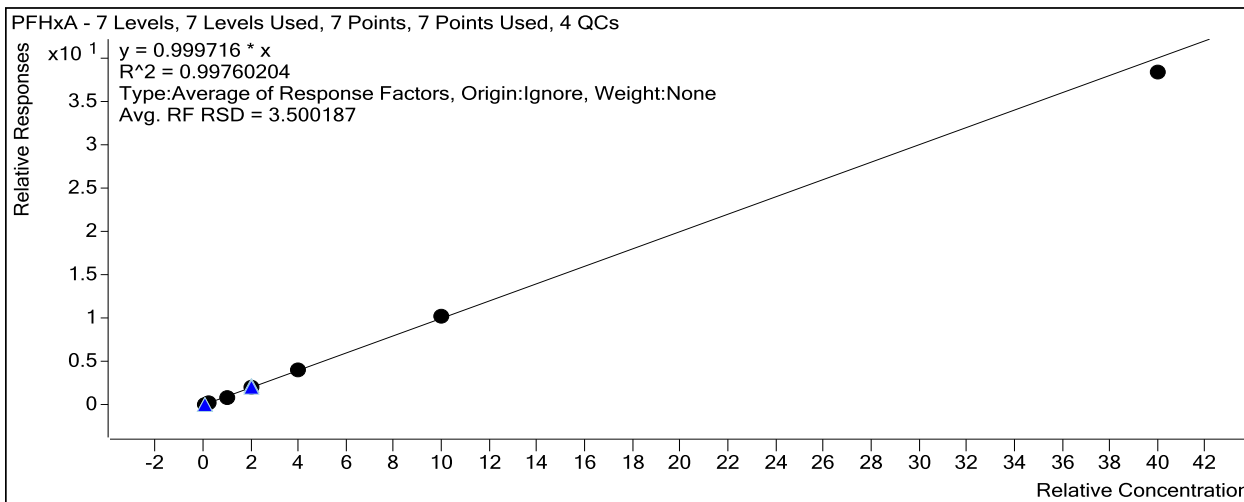
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	349118	20.0000	17455.9154
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	325321	20.0000	16266.0511



Target Compound

PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	8729	0.5000	1.0119
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	21431	1.2500	0.9731
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	87940	5.0000	0.9614
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	182153	10.0000	1.0456
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	350857	20.0000	1.0301
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	877862	50.0000	1.0172
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	3070363	200.0000	0.9587



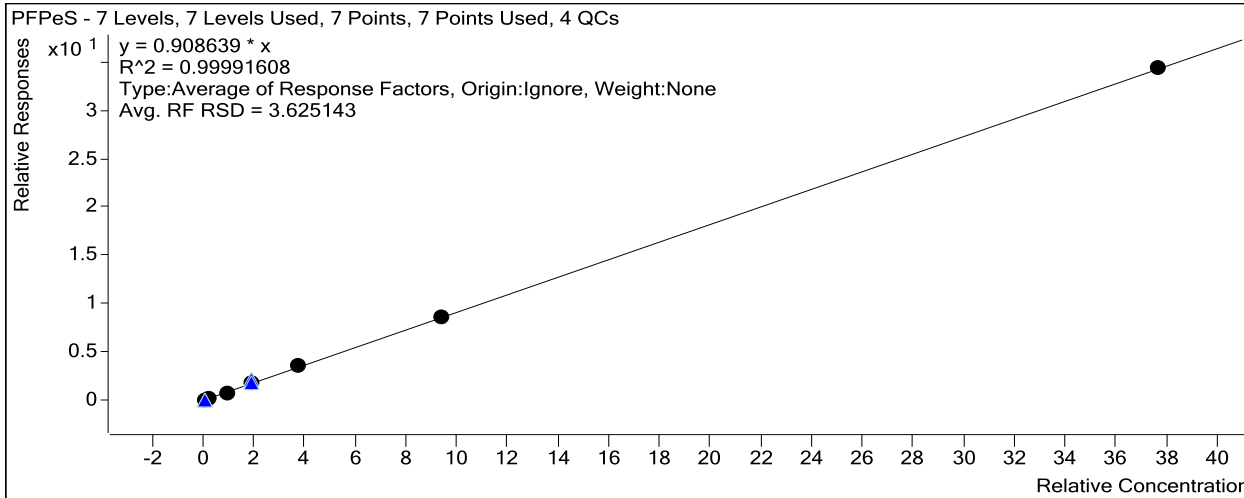
Target Compound

PFPeS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1974	0.4705	0.8805
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4874	1.1763	0.8749
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	20021	4.7050	0.8767

Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	41262	9.4100	0.9359
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	79534	18.8200	0.9604
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	196922	47.0500	0.9192
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	705890	188.2000	0.9129



Extracted ISTD

M3HFPODA

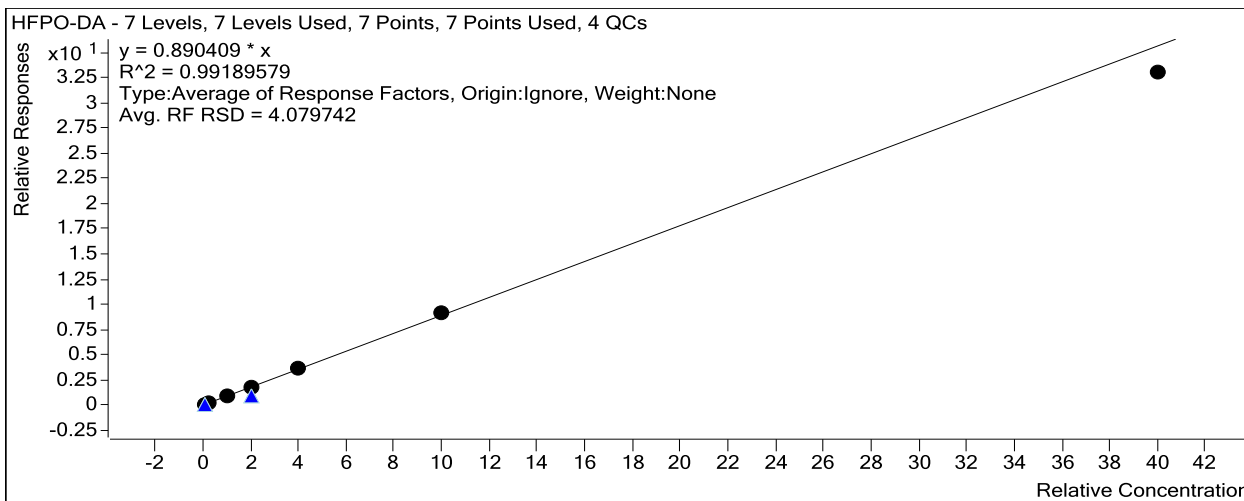
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	34764	10.0000	3476.3593
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	36504	10.0000	3650.4432
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	36469	10.0000	3646.8805
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	35735	10.0000	3573.4682
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	33863	10.0000	3386.3364
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	35108	10.0000	3510.8165
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	33911	10.0000	3391.1288

Target Compound

HFPO-DA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3126	1.0000	0.8991
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	8171	2.5000	0.8954
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	31296	10.0000	0.8582
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	65543	20.0000	0.9171
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	125728	40.0000	0.9282
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	319403	100.0000	0.9098
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1119233	400.0000	0.8251

Quantitative Analysis Calibration Report



Extracted ISTD

M4PFHpA

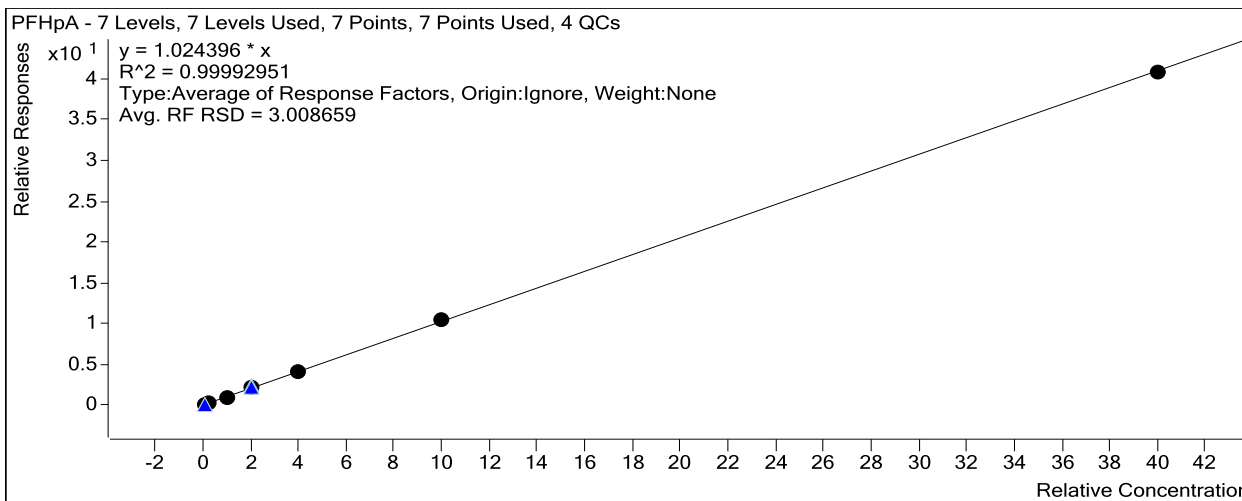
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	128339	5.0000	25667.8675
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	129024	5.0000	25804.7662
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	133637	5.0000	26727.3555
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	129023	5.0000	25804.6490
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	124364	5.0000	24872.7868
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	128831	5.0000	25766.2608
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	118997	5.0000	23799.3880

Target Compound

PFHpA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	13258	0.5000	1.0330
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	31483	1.2500	0.9760
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	132454	5.0000	0.9911
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	273482	10.0000	1.0598
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	520775	20.0000	1.0469
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1345427	50.0000	1.0443
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	4852941	200.0000	1.0196

Quantitative Analysis Calibration Report



Extracted ISTD

M3PFHxS

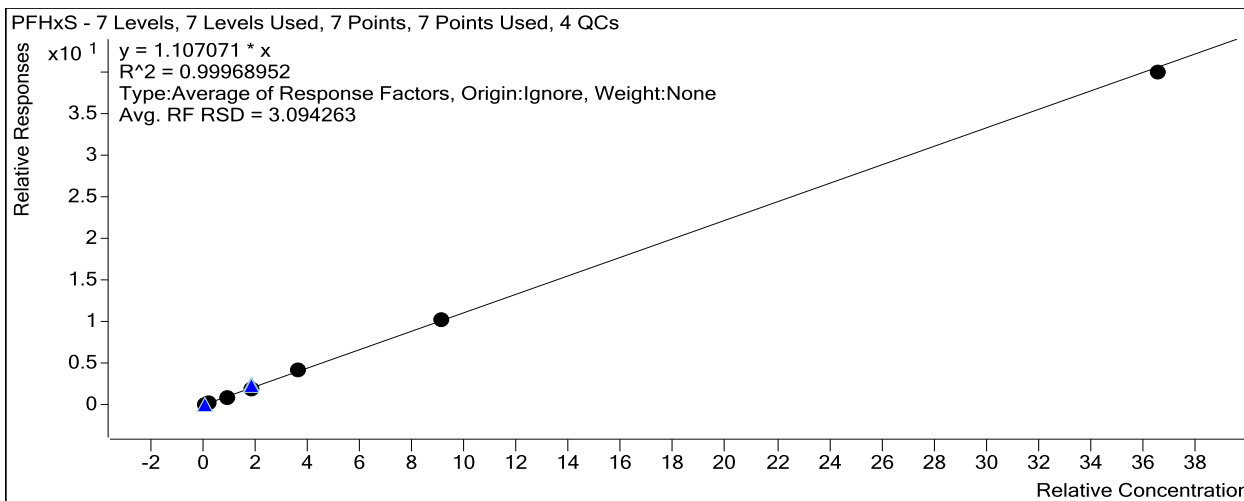
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	17518	5.0000	3503.5564
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	18124	5.0000	3624.7268
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	18299	5.0000	3659.7750
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	18083	5.0000	3616.6897
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	17171	5.0000	3434.2942
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	17937	5.0000	3587.4248
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	16351	5.0000	3270.2564

Target Compound

PFHxS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1852	0.4570	1.1567
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4488	1.1425	1.0838
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	17647	4.5700	1.0551
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	36860	9.1400	1.1151
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	71480	18.2800	1.1386
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	181950	45.7000	1.1098
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	651875	182.8000	1.0905

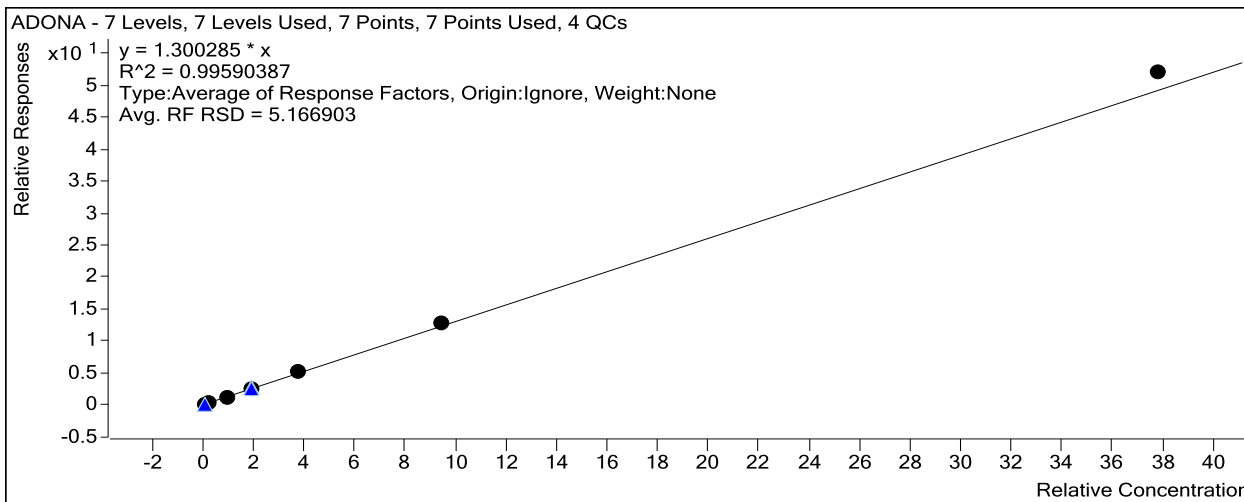
Quantitative Analysis Calibration Report



Target Compound

ADONA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	15224	0.4725	1.2463
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	37843	1.1813	1.2132
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	157379	4.7250	1.2343
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	325456	9.4500	1.3221
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	639915	18.9000	1.3530
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1642229	47.2500	1.3562
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	6097326	189.0000	1.3768



Extracted ISTD

M2 6:2 FTS

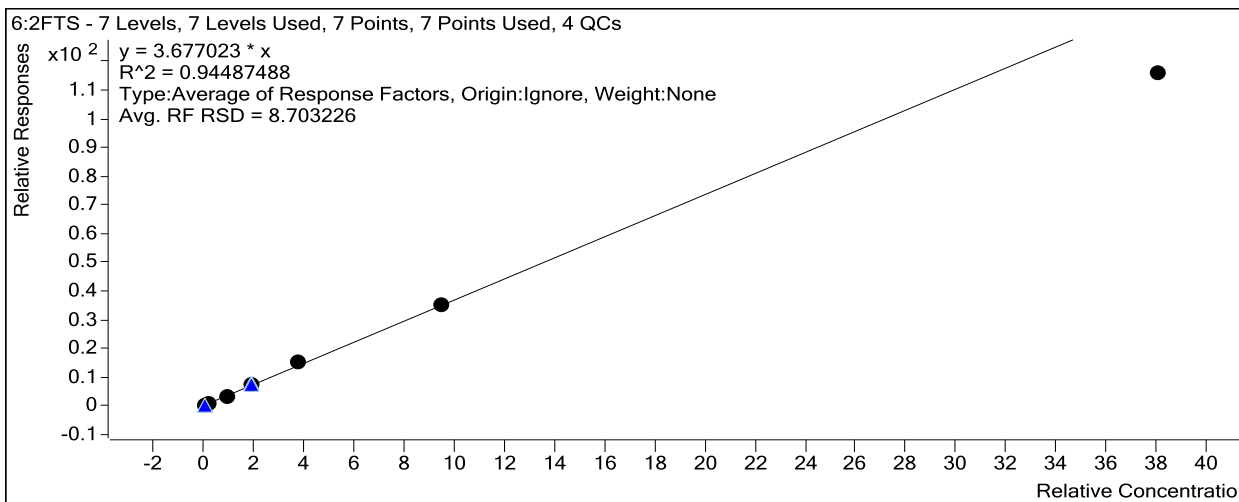
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	5979	5.0000	1195.7484
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	5929	5.0000	1185.8229
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	5958	5.0000	1191.5907
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	5812	5.0000	1162.4080
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	5425	5.0000	1084.9664

Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	5447	5.0000	1089.4714
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5138	5.0000	1027.6865

Target Compound 6:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2199	0.4755	3.8678
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	5102	1.1888	3.6193
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	20362	4.7550	3.5938
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	43643	9.5100	3.9480
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	82354	19.0200	3.9908
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	190214	47.5500	3.6718
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	595739	190.2000	3.0478



Extracted ISTD M8PFOA

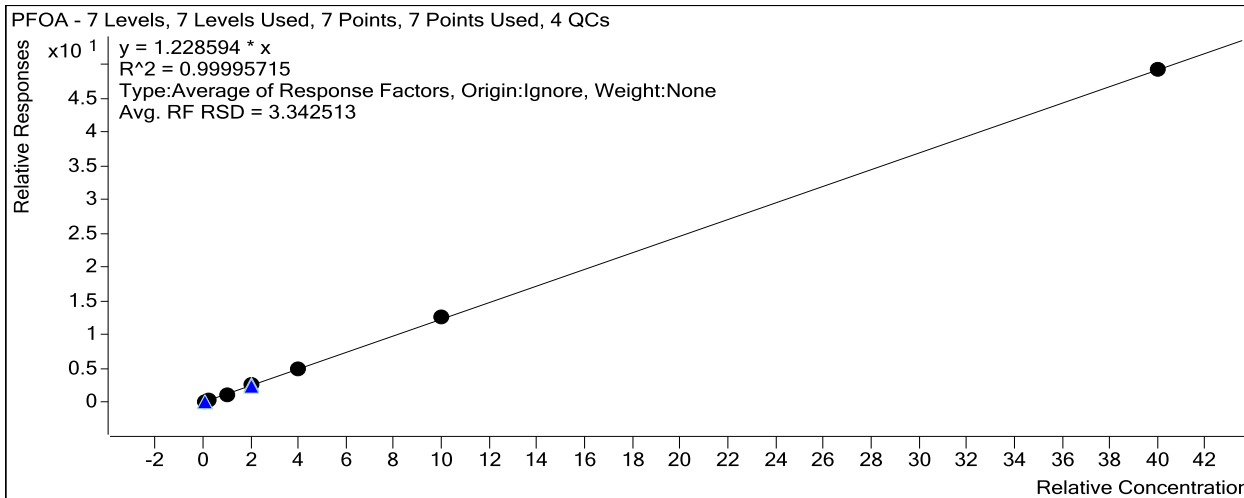
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	129262	5.0000	25852.4681
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	132024	5.0000	26404.7026
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	134924	5.0000	26984.8634
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	130247	5.0000	26049.4024
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	125126	5.0000	25025.2033
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	128135	5.0000	25626.9464
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	117156	5.0000	23431.2639

Instrument ISTD MPFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	827837	25.0000	33113.4642
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	823972	25.0000	32958.8985
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	800743	25.0000	32029.7360
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	825655	25.0000	33026.1903
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	784559	25.0000	31382.3498
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	812374	25.0000	32494.9748
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	753613	25.0000	30144.5093

Quantitative Analysis Calibration Report

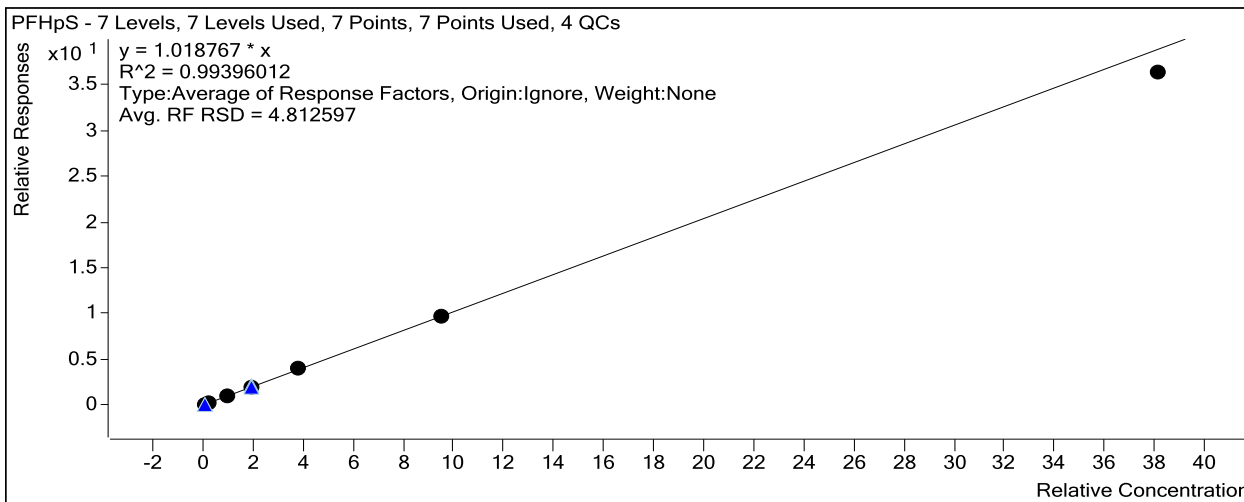
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1601626	50.0000	1.2500
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5765341	200.0000	1.2303



Target Compound

PFHpS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1842	0.4765	1.1035
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4328	1.1913	1.0024
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	17049	4.7650	0.9776
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	35531	9.5300	1.0309
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	68596	19.0600	1.0479
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	173608	47.6500	1.0156
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	594273	190.6000	0.9534



Extracted ISTD

M9PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	166062	5.0000	33212.4067
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	172670	5.0000	34533.9296
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	176077	5.0000	35215.3447

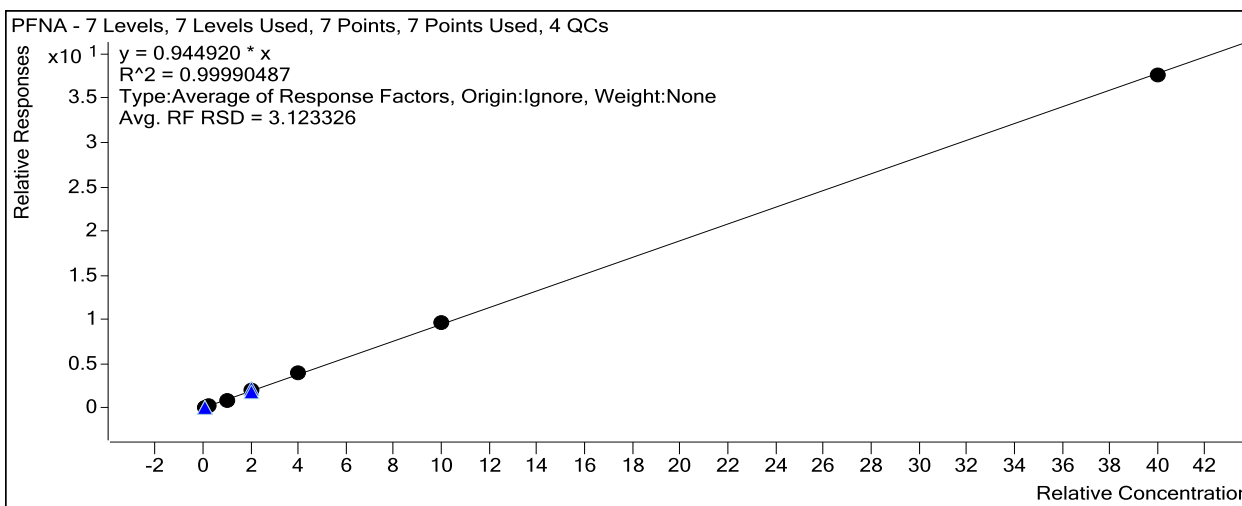
Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	168628	5.0000	33725.6739
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	161165	5.0000	32232.9171
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	165162	5.0000	33032.4380
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	147488	5.0000	29497.5528

Target Compound

PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	15672	0.5000	0.9437
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	39552	1.2500	0.9163
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	158342	5.0000	0.8993
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	327151	10.0000	0.9700
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	632154	20.0000	0.9806
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1593277	50.0000	0.9647
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5544684	200.0000	0.9399



Extracted ISTD

M8PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	14851	5.0000	2970.1313
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	15652	5.0000	3130.4308
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	15823	5.0000	3164.5214
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	15689	5.0000	3137.8064
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	14982	5.0000	2996.4696
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	15068	5.0000	3013.5583
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	13680	5.0000	2736.0674

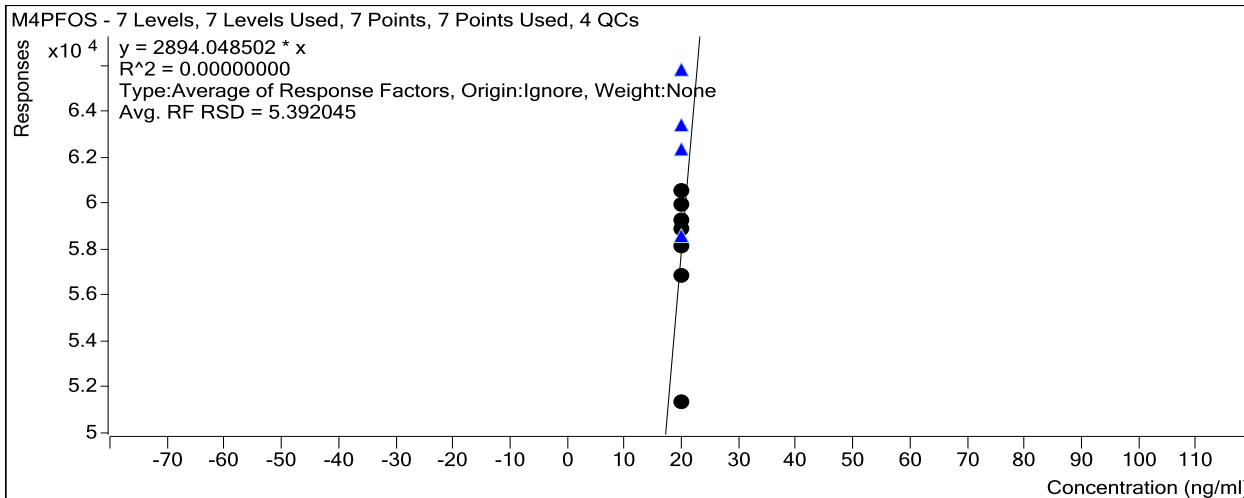
Instrument ISTD

M4PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	60585	20.0000	3029.2351
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	59974	20.0000	2998.7149
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	58171	20.0000	2908.5469
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	58915	20.0000	2945.7525
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	56859	20.0000	2842.9497

Quantitative Analysis Calibration Report

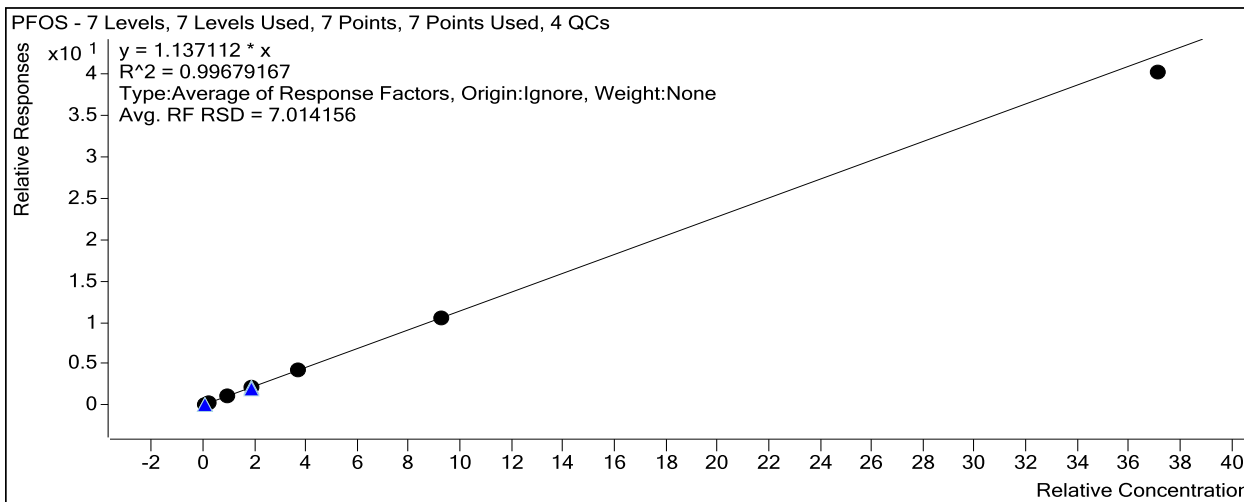
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	59303	20.0000	2965.1654
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	51359	20.0000	2567.9750



Target Compound

PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1807	0.4640	1.3111
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	3942	1.1600	1.0856
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	16017	4.6400	1.0908
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	32912	9.2800	1.1303
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	62819	18.5600	1.1295
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	157931	46.4000	1.1295
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	549937	185.6000	1.0830



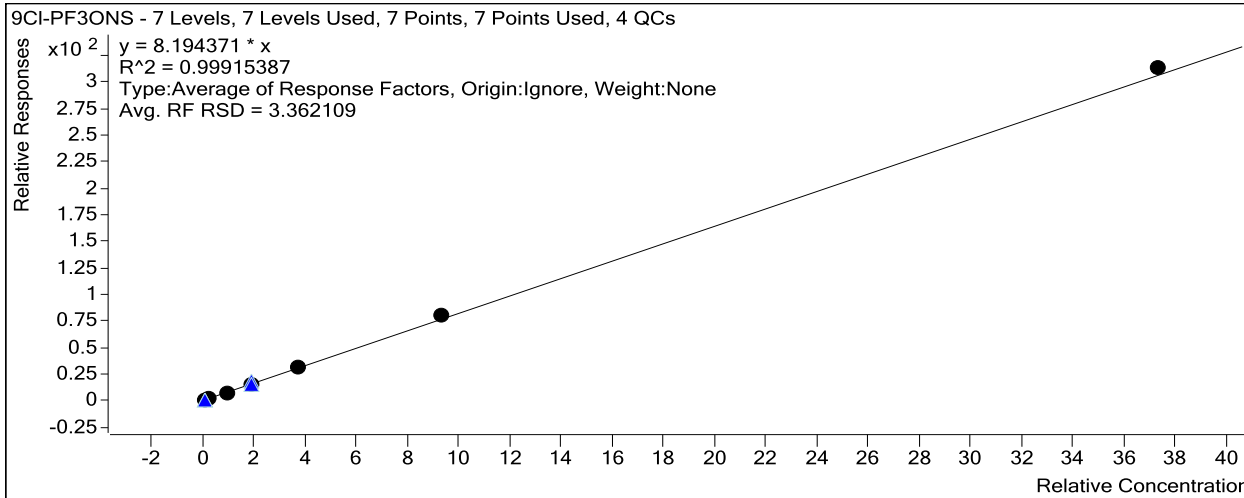
Target Compound

9CI-PF3ONS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	11281	0.4665	8.1418
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	28314	1.1663	7.7550
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	117037	4.6650	7.9280

Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	241883	9.3300	8.2622
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	465944	18.6600	8.3332
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1199349	46.5500	8.5496
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	4283899	186.6000	8.3907



Extracted ISTD

M2 8:2 FTS

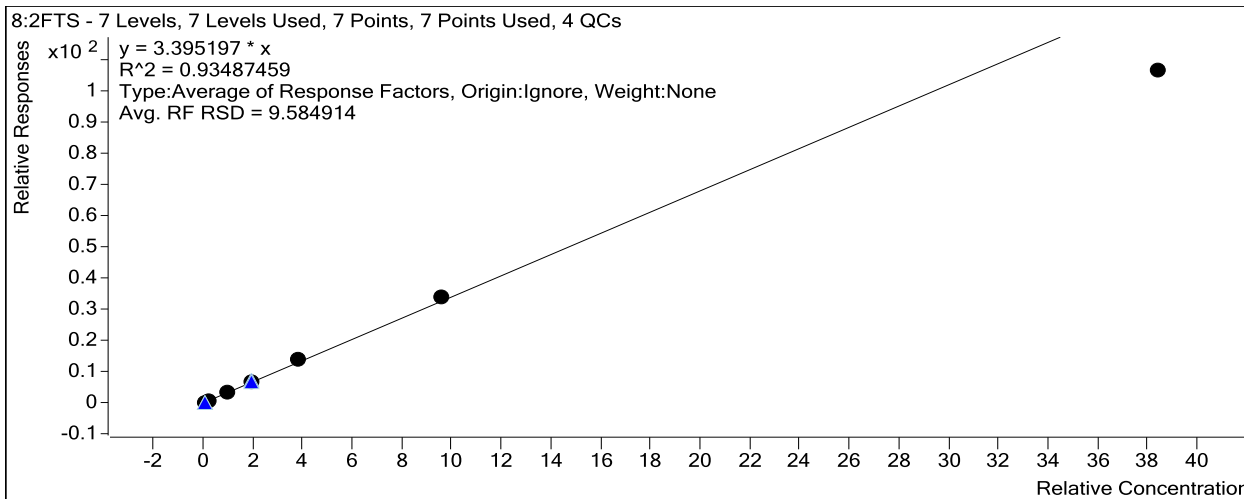
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	5561	5.0000	1112.1534
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	5248	5.0000	1049.6707
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	5065	5.0000	1012.9363
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	5137	5.0000	1027.4586
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	4625	5.0000	925.0280
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	4446	5.0000	889.2484
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	3905	5.0000	781.0888

Target Compound

8:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1687	0.4800	3.1608
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4337	1.2000	3.4433
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	17046	4.8000	3.5058
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	36494	9.6000	3.6998
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	64966	19.2000	3.6579
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	150492	48.0000	3.5257
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	415872	192.0000	2.7731

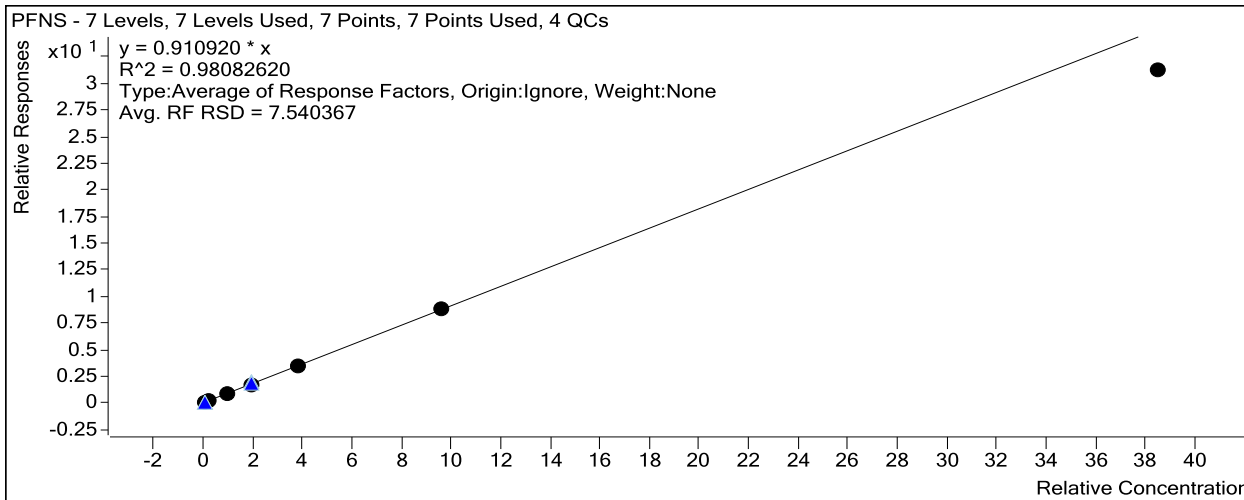
Quantitative Analysis Calibration Report



Target Compound

PFNS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1483	0.4810	1.0383
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	3497	1.2025	0.9289
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	13216	4.8100	0.8683
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	27608	9.6200	0.9146
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	52049	19.2400	0.9028
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	132165	48.1000	0.9118
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	427280	192.4000	0.8117

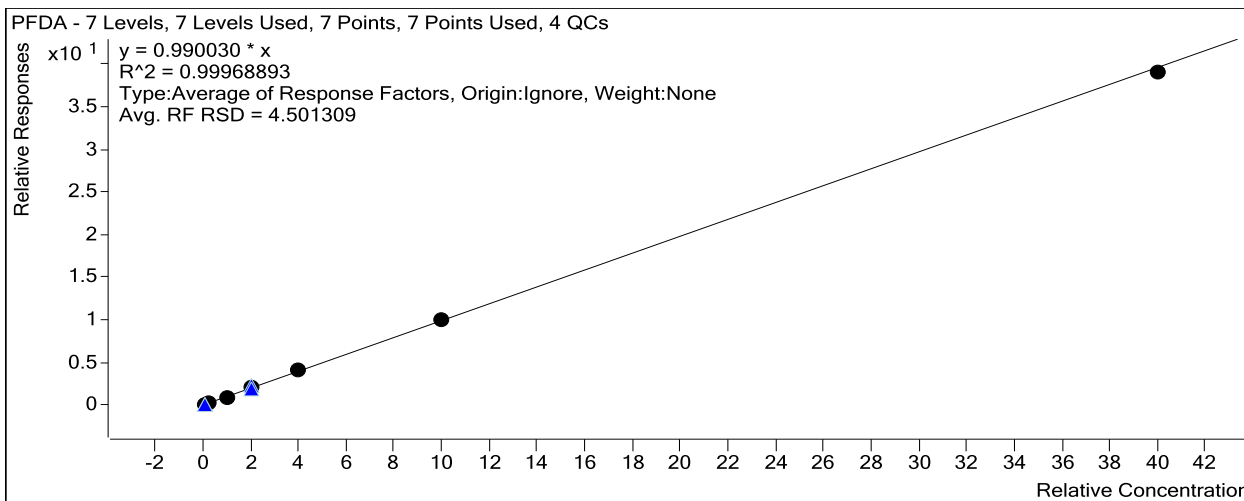


Extracted ISTD

M6PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	149874	5.0000	29974.7309
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	154649	5.0000	30929.8648
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	158057	5.0000	31611.3093
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	150418	5.0000	30083.5776
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	141706	5.0000	28341.2469

Quantitative Analysis Calibration Report



Extracted ISTD

d3-NMeFOSAA

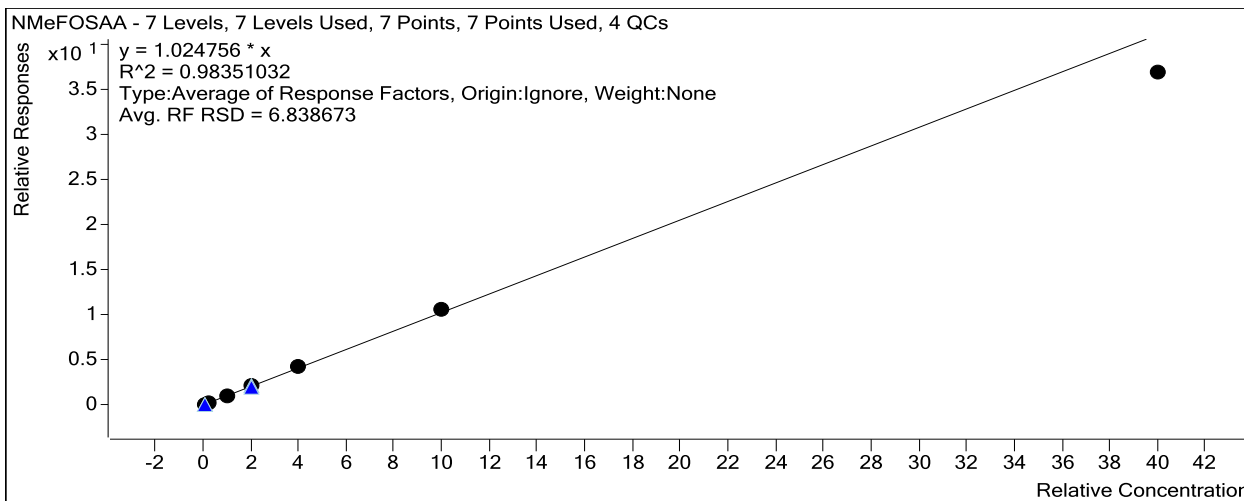
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	13041	5.0000	2608.2898
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	13302	5.0000	2660.4911
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	13884	5.0000	2776.7682
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	13179	5.0000	2635.8542
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	12607	5.0000	2521.4630
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	13431	5.0000	2686.2224
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	13317	5.0000	2663.3479

Target Compound

NMeFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1383	0.5000	1.0607
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	3185	1.2500	0.9578
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	13658	5.0000	0.9837
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	29196	10.0000	1.1076
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	54341	20.0000	1.0776
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	143003	50.0000	1.0647
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	490617	200.0000	0.9211

Quantitative Analysis Calibration Report



Extracted ISTD

M8FOSA

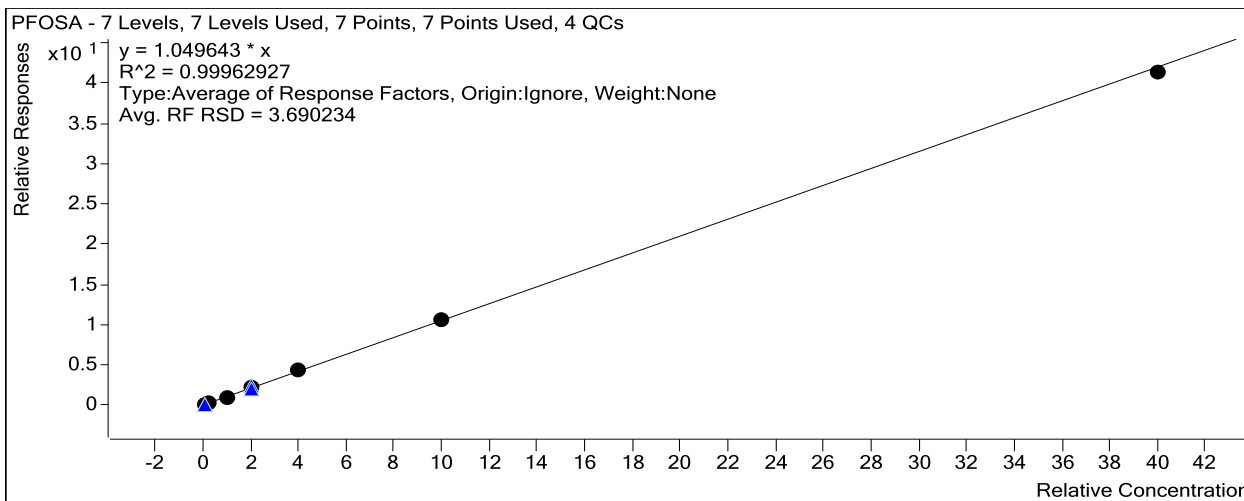
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	40688	5.0000	8137.6003
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	41324	5.0000	8264.7884
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	43060	5.0000	8612.0468
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	42313	5.0000	8462.5747
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	39250	5.0000	7849.9981
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	40916	5.0000	8183.2488
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	38479	5.0000	7695.7996

Target Compound

PFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	4361	0.5000	1.0718
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	10380	1.2500	1.0047
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	42870	5.0000	0.9956
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	91722	10.0000	1.0838
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	171612	20.0000	1.0931
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	435856	50.0000	1.0652
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1590265	200.0000	1.0332

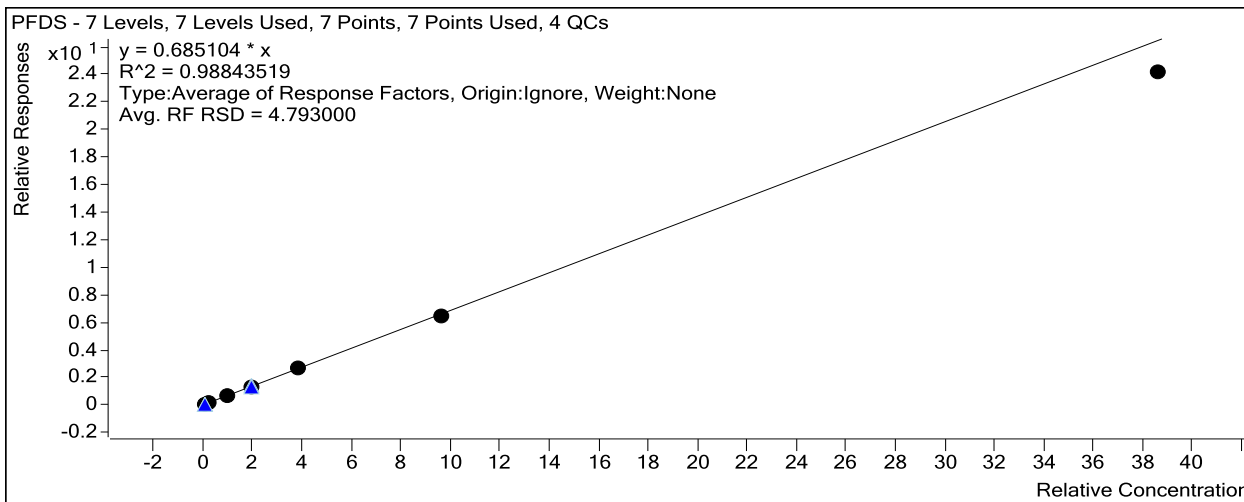
Quantitative Analysis Calibration Report



Target Compound

PFDS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1040	0.4825	0.7254
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	2654	1.2063	0.7029
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	10254	4.8250	0.6716
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	21309	9.6500	0.7037
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	40408	19.3000	0.6987
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	97057	48.2500	0.6675
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	330519	193.0000	0.6259



Extracted ISTD

d5-NEtFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	26700	5.0000	5340.0963
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	26453	5.0000	5290.6643
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	26350	5.0000	5270.0308
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	26231	5.0000	5246.2915
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	24117	5.0000	4823.4560

Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	24154	5.0000	4830.7090
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	19461	5.0000	3892.1748

Extracted ISTD

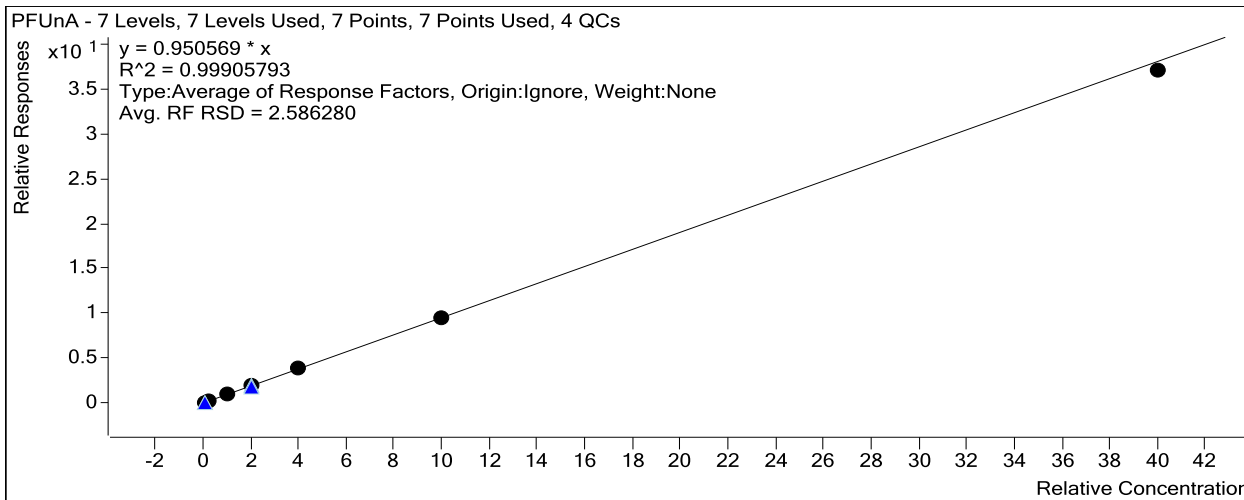
M7PFUnA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	153850	5.0000	30770.0023
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	155219	5.0000	31043.8850
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	154252	5.0000	30850.4405
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	151719	5.0000	30343.8398
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	143748	5.0000	28749.6093
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	146907	5.0000	29381.4548
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	124362	5.0000	24872.3585

Target Compound

PFUnA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	14717	0.5000	0.9566
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	36184	1.2500	0.9325
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	142893	5.0000	0.9264
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	297345	10.0000	0.9799
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	566425	20.0000	0.9851
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1392379	50.0000	0.9478
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	4605209	200.0000	0.9258

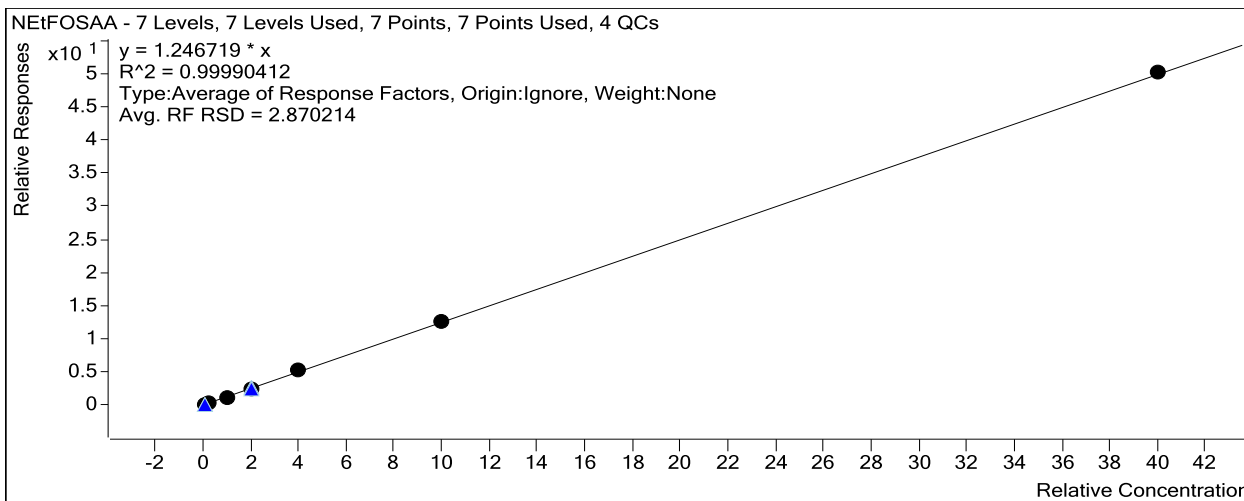


Target Compound

NETFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3308	0.5000	1.2389
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	8051	1.2500	1.2174
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	31371	5.0000	1.1905
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	66191	10.0000	1.2617
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	125651	20.0000	1.3025
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	304533	50.0000	1.2608
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	977095	200.0000	1.2552

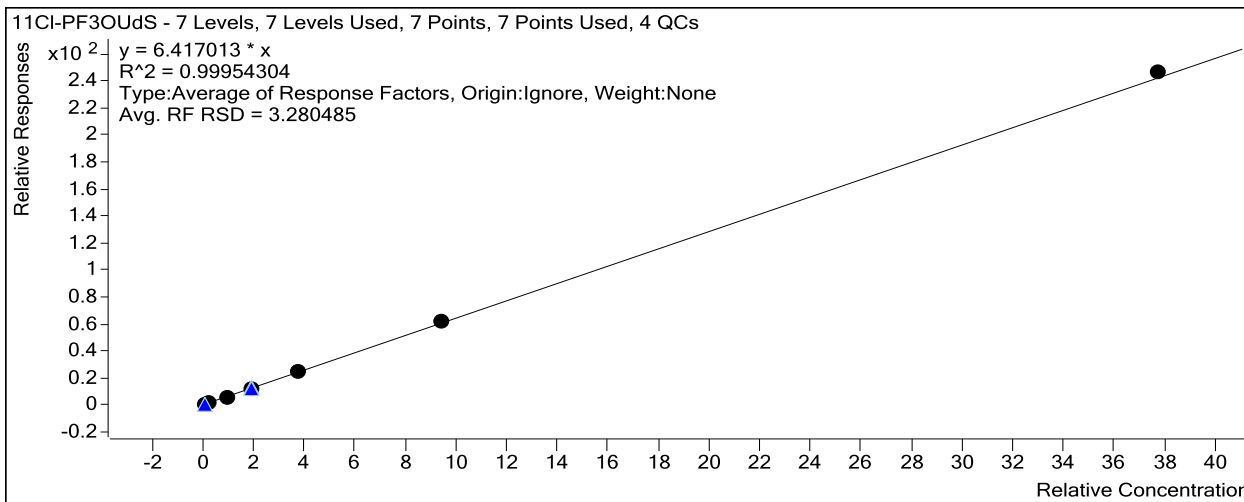
Quantitative Analysis Calibration Report



Target Compound

11CI-PF3OUdS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	8982	0.4715	6.4141
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	22302	1.1788	6.0437
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	92769	4.7150	6.2175
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	195159	9.4300	6.5955
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	372283	18.8600	6.5875
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	927103	47.1500	6.5248
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	3372692	188.6000	6.5359



Extracted ISTD

MPFDaA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	156724	5.0000	31344.7704
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	157347	5.0000	31469.3055
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	159665	5.0000	31932.9080
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	153773	5.0000	30754.5654
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	148914	5.0000	29782.7263

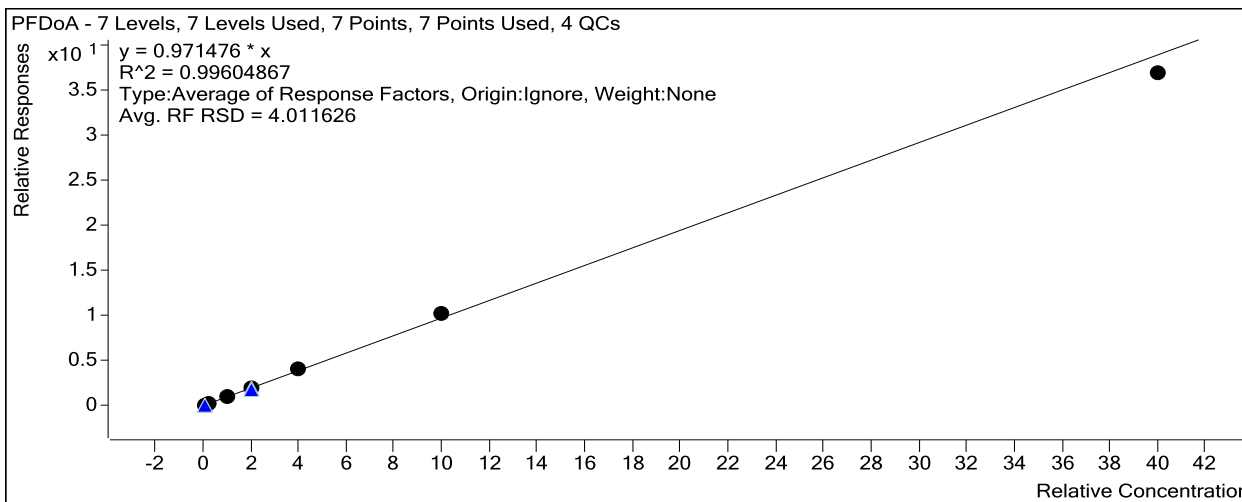
Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	149455	5.0000	29891.0278
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	143603	5.0000	28720.5850

Target Compound

PFD_oA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	15234	0.5000	0.9720
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	36778	1.2500	0.9350
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	150465	5.0000	0.9424
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	309101	10.0000	1.0051
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	601670	20.0000	1.0101
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1515764	50.0000	1.0142
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5293702	200.0000	0.9216

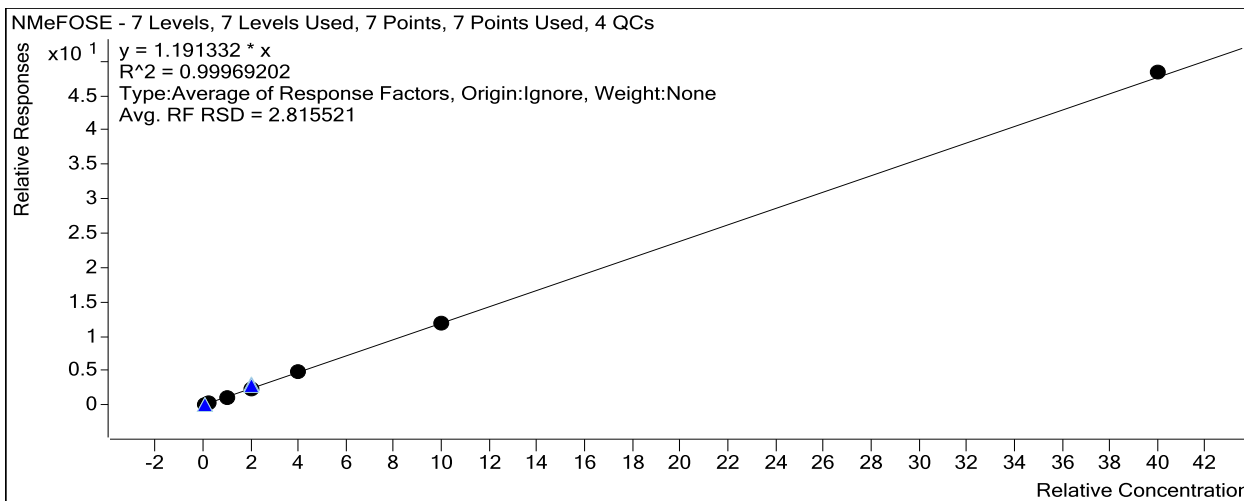


Target Compound

10:2F_{TS}

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1692	0.4820	3.1558
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	3826	1.2050	3.0249
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	15730	4.8200	3.2219
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	32984	9.6400	3.3301
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	61526	19.2800	3.4498
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	147098	48.2000	3.4319
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	463756	192.8000	3.0795

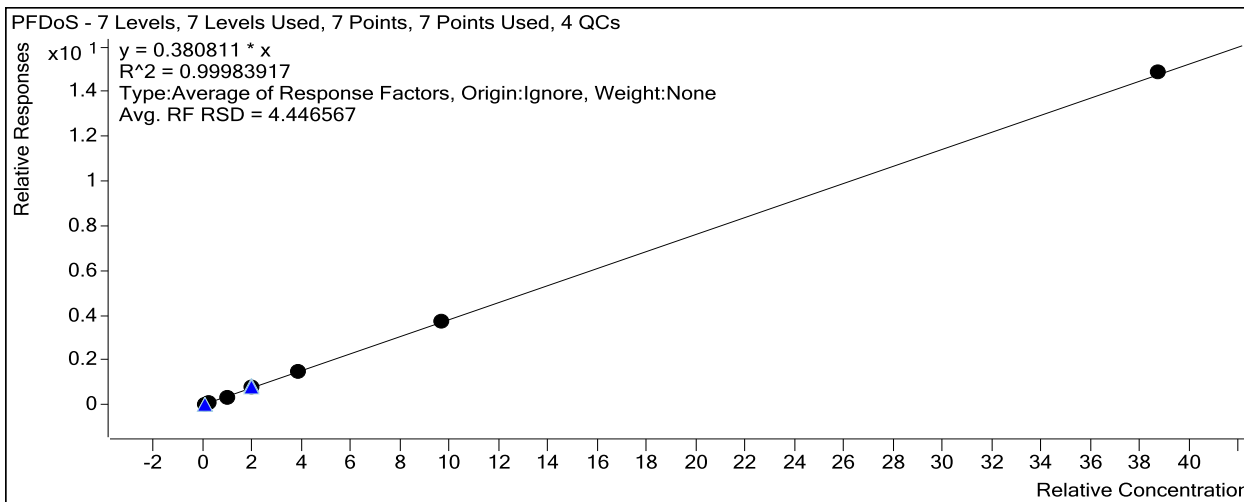
Quantitative Analysis Calibration Report



Target Compound

PFDoS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	530	0.4840	0.3688
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	1487	1.2100	0.3925
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	5324	4.8400	0.3476
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	11985	9.6800	0.3946
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	22506	19.3600	0.3880
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	56891	48.4000	0.3901
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	203518	193.6000	0.3842



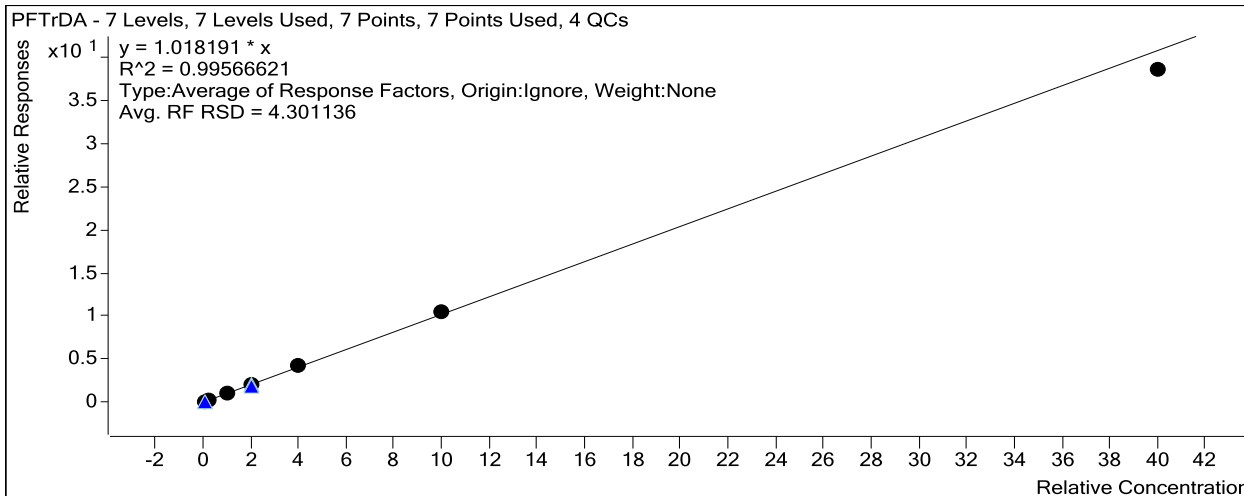
Target Compound

PFTrDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	15799	0.5000	1.0081
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	38701	1.2500	0.9838
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	157604	5.0000	0.9871
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	332038	10.0000	1.0796
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	623329	20.0000	1.0465

Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1582720	50.0000	1.0590
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5533077	200.0000	0.9633



Extracted ISTD

d9-NEtFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	13728	5.0000	2745.5992
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	14248	5.0000	2849.5144
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	14256	5.0000	2851.1991
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	14623	5.0000	2924.6668
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	13875	5.0000	2775.0384
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	14366	5.0000	2873.1792
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	13637	5.0000	2727.3961

Extracted ISTD

d-NEtFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	9962	5.0000	1992.4811
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	9959	5.0000	1991.7119
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	10295	5.0000	2059.0063
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	9882	5.0000	1976.3111
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	9695	5.0000	1938.9820
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	9421	5.0000	1884.2854
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	9491	5.0000	1898.2272

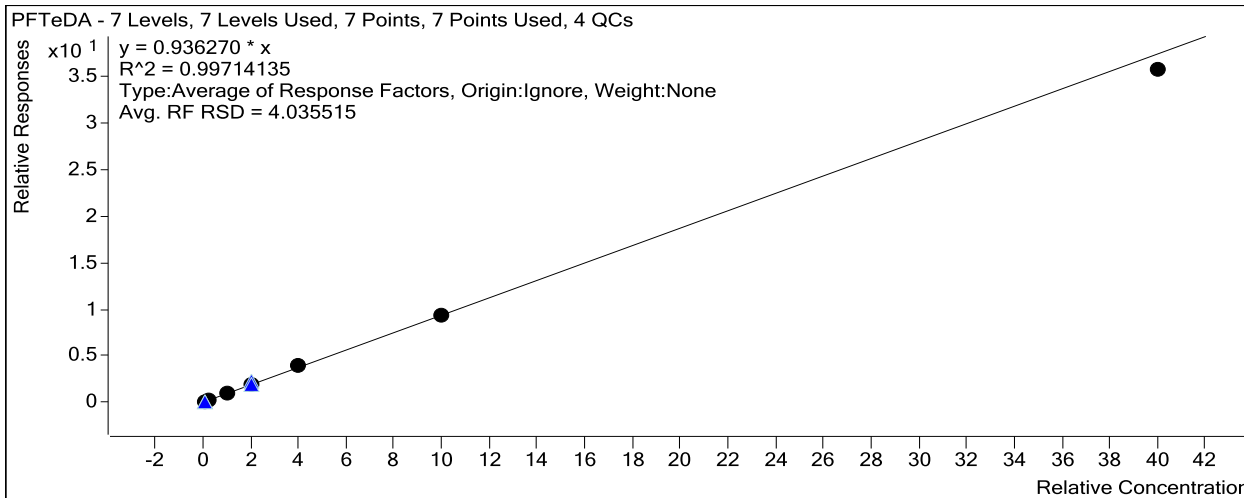
Target Compound

NEtFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1658	0.5000	1.2078
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	3962	1.2500	1.1124
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	15711	5.0000	1.1020
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	34193	10.0000	1.1691
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	64473	20.0000	1.1617
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	161566	50.0000	1.1246
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	616665	200.0000	1.1305

Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_7.d Calibration 6 1629083 50.0000 0.9419
 J:\MassHunter\Data\2220506BCAL\2220506B_8.d Calibration 7 5927071 200.0000 0.8945



Extracted ISTD

M2PFTA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	172278	5.0000	34455.6938
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	175362	5.0000	35072.3643
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	176233	5.0000	35246.6884
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	174416	5.0000	34883.1622
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	165507	5.0000	33101.4350
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	172951	5.0000	34590.2444
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	165659	5.0000	33131.8645

Extracted ISTD

M2PFHxDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	17612	5.0000	3522.4571
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	17560	5.0000	3512.0466
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	18317	5.0000	3663.4736
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	17983	5.0000	3596.5973
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	16992	5.0000	3398.3713
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	17584	5.0000	3516.7099
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	17525	5.0000	3505.0116

Target Compound

PFHxDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	21257	0.5000	12.0697
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	49031	1.2500	11.1686
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	194441	5.0000	10.6151
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	414263	10.0000	11.5182
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	787046	20.0000	11.5797
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2036893	50.0000	11.5841
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	7942572	200.0000	11.3303

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ5</u>
Analysis Date:	<u>05/08/2022 16:55</u>	Lab File ID:	<u>2220508A_25.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>740431</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	9430	9660	102	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	9370	9710	104	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	9510	9560	101	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10100	105	70	130	
9Cl-PF3ONS	ng/L	9330	9580	103	70	130	
ADONA	ng/L	9450	9800	104	70	130	
HFPO-DA	ng/L	20000	20600	103	70	130	
NEFOSAA	ng/L	10000	9810	98	70	130	
NMeFOSAA	ng/L	10000	10200	102	70	130	
Perfluorobutanoic acid	ng/L	10000	10500	105	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9240	104	70	130	
Perfluorodecanoic acid	ng/L	10000	10200	102	70	130	
Perfluorodecane sulfonic acid	ng/L	9650	9800	102	70	130	
Perfluorododecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroheptanoic acid	ng/L	10000	10300	103	70	130	
Perfluoroheptanesulfonic acid	ng/L	9530	9800	103	70	130	
Perfluorohexanoic acid	ng/L	10000	10400	104	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9390	103	70	130	
Perfluorononanoic acid	ng/L	10000	10400	104	70	130	
Perfluorononanesulfonic acid	ng/L	9620	10100	105	70	130	
Perfluorooctanoic acid	ng/L	10000	10200	102	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9580	103	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	10200	102	70	130	
Perfluoropentanoic acid	ng/L	10000	10600	106	70	130	
Perfluoropentanesulfonic acid	ng/L	9410	9890	105	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorotridecanoic acid	ng/L	10000	10600	106	70	130	
Perfluoroundecanoic acid	ng/L	10000	10400	104	70	130	

FORM 7E - ORG

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>05/13/2022 17:14</u>	Lab File ID:	<u>2220513A_17.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>740969</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	9430	9280	98	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	9370	9960	106	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	9510	10300	108	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10300	108	70	130	
9Cl-PF3ONS	ng/L	9330	9270	99	70	130	
ADONA	ng/L	9450	9670	102	70	130	
HFPO-DA	ng/L	20000	20700	104	70	130	
NEtFOSAA	ng/L	10000	10400	104	70	130	
NMeFOSAA	ng/L	10000	9740	97	70	130	
Perfluorobutanoic acid	ng/L	10000	10300	103	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9160	103	70	130	
Perfluorodecanoic acid	ng/L	10000	10000	100	70	130	
Perfluorodecane sulfonic acid	ng/L	9650	10300	107	70	130	
Perfluorododecanoic acid	ng/L	10000	10100	101	70	130	
Perfluoroheptanoic acid	ng/L	10000	10100	101	70	130	
Perfluoroheptanesulfonic acid	ng/L	9530	10000	105	70	130	
Perfluorohexanoic acid	ng/L	10000	10300	103	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9420	103	70	130	
Perfluorononanoic acid	ng/L	10000	10000	100	70	130	
Perfluorononanesulfonic acid	ng/L	9620	10200	106	70	130	
Perfluorooctanoic acid	ng/L	10000	10000	100	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9660	104	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	10700	107	70	130	
Perfluoropentanoic acid	ng/L	10000	10300	103	70	130	
Perfluoropentanesulfonic acid	ng/L	9410	9840	105	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10200	102	70	130	
Perfluorotridecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroundecanoic acid	ng/L	10000	10100	101	70	130	

FORM 7E - ORG

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>05/13/2022 19:41</u>	Lab File ID:	<u>2220513A_27.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>740969</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	9430	9100	97	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	9370	9650	103	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	9510	10200	107	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10500	109	70	130	
9Cl-PF3ONS	ng/L	9330	9120	98	70	130	
ADONA	ng/L	9450	9480	100	70	130	
HFPO-DA	ng/L	20000	22200	111	70	130	
NEFOSAA	ng/L	10000	10000	100	70	130	
NMeFOSAA	ng/L	10000	10400	104	70	130	
Perfluorobutanoic acid	ng/L	10000	10500	105	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9280	105	70	130	
Perfluorodecanoic acid	ng/L	10000	10100	101	70	130	
Perfluorodecane sulfonic acid	ng/L	9650	9830	102	70	130	
Perfluorododecanoic acid	ng/L	10000	9990	100	70	130	
Perfluoroheptanoic acid	ng/L	10000	10300	103	70	130	
Perfluoroheptanesulfonic acid	ng/L	9530	10400	109	70	130	
Perfluorohexanoic acid	ng/L	10000	9830	98	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9410	103	70	130	
Perfluorononanoic acid	ng/L	10000	10200	102	70	130	
Perfluorononanesulfonic acid	ng/L	9620	10000	104	70	130	
Perfluorooctanoic acid	ng/L	10000	9980	100	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9670	104	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	11300	113	70	130	
Perfluoropentanoic acid	ng/L	10000	10300	103	70	130	
Perfluoropentanesulfonic acid	ng/L	9410	10000	107	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10300	103	70	130	
Perfluorotridecanoic acid	ng/L	10000	10400	104	70	130	
Perfluoroundecanoic acid	ng/L	10000	10000	100	70	130	

FORM 7E - ORG

LC-QQQ Instrument Run Log

Instrument: QQQ 4
Instrument Batch: 2220418B.batch.bin
Current ICAL Batch: 2220412BCAL
ICAL Std (ID/Exp): 022-35-1 9/11/22
ICV Std (ID/Exp): 022-38-2 7/19/22

LIMS Batch (HBN): 738768
20mM NH4OAc (ID/Exp): 022-41-6 4/20/22 8:00AM
Methanol (ID/Exp): 2131452 11/30/26
EIS Mix (ID/Exp): 022-37-1 10/12/22
IIS Mix (ID/Exp): 022-35-9 9/30/22

Acquisition time	Data File	Name	Type	Dilution	Comment
04/12/22 15:19:50	2220412B_1.d	1400 Test	Sample	1	SXA,QQQ4,Test
04/12/22 15:34:47	2220412B_2.d	1201	Cal	1	SXA,QQQ4,ICAL
04/12/22 15:49:35	2220412B_3.d	1202	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:04:23	2220412B_4.d	1203	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:19:12	2220412B_5.d	1204	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:34:00	2220412B_6.d	1205	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:48:49	2220412B_7.d	1206	Cal	1	SXA,QQQ4,ICAL
04/12/22 17:03:40	2220412B_8.d	1207	Cal	1	SXA,QQQ4,ICAL
04/12/22 17:18:28	2220412B_9.d	1500	Blank	1	SXA,QQQ4,Instrument Blank
04/12/22 17:33:17	2220412B_10.d	1600	Sample	1	SXA,QQQ4,ICV
04/12/22 17:48:06	2220412B_11.d	1450	QC	1	SXA,QQQ4,CCV
04/18/22 18:50:13	2220418B_1.d	1500	Blank	1	SXA,QQQ4,Instrument Blank
04/18/22 19:05:03	2220418B_2.d	1450	QC	1	SXA,QQQ4,CCV
04/18/22 19:19:51	2220418B_3.d	2332459	Blank	1	SXA,QQQ4,738457
04/18/22 19:34:59	2220418B_4.d	2332460	QC	1	SXA,QQQ4,738457
04/18/22 19:49:48	2220418B_5.d	2332461	QC	1	SXA,QQQ4,738457
04/18/22 20:04:37	2220418B_6.d	22204063510	Sample	1	SXA,QQQ4,738457
04/18/22 20:19:27	2220418B_7.d	22204063511	Sample	1	SXA,QQQ4,738457
04/18/22 20:34:16	2220418B_8.d	22204063512	Sample	1	SXA,QQQ4,738457
04/18/22 20:49:06	2220418B_9.d	22204064507	Sample	1	SXA,QQQ4,738457
04/18/22 21:03:55	2220418B_10.d	22204064508	Sample	1	SXA,QQQ4,738457
04/18/22 21:18:44	2220418B_11.d	22204064509	Sample	1	SXA,QQQ4,738457
04/18/22 21:33:34	2220418B_14.d	22204064512	Sample	1	SXA,QQQ4,738457
04/18/22 21:48:23	2220418B_15.d	22204064513	Sample	1	SXA,QQQ4,738457
04/18/22 22:03:15	2220418B_16.d	1400	QC	1	SXA,QQQ4,CCV
04/18/22 22:18:21	2220418B_17.d	22204064514	Sample	1	SXA,QQQ4,738457
04/18/22 22:33:27	2220418B_18.d	22204064515	Sample	1	SXA,QQQ4,738457
04/18/22 22:48:16	2220418B_19.d	22204064516	Sample	1	SXA,QQQ4,738457
04/18/22 23:03:06	2220418B_20.d	22204068803	Sample	1	SXA,QQQ4,738457
04/18/22 23:17:56	2220418B_21.d	22204068804	Sample	1	SXA,QQQ4,738457
04/18/22 23:32:46	2220418B_22.d	22204075801	Sample	1	SXA,QQQ4,738457
04/18/22 23:47:35	2220418B_23.d	22204075802	Sample	1	SXA,QQQ4,738457
04/19/22 00:02:26	2220418B_24.d	22204075803	Sample	1	SXA,QQQ4,738457
04/19/22 00:17:15	2220418B_25.d	22204075804	Sample	1	SXA,QQQ4,738457
04/19/22 00:32:08	2220418B_26.d	22204075806	Sample	1	SXA,QQQ4,738457
04/19/22 00:46:58	2220418B_27.d	1400	QC	1	SXA,QQQ4,CCV

LC-QQQ Instrument Run Log

Instrument: QQQ 4
Instrument Batch: 2220419A.batch.bin
Current ICAL Batch: 2220412BCAL
ICAL Std (ID/Exp): 022-35-1 9/11/22
ICV Std (ID/Exp): 022-38-2 7/19/22

LIMS Batch (HBN): 738977
20mM NH4OAc (ID/Exp): 022-41-6 4/20/22 8:00AM
Methanol (ID/Exp): 2131452 11/30/26
EIS Mix (ID/Exp): 022-37-1 10/12/22
IIS Mix (ID/Exp): 022-35-9 9/30/22

Acquisition time	Data File	Name	Type	Dilution	Comment
04/12/22 15:19:50	2220412B_1.d	1400 Test	Sample	1	SXA,QQQ4,Test
04/12/22 15:34:47	2220412B_2.d	1201	Cal	1	SXA,QQQ4,ICAL
04/12/22 15:49:35	2220412B_3.d	1202	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:04:23	2220412B_4.d	1203	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:19:12	2220412B_5.d	1204	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:34:00	2220412B_6.d	1205	Cal	1	SXA,QQQ4,ICAL
04/12/22 16:48:49	2220412B_7.d	1206	Cal	1	SXA,QQQ4,ICAL
04/12/22 17:03:40	2220412B_8.d	1207	Cal	1	SXA,QQQ4,ICAL
04/12/22 17:18:28	2220412B_9.d	1500	Blank	1	SXA,QQQ4,Instrument Blank
04/12/22 17:33:17	2220412B_10.d	1600	Sample	1	SXA,QQQ4,ICV
04/12/22 17:48:06	2220412B_11.d	1450	QC	1	SXA,QQQ4,CCV
04/19/22 06:57:06	2220419A_1.d	1400 RT TEST	QC	1	SXA,QQQ4,RT Test
04/19/22 07:14:12	2220419A_2.d	1500	Blank	1	SXA,QQQ4,Instrument Blank
04/19/22 07:29:10	2220419A_3.d	1450	QC	1	SXA,QQQ4,CCV
04/19/22 07:46:50	2220419A_4.d	1204 Test	QC	1	SXA,QQQ4,1204 Test
04/19/22 08:01:41	2220419A_5.d	22204064510	Sample	1	SXA,QQQ4,738457
04/19/22 08:16:39	2220419A_6.d	22204064511	Sample	1	SXA,QQQ4,738457
04/19/22 08:31:27	2220419A_7.d	1400	QC	1	SXA,QQQ4,CCV
04/19/22 08:47:52	2220419A_8.d	1204 Test	Sample	1	SXA,QQQ4,1204 without CAL
04/19/22 09:47:07	2220419A_9.d	TP Test	Sample	1	SXA,QQQ4,TP#04703/0841,vial lot#00323905-2
04/19/22 10:40:55	2220419A_10.d	13 Comp. Test	Sample	1	SXA,QQQ4,13 Comp.mix Test

LC-QQQ Instrument Run Log

Instrument: QQQ 4
Instrument Batch: 2220421A.batch.bin
Current ICAL Batch: 2220419CCAL
ICAL Std (ID/Exp): 022-35-1 9/11/22
ICV Std (ID/Exp): 022-38-2 7/19/22

LIMS Batch (HBN): 739037/739099
20mM NH4OAc (ID/Exp): 022-45-4 4/22/22 8:00AM
Methanol (ID/Exp): 2131452 11/30/26
EIS Mix (ID/Exp): 022-37-1 10/12/22
IIS Mix (ID/Exp): 022-35-9 9/30/22

Acquisition time	Data File	Name	Type	Dilution	Comment
04/19/22 16:49:27	2220419C_1.d	1201	Cal	1	SXA,QQQ4,ICAL
04/19/22 17:04:24	2220419C_2.d	1202	Cal	1	SXA,QQQ4,ICAL
04/19/22 17:19:11	2220419C_3.d	1203	Cal	1	SXA,QQQ4,ICAL
04/19/22 17:33:59	2220419C_4.d	1204	Cal	1	SXA,QQQ4,ICAL
04/19/22 17:48:49	2220419C_5.d	1205	Cal	1	SXA,QQQ4,ICAL
04/19/22 18:03:37	2220419C_6.d	1206	Cal	1	SXA,QQQ4,ICAL
04/19/22 18:18:25	2220419C_7.d	1207	Cal	1	SXA,QQQ4,ICAL
04/19/22 18:36:05	2220419C_8.d	1500	Blank	1	SXA,QQQ4,Instrument Blank
04/19/22 18:51:02	2220419C_9.d	1600	Sample	1	SXA,QQQ4,ICV
04/19/22 19:05:51	2220419C_10.d	1450	QC	1	SXA,QQQ4,CCV
04/21/22 08:21:26	2220421A_1.d	1400 RT Test	QC	1	SXA,QQQ4,RT TEST
04/21/22 08:46:01	2220421A_2.d	1500	Blank	1	SXA,QQQ4,INSTRUMENT BLANK
04/21/22 09:00:58	2220421A_3.d	1450	QC	1	SXA,QQQ4,CCV
04/21/22 09:18:45	2220421A_4.d	2334174	Blank	1	SXA,QQQ4,738671
04/21/22 09:33:41	2220421A_5.d	2334175	QC	1	SXA,QQQ4,738671
04/21/22 09:48:29	2220421A_6.d	2334176	QC	1	SXA,QQQ4,738671
04/21/22 10:03:17	2220421A_7.d	22204041206	Sample	1	SXA,QQQ4,738671
04/21/22 10:21:59	2220421A_8.d	15 ml Cent. Test	Sample	1	SXA,QQQ4,Cent.#20210717-058
04/21/22 10:36:50	2220421A_9.d	22204041207	Sample	1	SXA,QQQ4,738671
04/21/22 10:51:47	2220421A_10.d	IIS TEST	Sample	1	SXA,QQQ4,022-46-2
04/21/22 11:06:37	2220421A_11.d	22204041208	Sample	1	SXA,QQQ4,738671
04/21/22 11:21:27	2220421A_12.d	22204041209	Sample	1	SXA,QQQ4,738671
04/21/22 11:36:17	2220421A_13.d	22204041004	Sample	1	SXA,QQQ4,738671
04/21/22 11:51:06	2220421A_14.d	22204041005	Sample	1	SXA,QQQ4,738671
04/21/22 12:05:55	2220421A_15.d	22204050702	Sample	1	SXA,QQQ4,738671
04/21/22 12:20:43	2220421A_16.d	22204050703	Sample	1	SXA,QQQ4,738671
04/21/22 12:35:30	2220421A_17.d	22204050704	Sample	1	SXA,QQQ4,738671
04/21/22 12:50:18	2220421A_18.d	22204050705	Sample	1	SXA,QQQ4,738671
04/21/22 13:05:06	2220421A_19.d	1400	QC	1	SXA,QQQ4,CCV
04/21/22 13:20:11	2220421A_20.d	22204050706	Sample	1	SXA,QQQ4,738671
04/21/22 13:35:15	2220421A_21.d	22204050707	Sample	1	SXA,QQQ4,738671
04/21/22 13:50:05	2220421A_22.d	22204064506	Sample	1	SXA,QQQ4,738671
04/21/22 14:04:53	2220421A_23.d	22204068801	Sample	1	SXA,QQQ4,738671
04/21/22 14:22:21	2220421A_24.d	13 Comp. Test	Sample	1	SXA,QQQ4,13 comp.#022-46-5
04/21/22 14:37:13	2220421A_25.d	22204068802	Sample	1	SXA,QQQ4,738671
04/21/22 14:52:11	2220421A_26.d	22204068805	Sample	1	SXA,QQQ4,738671
04/21/22 15:06:59	2220421A_27.d	22204068901	Sample	1	SXA,QQQ4,738671
04/21/22 15:21:48	2220421A_28.d	22204068902	Sample	1	SXA,QQQ4,738671
04/21/22 15:36:36	2220421A_29.d	22204068903	Sample	1	SXA,QQQ4,738671
04/21/22 15:51:23	2220421A_30.d	22204068904	Sample	1	SXA,QQQ4,738671
04/21/22 16:06:12	2220421A_31.d	1400	QC	1	SXA,QQQ4,CCV
04/21/22 16:21:19	2220421A_32.d	2332008	Blank	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 16:36:24	2220421A_33.d	2332009	QC	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 16:51:12	2220421A_34.d	2332010	QC	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 17:06:00	2220421A_35.d	22204111201	Sample	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 17:20:48	2220421A_36.d	22204111202	Sample	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 17:35:36	2220421A_37.d	22204111203	Sample	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 17:50:25	2220421A_38.d	22204111204	Sample	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 18:05:13	2220421A_39.d	22204111205	Sample	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 18:20:01	2220421A_40.d	22204111206	Sample	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 18:34:49	2220421A_41.d	22204111207	Sample	1	SXA,QQQ4,738396_TA_W_PRE
04/21/22 18:49:40	2220421A_42.d	22204063507	Sample	5	SXA,QQQ4,738400
04/21/22 19:04:45	2220421A_43.d	1400	QC	1	SXA,QQQ4,CCV

ORGANICS INSTRUMENT SENSITIVITY CHECK

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/18/2022 19:05</u>	Lab File ID:	<u>2220418B_2.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738768</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	3.78	3.60	96	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	3.75	3.56	95	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	3.81	3.91	103	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	3.84	4.15	108	70	130	
9Cl-PF3ONS	ng/L	3.74	3.34	90	70	130	
ADONA	ng/L	3.78	3.50	92	70	130	
HFPO-DA	ng/L	8.00	7.72	96	70	130	
NEFOSAA	ng/L	4.00	3.62	90	70	130	
NMeFOSAA	ng/L	4.00	4.10	103	70	130	
Perfluorobutanoic acid	ng/L	4.00	3.80	95	70	130	
Perfluorobutanesulfonic acid	ng/L	3.55	3.42	96	70	130	
Perfluorodecanoic acid	ng/L	4.00	3.84	96	70	130	
Perfluorodecane sulfonic acid	ng/L	3.86	3.84	99	70	130	
Perfluorododecanoic acid	ng/L	4.00	3.74	93	70	130	
Perfluoroheptanoic acid	ng/L	4.00	3.79	95	70	130	
Perfluoroheptanesulfonic acid	ng/L	3.82	3.40	89	70	130	
Perfluorohexanoic acid	ng/L	4.00	3.99	100	70	130	
Perfluorohexanesulfonic acid	ng/L	3.66	3.83	105	70	130	
Perfluorononanoic acid	ng/L	4.00	3.79	95	70	130	
Perfluorononanesulfonic acid	ng/L	3.85	3.78	98	70	130	
Perfluorooctanoic acid	ng/L	4.00	3.91	98	70	130	
Perfluorooctanesulfonic acid	ng/L	3.71	4.04	109	70	130	
Perfluorooctane Sulfonamide	ng/L	4.00	4.28	107	70	130	
Perfluoropentanoic acid	ng/L	4.00	3.82	96	70	130	
Perfluoropentanesulfonic acid	ng/L	3.77	3.98	106	70	130	
Perfluorotetradecanoic acid	ng/L	4.00	3.71	93	70	130	
Perfluorotridecanoic acid	ng/L	4.00	4.20	105	70	130	
Perfluoroundecanoic acid	ng/L	4.00	3.84	96	70	130	

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ORGANICS INSTRUMENT SENSITIVITY CHECK

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/19/2022 07:29</u>	Lab File ID:	<u>2220419A_3.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738977</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	3.78	3.42	91	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	3.75	3.94	105	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	3.81	4.02	106	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	3.84	4.02	105	70	130	
9Cl-PF3ONS	ng/L	3.74	3.50	94	70	130	
ADONA	ng/L	3.78	3.46	92	70	130	
HFPO-DA	ng/L	8.00	8.32	104	70	130	
NEtFOSAA	ng/L	4.00	4.00	100	70	130	
NMeFOSAA	ng/L	4.00	3.78	95	70	130	
Perfluorobutanoic acid	ng/L	4.00	3.84	96	70	130	
Perfluorobutanesulfonic acid	ng/L	3.55	3.34	94	70	130	
Perfluorodecanoic acid	ng/L	4.00	3.74	94	70	130	
Perfluorodecane sulfonic acid	ng/L	3.86	3.72	96	70	130	
Perfluorododecanoic acid	ng/L	4.00	3.78	95	70	130	
Perfluoroheptanoic acid	ng/L	4.00	3.79	95	70	130	
Perfluoroheptanesulfonic acid	ng/L	3.82	3.74	98	70	130	
Perfluorohexanoic acid	ng/L	4.00	3.95	99	70	130	
Perfluorohexanesulfonic acid	ng/L	3.66	3.93	107	70	130	
Perfluorononanoic acid	ng/L	4.00	3.74	93	70	130	
Perfluorononanesulfonic acid	ng/L	3.85	3.82	99	70	130	
Perfluorooctanoic acid	ng/L	4.00	3.88	97	70	130	
Perfluorooctanesulfonic acid	ng/L	3.71	4.17	112	70	130	
Perfluorooctane Sulfonamide	ng/L	4.00	3.90	97	70	130	
Perfluoropentanoic acid	ng/L	4.00	3.78	95	70	130	
Perfluoropentanesulfonic acid	ng/L	3.77	3.78	100	70	130	
Perfluorotetradecanoic acid	ng/L	4.00	3.86	96	70	130	
Perfluorotridecanoic acid	ng/L	4.00	4.24	106	70	130	
Perfluoroundecanoic acid	ng/L	4.00	3.74	93	70	130	

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ORGANICS INSTRUMENT SENSITIVITY CHECK

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/21/2022 09:00</u>	Lab File ID:	<u>2220421A_3.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739037</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	3.78	3.66	97	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	3.75	3.58	95	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	3.81	3.76	99	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	3.84	3.80	99	70	130	
9Cl-PF3ONS	ng/L	3.74	3.68	99	70	130	
ADONA	ng/L	3.78	3.44	91	70	130	
HFPO-DA	ng/L	8.00	8.40	105	70	130	
NEFOSAA	ng/L	4.00	3.89	97	70	130	
NMeFOSAA	ng/L	4.00	4.49	112	70	130	
Perfluorobutanoic acid	ng/L	4.00	3.81	95	70	130	
Perfluorobutanesulfonic acid	ng/L	3.55	3.50	99	70	130	
Perfluorodecanoic acid	ng/L	4.00	3.78	95	70	130	
Perfluorodecane sulfonic acid	ng/L	3.86	3.77	98	70	130	
Perfluorododecanoic acid	ng/L	4.00	3.85	96	70	130	
Perfluoroheptanoic acid	ng/L	4.00	3.86	96	70	130	
Perfluoroheptanesulfonic acid	ng/L	3.82	3.84	101	70	130	
Perfluorohexanoic acid	ng/L	4.00	4.05	101	70	130	
Perfluorohexanesulfonic acid	ng/L	3.66	3.82	105	70	130	
Perfluorononanoic acid	ng/L	4.00	3.77	94	70	130	
Perfluorononanesulfonic acid	ng/L	3.85	3.70	96	70	130	
Perfluorooctanoic acid	ng/L	4.00	3.90	98	70	130	
Perfluorooctanesulfonic acid	ng/L	3.71	4.03	109	70	130	
Perfluorooctane Sulfonamide	ng/L	4.00	4.04	101	70	130	
Perfluoropentanoic acid	ng/L	4.00	3.78	95	70	130	
Perfluoropentanesulfonic acid	ng/L	3.77	3.62	96	70	130	
Perfluorotetradecanoic acid	ng/L	4.00	3.83	96	70	130	
Perfluorotridecanoic acid	ng/L	4.00	3.73	93	70	130	
Perfluoroundecanoic acid	ng/L	4.00	3.74	93	70	130	

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ORGANICS INSTRUMENT SENSITIVITY CHECK

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ5</u>
Analysis Date:	<u>05/08/2022 11:33</u>	Lab File ID:	<u>2220508A_3.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>740431</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	3.78	3.61	96	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	3.75	3.40	91	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	3.81	3.51	92	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	3.84	4.39	114	70	130	
9Cl-PF3ONS	ng/L	3.74	3.60	97	70	130	
ADONA	ng/L	3.78	3.64	96	70	130	
HFPO-DA	ng/L	8.00	7.68	96	70	130	
NEFOSAA	ng/L	4.00	3.91	98	70	130	
NMeFOSAA	ng/L	4.00	4.38	109	70	130	
Perfluorobutanoic acid	ng/L	4.00	4.22	106	70	130	
Perfluorobutanesulfonic acid	ng/L	3.55	3.67	104	70	130	
Perfluorodecanoic acid	ng/L	4.00	4.02	100	70	130	
Perfluorodecane sulfonic acid	ng/L	3.86	3.79	98	70	130	
Perfluorododecanoic acid	ng/L	4.00	4.01	100	70	130	
Perfluoroheptanoic acid	ng/L	4.00	3.88	97	70	130	
Perfluoroheptanesulfonic acid	ng/L	3.82	3.93	103	70	130	
Perfluorohexanoic acid	ng/L	4.00	4.14	104	70	130	
Perfluorohexanesulfonic acid	ng/L	3.66	3.90	107	70	130	
Perfluorononanoic acid	ng/L	4.00	4.02	101	70	130	
Perfluorononanesulfonic acid	ng/L	3.85	4.32	112	70	130	
Perfluorooctanoic acid	ng/L	4.00	4.02	101	70	130	
Perfluorooctanesulfonic acid	ng/L	3.71	3.94	106	70	130	
Perfluorooctane Sulfonamide	ng/L	4.00	4.18	104	70	130	
Perfluoropentanoic acid	ng/L	4.00	3.99	100	70	130	
Perfluoropentanesulfonic acid	ng/L	3.77	3.83	102	70	130	
Perfluorotetradecanoic acid	ng/L	4.00	4.06	101	70	130	
Perfluorotridecanoic acid	ng/L	4.00	3.98	99	70	130	
Perfluoroundecanoic acid	ng/L	4.00	3.91	98	70	130	

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ORGANICS INSTRUMENT SENSITIVITY CHECK

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>05/13/2022 13:36</u>	Lab File ID:	<u>2220513A_3.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>740969</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	3.78	3.54	94	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	3.75	3.72	99	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	3.81	4.35	114	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	3.84	3.92	102	70	130	
9Cl-PF3ONS	ng/L	3.74	3.54	95	70	130	
ADONA	ng/L	3.78	3.70	98	70	130	
HFPO-DA	ng/L	8.00	8.16	102	70	130	
NEtFOSAA	ng/L	4.00	4.00	100	70	130	
NMeFOSAA	ng/L	4.00	4.30	107	70	130	
Perfluorobutanoic acid	ng/L	4.00	4.00	100	70	130	
Perfluorobutanesulfonic acid	ng/L	3.55	3.57	101	70	130	
Perfluorodecanoic acid	ng/L	4.00	3.96	99	70	130	
Perfluorodecane sulfonic acid	ng/L	3.86	4.13	107	70	130	
Perfluorododecanoic acid	ng/L	4.00	3.99	100	70	130	
Perfluoroheptanoic acid	ng/L	4.00	3.86	97	70	130	
Perfluoroheptanesulfonic acid	ng/L	3.82	3.84	101	70	130	
Perfluorohexanoic acid	ng/L	4.00	4.05	101	70	130	
Perfluorohexanesulfonic acid	ng/L	3.66	3.83	105	70	130	
Perfluorononanoic acid	ng/L	4.00	4.02	100	70	130	
Perfluorononanesulfonic acid	ng/L	3.85	4.10	106	70	130	
Perfluorooctanoic acid	ng/L	4.00	3.97	99	70	130	
Perfluorooctanesulfonic acid	ng/L	3.71	3.96	107	70	130	
Perfluorooctane Sulfonamide	ng/L	4.00	4.28	107	70	130	
Perfluoropentanoic acid	ng/L	4.00	4.08	102	70	130	
Perfluoropentanesulfonic acid	ng/L	3.77	3.68	98	70	130	
Perfluorotetradecanoic acid	ng/L	4.00	3.89	97	70	130	
Perfluorotridecanoic acid	ng/L	4.00	4.02	100	70	130	
Perfluoroundecanoic acid	ng/L	4.00	3.71	93	70	130	

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ORGANICS INITIAL CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/12/2022 17:33</u>	Lab File ID:	<u>2220412B_10.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738370</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	10000	9870	99	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	10000	10500	105	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	10000	10300	103	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	10100	10100	100	70	130	
9Cl-PF3ONS	ng/L	10000	9960	100	70	130	
ADONA	ng/L	10000	9620	96	70	130	
HFPO-DA	ng/L	10000	10200	102	70	130	
NEFOSAA	ng/L	10000	10100	101	70	130	
NMeFOSAA	ng/L	10000	9880	99	70	130	
Perfluorobutanoic acid	ng/L	10000	9990	100	70	130	
Perfluorobutanesulfonic acid	ng/L	10000	10600	106	70	130	
Perfluorodecanoic acid	ng/L	10000	10200	102	70	130	
Perfluorodecane sulfonic acid	ng/L	10100	9880	98	70	130	
Perfluorododecanoic acid	ng/L	10000	8940	89	70	130	
Perfluoroheptanoic acid	ng/L	10000	10100	101	70	130	
Perfluoroheptanesulfonic acid	ng/L	10000	10200	102	70	130	
Perfluorohexanoic acid	ng/L	10100	10700	105	70	130	
Perfluorohexanesulfonic acid	ng/L	10000	10500	105	70	130	
Perfluorononanoic acid	ng/L	10000	10300	103	70	130	
Perfluorononanesulfonic acid	ng/L	10100	10300	102	70	130	
Perfluorooctanoic acid	ng/L	10100	9480	94	70	130	
Perfluorooctanesulfonic acid	ng/L	10000	8780	88	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	10100	101	70	130	
Perfluoropentanoic acid	ng/L	10100	10100	100	70	130	
Perfluoropentanesulfonic acid	ng/L	10000	10400	104	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorotridecanoic acid	ng/L	10000	9300	93	70	130	
Perfluoroundecanoic acid	ng/L	10000	9570	96	70	130	

FORM 6I - ORG

ORGANICS INITIAL CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/19/2022 18:51</u>	Lab File ID:	<u>2220419C_9.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738889</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	10000	9490	95	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	10000	10800	108	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	10000	10400	104	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	10100	10500	104	70	130	
9Cl-PF3ONS	ng/L	10000	9500	95	70	130	
ADONA	ng/L	10000	9580	96	70	130	
HFPO-DA	ng/L	10000	9880	99	70	130	
NEFOSAA	ng/L	10000	9580	96	70	130	
NMeFOSAA	ng/L	10000	10100	101	70	130	
Perfluorobutanoic acid	ng/L	10000	9700	97	70	130	
Perfluorobutanesulfonic acid	ng/L	10000	10300	103	70	130	
Perfluorodecanoic acid	ng/L	10000	9930	99	70	130	
Perfluorodecane sulfonic acid	ng/L	10100	9720	96	70	130	
Perfluorododecanoic acid	ng/L	10000	8830	88	70	130	
Perfluoroheptanoic acid	ng/L	10000	9940	99	70	130	
Perfluoroheptanesulfonic acid	ng/L	10000	9950	99	70	130	
Perfluorohexanoic acid	ng/L	10100	10400	103	70	130	
Perfluorohexanesulfonic acid	ng/L	10000	10200	102	70	130	
Perfluorononanoic acid	ng/L	10000	10100	101	70	130	
Perfluorononanesulfonic acid	ng/L	10100	9750	96	70	130	
Perfluorooctanoic acid	ng/L	10100	9430	93	70	130	
Perfluorooctanesulfonic acid	ng/L	10000	8520	85	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	9950	100	70	130	
Perfluoropentanoic acid	ng/L	10100	9950	99	70	130	
Perfluoropentanesulfonic acid	ng/L	10000	10100	101	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10100	101	70	130	
Perfluorotridecanoic acid	ng/L	10000	9190	92	70	130	
Perfluoroundecanoic acid	ng/L	10000	9310	93	70	130	

FORM 6I - ORG

4I - ORGANICS INSTRUMENT BLANK

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/18/2022 18:50</u>	Lab File ID:	<u>2220418B_1.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>738768</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>RESULT</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>	<i>#</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.50	3.00	4.00	
8:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.06	3.00	4.00	
NEtFOSAA	ng/L	4.00	U	1.58	4.00	8.00	
NMeFOSAA	ng/L	4.00	U	0.90	4.00	8.00	
Perfluorobutanesulfonic acid	ng/L	2.00	U	0.62	2.00	4.00	
Perfluorobutanoic acid	ng/L	3.50	U	1.52	3.50	4.00	
Perfluorodecanoic acid	ng/L	3.00	U	1.44	3.00	4.00	
Perfluorododecanoic acid	ng/L	3.00	U	1.30	3.00	4.00	
Perfluoroheptanoic acid	ng/L	3.00	U	1.16	3.00	4.00	
Perfluorohexanesulfonic acid	ng/L	3.00	U	1.24	3.00	4.00	
Perfluorohexanoic acid	ng/L	2.00	U	0.94	2.00	4.00	
Perfluorononanoic acid	ng/L	2.00	U	0.98	2.00	4.00	
Perfluorooctanesulfonic acid	ng/L	2.00	U	0.76	2.00	4.00	
Perfluorooctanoic acid	ng/L	2.00	U	0.84	2.00	4.00	
Perfluoropentanoic acid	ng/L	2.00	U	0.88	2.00	4.00	
Perfluorotetradecanoic acid	ng/L	3.00	U	1.14	3.00	4.00	
Perfluorotridecanoic acid	ng/L	3.00	U	1.23	3.00	4.00	
Perfluoroundecanoic acid	ng/L	3.00	U	1.24	3.00	4.00	

* - Result greater than 1/2 LOQ

4I - ORGANICS INSTRUMENT BLANK

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/19/2022 07:14</u>	Lab File ID:	<u>2220419A_2.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>738977</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>RESULT</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>	<i>#</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.50	3.00	4.00	
8:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.06	3.00	4.00	
NEtFOSAA	ng/L	4.00	U	1.58	4.00	8.00	
NMeFOSAA	ng/L	4.00	U	0.90	4.00	8.00	
Perfluorobutanesulfonic acid	ng/L	2.00	U	0.62	2.00	4.00	
Perfluorobutanoic acid	ng/L	3.50	U	1.52	3.50	4.00	
Perfluorodecanoic acid	ng/L	3.00	U	1.44	3.00	4.00	
Perfluorododecanoic acid	ng/L	3.00	U	1.30	3.00	4.00	
Perfluoroheptanoic acid	ng/L	3.00	U	1.16	3.00	4.00	
Perfluorohexanesulfonic acid	ng/L	3.00	U	1.24	3.00	4.00	
Perfluorohexanoic acid	ng/L	2.00	U	0.94	2.00	4.00	
Perfluorononanoic acid	ng/L	2.00	U	0.98	2.00	4.00	
Perfluorooctanesulfonic acid	ng/L	2.00	U	0.76	2.00	4.00	
Perfluorooctanoic acid	ng/L	2.00	U	0.84	2.00	4.00	
Perfluoropentanoic acid	ng/L	2.00	U	0.88	2.00	4.00	
Perfluorotetradecanoic acid	ng/L	3.00	U	1.14	3.00	4.00	
Perfluorotridecanoic acid	ng/L	3.00	U	1.23	3.00	4.00	
Perfluoroundecanoic acid	ng/L	3.00	U	1.24	3.00	4.00	

* - Result greater than 1/2 LOQ

4I - ORGANICS INSTRUMENT BLANK

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/21/2022 08:46</u>	Lab File ID:	<u>2220421A_2.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>739037</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>RESULT</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>	<i>#</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.50	3.00	4.00	
8:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.06	3.00	4.00	
NEtFOSAA	ng/L	4.00	U	1.58	4.00	8.00	
NMeFOSAA	ng/L	4.00	U	0.90	4.00	8.00	
Perfluorobutanesulfonic acid	ng/L	2.00	U	0.62	2.00	4.00	
Perfluorobutanoic acid	ng/L	3.50	U	1.52	3.50	4.00	
Perfluorodecanoic acid	ng/L	3.00	U	1.44	3.00	4.00	
Perfluorododecanoic acid	ng/L	3.00	U	1.30	3.00	4.00	
Perfluoroheptanoic acid	ng/L	3.00	U	1.16	3.00	4.00	
Perfluorohexanesulfonic acid	ng/L	3.00	U	1.24	3.00	4.00	
Perfluorohexanoic acid	ng/L	2.00	U	0.94	2.00	4.00	
Perfluorononanoic acid	ng/L	2.00	U	0.98	2.00	4.00	
Perfluorooctanesulfonic acid	ng/L	2.00	U	0.76	2.00	4.00	
Perfluorooctanoic acid	ng/L	2.00	U	0.84	2.00	4.00	
Perfluoropentanoic acid	ng/L	2.00	U	0.88	2.00	4.00	
Perfluorotetradecanoic acid	ng/L	3.00	U	1.14	3.00	4.00	
Perfluorotridecanoic acid	ng/L	3.00	U	1.23	3.00	4.00	
Perfluoroundecanoic acid	ng/L	3.00	U	1.24	3.00	4.00	

* - Result greater than 1/2 LOQ

4I - ORGANICS INSTRUMENT BLANK

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ5</u>
Analysis Date:	<u>05/08/2022 11:19</u>	Lab File ID:	<u>2220508A_2.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>740431</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>RESULT</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>	<i>#</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.50	3.00	4.00	
8:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.06	3.00	4.00	
NEtFOSAA	ng/L	4.00	U	1.58	4.00	8.00	
NMeFOSAA	ng/L	4.00	U	0.90	4.00	8.00	
Perfluorobutanesulfonic acid	ng/L	2.00	U	0.62	2.00	4.00	
Perfluorobutanoic acid	ng/L	3.50	U	1.52	3.50	4.00	
Perfluorodecanoic acid	ng/L	3.00	U	1.44	3.00	4.00	
Perfluorododecanoic acid	ng/L	3.00	U	1.30	3.00	4.00	
Perfluoroheptanoic acid	ng/L	3.00	U	1.16	3.00	4.00	
Perfluorohexanesulfonic acid	ng/L	3.00	U	1.24	3.00	4.00	
Perfluorohexanoic acid	ng/L	2.00	U	0.94	2.00	4.00	
Perfluorononanoic acid	ng/L	2.00	U	0.98	2.00	4.00	
Perfluorooctanesulfonic acid	ng/L	2.00	U	0.76	2.00	4.00	
Perfluorooctanoic acid	ng/L	2.00	U	0.84	2.00	4.00	
Perfluoropentanoic acid	ng/L	2.00	U	0.88	2.00	4.00	
Perfluorotetradecanoic acid	ng/L	3.00	U	1.14	3.00	4.00	
Perfluorotridecanoic acid	ng/L	3.00	U	1.23	3.00	4.00	
Perfluoroundecanoic acid	ng/L	3.00	U	1.24	3.00	4.00	

* - Result greater than 1/2 LOQ

4I - ORGANICS INSTRUMENT BLANK

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>05/13/2022 13:21</u>	Lab File ID:	<u>2220513A_2.d</u>
Analytical Method:	<u>EPA 537 Mod Isotope Dilution</u>	Analytical Batch:	<u>740969</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>RESULT</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>	<i>#</i>
6:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.50	3.00	4.00	
8:2 Fluorotelomersulfonic acid	ng/L	3.00	U	1.06	3.00	4.00	
NEtFOSAA	ng/L	4.00	U	1.58	4.00	8.00	
NMeFOSAA	ng/L	4.00	U	0.90	4.00	8.00	
Perfluorobutanesulfonic acid	ng/L	2.00	U	0.62	2.00	4.00	
Perfluorobutanoic acid	ng/L	3.50	U	1.52	3.50	4.00	
Perfluorodecanoic acid	ng/L	3.00	U	1.44	3.00	4.00	
Perfluorododecanoic acid	ng/L	3.00	U	1.30	3.00	4.00	
Perfluoroheptanoic acid	ng/L	3.00	U	1.16	3.00	4.00	
Perfluorohexanesulfonic acid	ng/L	3.00	U	1.24	3.00	4.00	
Perfluorohexanoic acid	ng/L	2.00	U	0.94	2.00	4.00	
Perfluorononanoic acid	ng/L	2.00	U	0.98	2.00	4.00	
Perfluorooctanesulfonic acid	ng/L	2.00	U	0.76	2.00	4.00	
Perfluorooctanoic acid	ng/L	2.00	U	0.84	2.00	4.00	
Perfluoropentanoic acid	ng/L	2.00	U	0.88	2.00	4.00	
Perfluorotetradecanoic acid	ng/L	3.00	U	1.14	3.00	4.00	
Perfluorotridecanoic acid	ng/L	3.00	U	1.23	3.00	4.00	
Perfluoroundecanoic acid	ng/L	3.00	U	1.24	3.00	4.00	

* - Result greater than 1/2 LOQ

Quantitative Analysis Calibration Report

Batch Data Path
Analysis Time
Report Time
Last Calib Update

D:\MassHunter\Data\QQQ3\2220511BCAL\QuantResults\2220513A.batch.bin
 5/16/2022 3:40 PM **Analyst Name** GCAL\jcms
 5/23/2022 9:03 PM **Reporter Name** GCAL\jcms
 5/12/2022 12:06 PM **Batch State** Processed

Calibration Info
Extracted ISTD

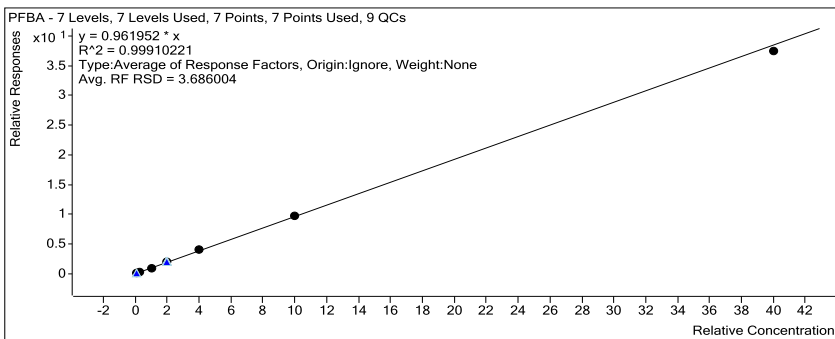
MPFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	100009	5.0000	20001.7035
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	98329	5.0000	19665.7330
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	102536	5.0000	20507.2189
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	96135	5.0000	19227.0580
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	92314	5.0000	18462.7611
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	93273	5.0000	18654.6082
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	89895	5.0000	17979.0083

Target Compound

PFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	9608	0.5000	0.9607
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	22745	1.2500	0.9253
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	94414	5.0000	0.9208
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	193959	10.0000	1.0088
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	368830	20.0000	0.9988
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	915277	50.0000	0.9813
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	3372899	200.0000	0.9380

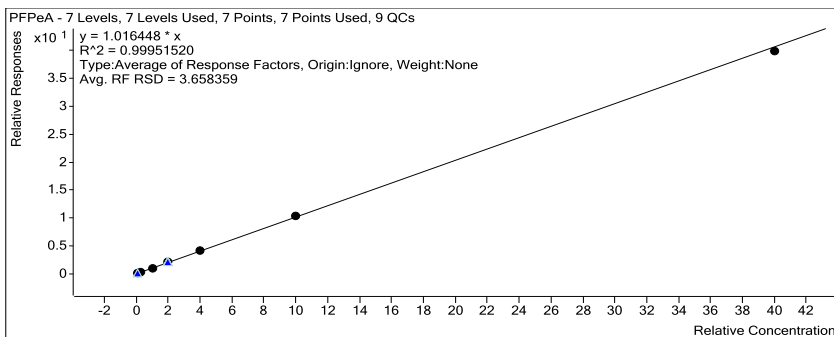


Target Compound

PFMPA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	1779	0.5000	0.1480
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	4139	1.2500	0.1380
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	16956	5.0000	0.1357
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	34460	10.0000	0.1478

Quantitative Analysis Calibration Report



Extracted ISTD

M3PFBS

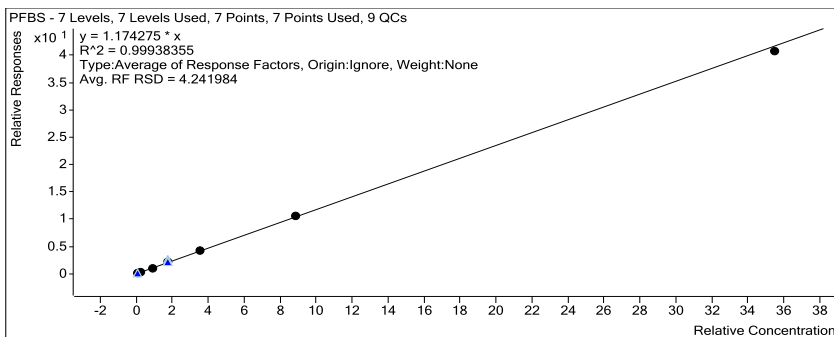
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	56542	5.0000	11308.3800
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	55464	5.0000	11092.7942
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	57744	5.0000	11548.8388
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	53899	5.0000	10779.8799
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	51750	5.0000	10349.9411
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	49248	5.0000	9849.6476
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	44509	5.0000	8901.7764

Target Compound

PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	6291	0.4435	1.2543
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	13760	1.1088	1.1187
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	57182	4.4350	1.1164
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	114974	8.8700	1.2024
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	216336	17.7400	1.1782
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	524141	44.3500	1.1999
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1815956	177.4000	1.1499

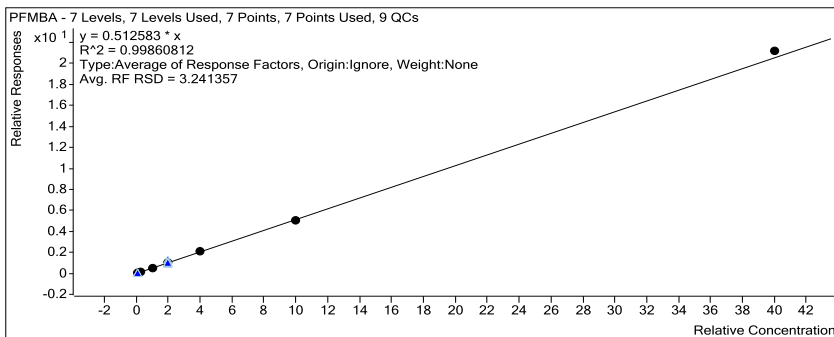
Quantitative Analysis Calibration Report



Target Compound

PFMBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	9082	0.5000	0.5170
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	21130	1.2500	0.4875
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	89797	5.0000	0.4952
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	179082	10.0000	0.5230
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	338306	20.0000	0.5287
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	830040	50.0000	0.5068
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	3195016	200.0000	0.5299



Target Compound

PFEESA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	14520	0.4450	3.7199
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	35545	1.1125	3.7989
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	149453	4.4500	3.7183
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	301442	8.9000	4.0312
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	581657	17.8000	4.0885

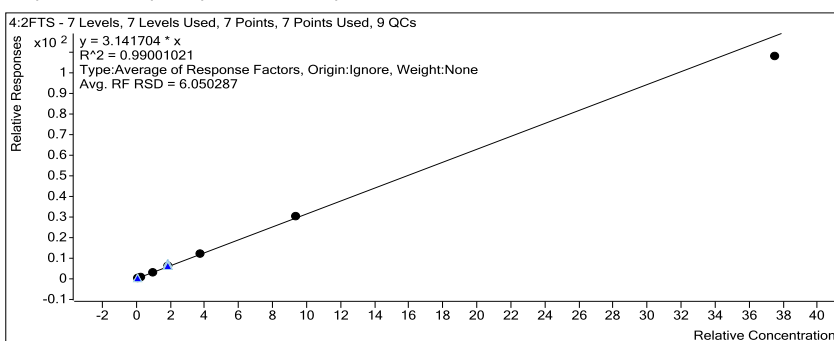
Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	24434	5.0000	4886.7492
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	22509	5.0000	4501.8456
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	19132	5.0000	3826.4136
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	14463	5.0000	2892.5556

Target Compound

4:2F7S

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	8635	0.4685	3.0704
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	19796	1.1713	2.9551
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	81740	4.6850	3.1243
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	156900	9.3700	3.4266
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	277878	18.7400	3.2938
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	579564	46.8500	3.2330
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1565911	187.4000	2.8888



Extracted ISTD

M5PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	175661	5.0000	35132.1371
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	173376	5.0000	34675.2179
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	181352	5.0000	36270.3824
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	171208	5.0000	34241.5233
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	159960	5.0000	31991.9536
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	163794	5.0000	32758.8823
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	150732	5.0000	30146.3113

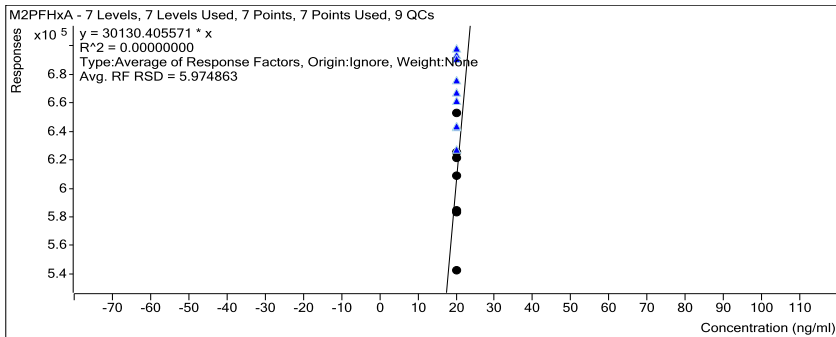
Instrument ISTD

M2PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	653122	20.0000	32656.1065
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	624999	20.0000	31249.9491
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	621148	20.0000	31057.4197
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	609015	20.0000	30450.7507
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	582926	20.0000	29146.2785

Quantitative Analysis Calibration Report

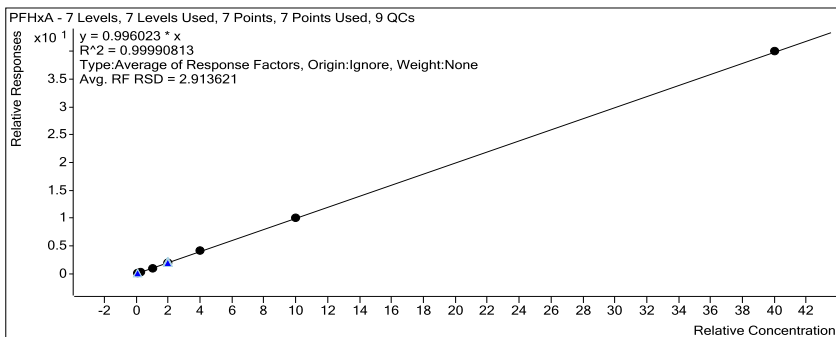
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	584710	20.0000	29235.4815
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	542337	20.0000	27116.8530



Target Compound

PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	17874	0.5000	1.0175
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	41438	1.2500	0.9560
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	173085	5.0000	0.9544
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	343702	10.0000	1.0038
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	656754	20.0000	1.0264
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	1656074	50.0000	1.0111
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	6046878	200.0000	1.0029



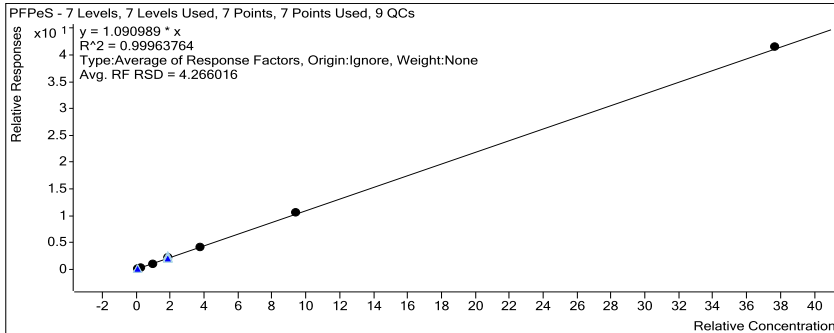
Target Compound

PFPeS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	5803	0.4705	1.0907
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	13232	1.1763	1.0141
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	56834	4.7050	1.0460

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	116153	9.4100	1.1451
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	214633	18.8200	1.1019
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	525178	47.0500	1.1333
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1852900	188.2000	1.1060



Extracted ISTD

M3HFPODA

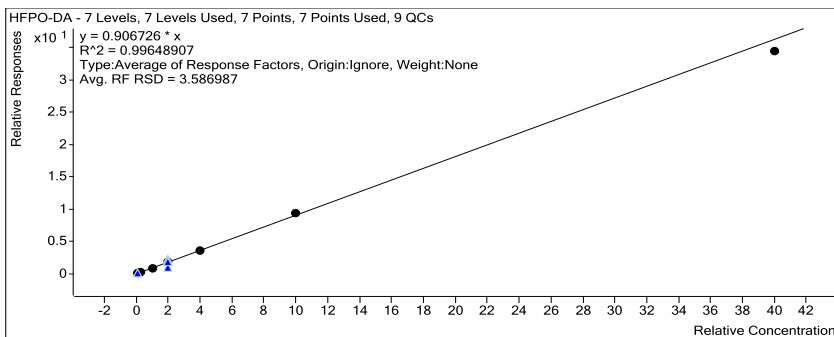
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	49638	10.0000	4963.8395
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	48560	10.0000	4856.0148
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	49374	10.0000	4937.4277
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	48513	10.0000	4851.2941
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	45875	10.0000	4587.4948
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	44357	10.0000	4435.6812
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	40645	10.0000	4064.4747

Target Compound

HFPO-DA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	4642	1.0000	0.9351
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	10497	2.5000	0.8647
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	44514	10.0000	0.9016
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	90335	20.0000	0.9310
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	167234	40.0000	0.9114
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	417353	100.0000	0.9409
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1402061	400.0000	0.8624

Quantitative Analysis Calibration Report



Extracted ISTD

M4PFHpA

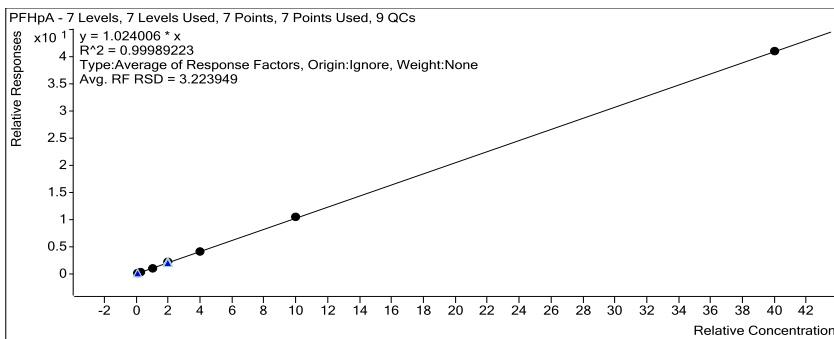
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	204514	5.0000	40902.7369
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	200189	5.0000	40037.8550
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	211960	5.0000	42392.0019
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	199731	5.0000	39946.2642
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	193352	5.0000	38670.3732
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	188415	5.0000	37682.9638
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	181309	5.0000	36261.8410

Target Compound

PFHpA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	20649	0.5000	1.0097
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	49551	1.2500	0.9901
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	207467	5.0000	0.9788
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	426564	10.0000	1.0678
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	802456	20.0000	1.0376
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	1989441	50.0000	1.0559
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	7456953	200.0000	1.0282

Quantitative Analysis Calibration Report



Extracted ISTD

M3PFHxS

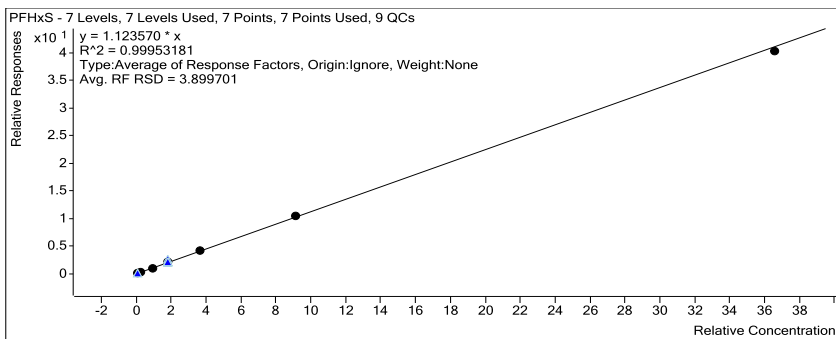
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	43856	5.0000	8771.2086
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	42052	5.0000	8410.4773
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	45162	5.0000	9032.4495
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	42009	5.0000	8401.8778
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	39963	5.0000	7992.5507
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	39101	5.0000	7820.2876
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	37224	5.0000	7444.7426

Target Compound

PFHxS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	4636	0.4570	1.1565
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	10509	1.1425	1.0937
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	43176	4.5700	1.0460
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	88975	9.1400	1.1586
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	169701	18.2800	1.1615
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	409208	45.7000	1.1450
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1501993	182.8000	1.1037

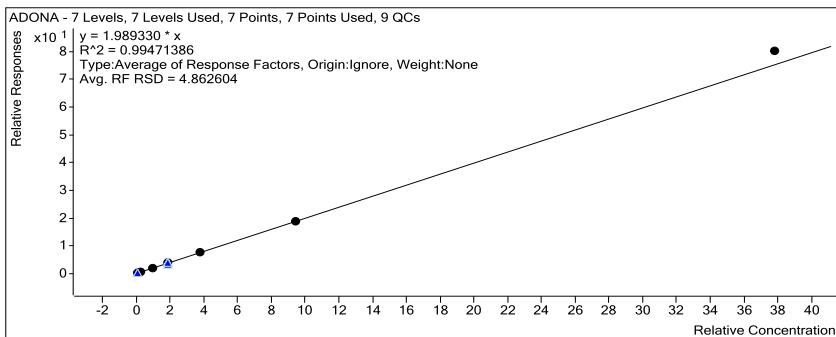
Quantitative Analysis Calibration Report



Target Compound

ADONA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	32742	0.4725	1.9348
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	78070	1.1813	1.8497
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	328858	4.7250	1.9076
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	672093	9.4500	2.0392
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	1282483	18.9000	2.0647
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	3112799	47.2500	2.0034
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	12065305	189.0000	2.1258



Extracted ISTD

M2 6:2 FTS

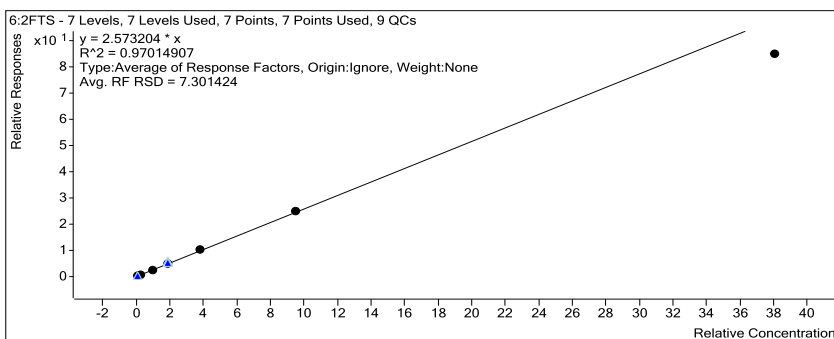
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	26881	5.0000	5376.2046
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	26314	5.0000	5262.8422
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	26263	5.0000	5252.6833
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	24174	5.0000	4834.8844
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	22555	5.0000	4511.0055

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	17990	5.0000	3597.9953
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	13707	5.0000	2741.4906

Target Compound 6:2FTS

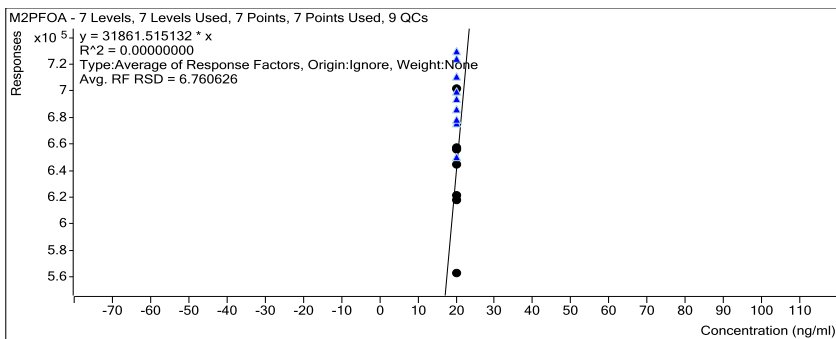
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	7130	0.4755	2.7893
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	15416	1.1888	2.4641
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	62732	4.7550	2.5117
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	124662	9.5100	2.7112
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	230556	19.0200	2.6871
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	447519	47.5500	2.6158
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1164493	190.2000	2.2333



Instrument ISTD M2PFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	701791	20.0000	35089.5252
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	655602	20.0000	32780.1194
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	657064	20.0000	32853.1796
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	644276	20.0000	32213.7902
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	617610	20.0000	30880.4882
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	621589	20.0000	31079.4302
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	562681	20.0000	28134.0730

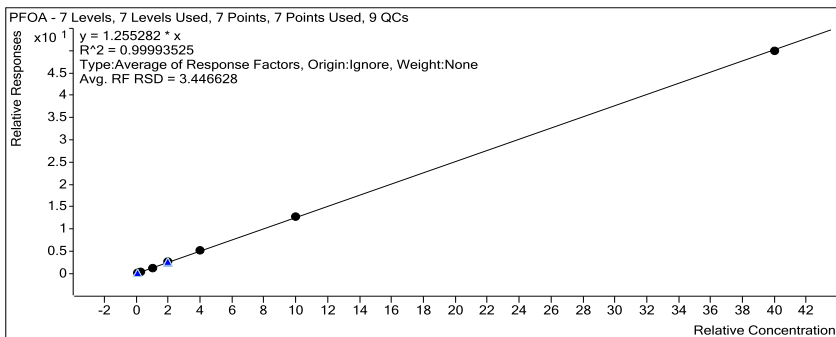
Quantitative Analysis Calibration Report



Target Compound

PFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	22444	0.5000	1.2533
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	53707	1.2500	1.2026
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	218777	5.0000	1.1993
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	452741	10.0000	1.2981
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	862182	20.0000	1.3117
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	2090756	50.0000	1.2716
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	7509670	200.0000	1.2504

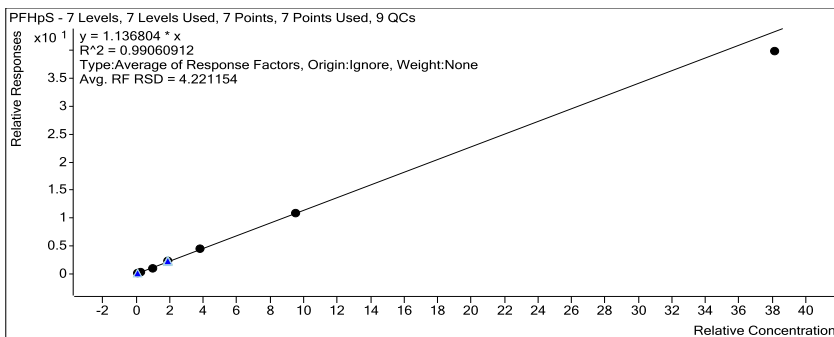


Extracted ISTD

M8PFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	179076	5.0000	35815.2796
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	178642	5.0000	35728.4949
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	182426	5.0000	36485.2767
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	174383	5.0000	34876.6410
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	164324	5.0000	32864.7457

Quantitative Analysis Calibration Report



Extracted ISTD

M9PFNA

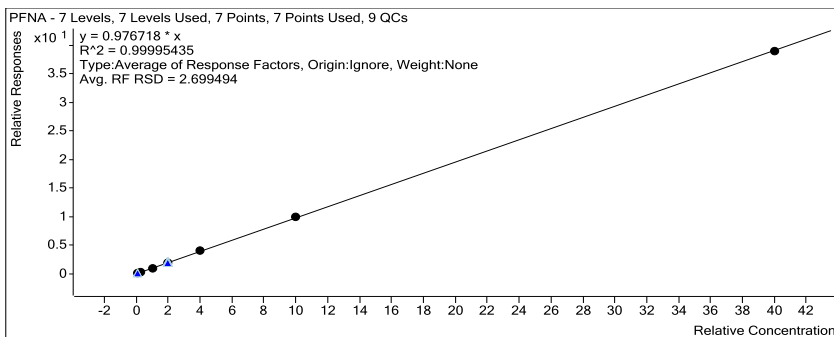
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	210332	5.0000	42066.3305
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	204640	5.0000	40928.0318
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	213131	5.0000	42626.1846
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	201702	5.0000	40340.4565
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	191274	5.0000	38254.8928
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	187621	5.0000	37524.1976
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	171814	5.0000	34362.7915

Target Compound

PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	20447	0.5000	0.9721
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	48265	1.2500	0.9434
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	200950	5.0000	0.9428
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	406714	10.0000	1.0082
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	765222	20.0000	1.0002
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	1867587	50.0000	0.9954
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	6699951	200.0000	0.9749

Quantitative Analysis Calibration Report



Extracted ISTD

M8PFOS

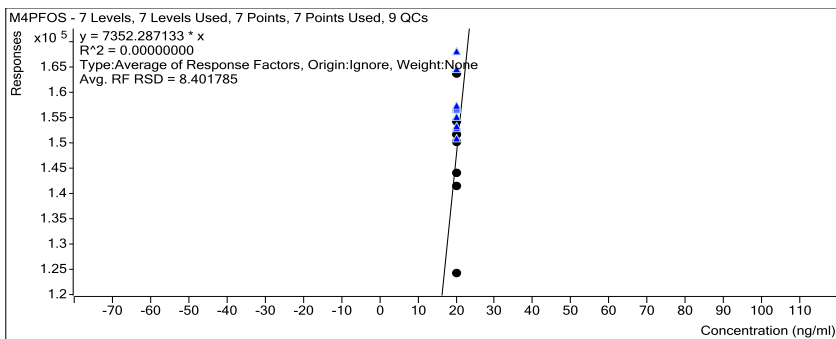
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	40442	5.0000	8088.4262
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	39694	5.0000	7938.8574
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	41345	5.0000	8268.9941
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	38357	5.0000	7671.3771
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	36597	5.0000	7319.3286
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	35638	5.0000	7127.6815
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	31398	5.0000	6279.6877

Instrument ISTD

M4PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	163605	20.0000	8180.2656
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	154162	20.0000	7708.1078
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	151666	20.0000	7583.3143
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	150173	20.0000	7508.6290
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	143986	20.0000	7199.3000
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	141472	20.0000	7073.6010
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	124256	20.0000	6212.7923

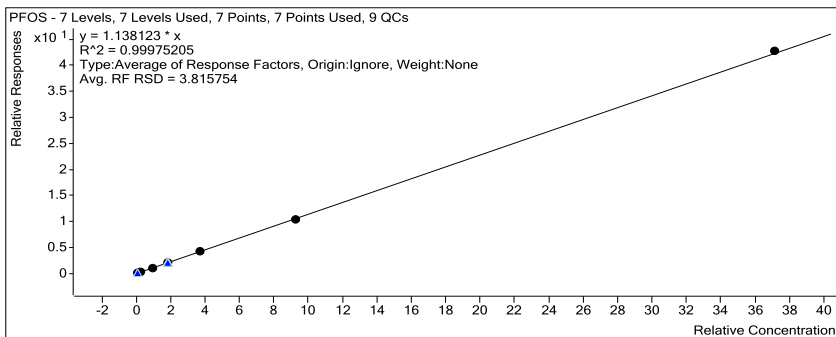
Quantitative Analysis Calibration Report



Target Compound

PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	4483	0.4640	1.1944
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	10140	1.1600	1.1011
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	40916	4.6400	1.0664
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	83194	9.2800	1.1686
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	157059	18.5600	1.1561
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	372556	46.4000	1.1265
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1344577	185.6000	1.1536



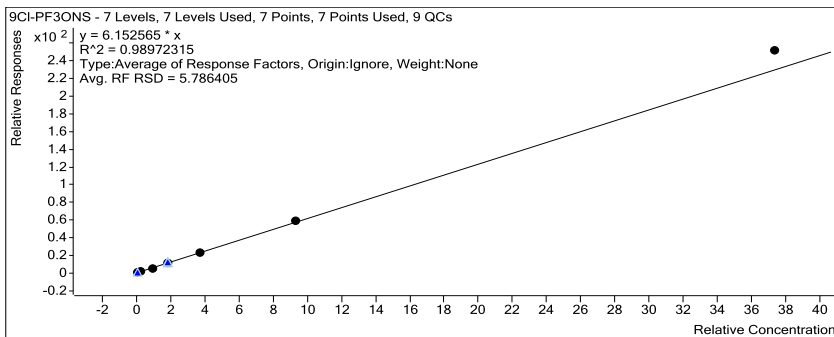
Target Compound

9CI-PF3ONS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	22520	0.4665	5.9684
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	53779	1.1663	5.8082
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	220427	4.6650	5.7143
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	449693	9.3300	6.2829
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	848857	18.6600	6.2152

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	2097238	46.5500	6.3209
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	7919038	186.6000	6.7581



Extracted ISTD

M2 8:2 FTS

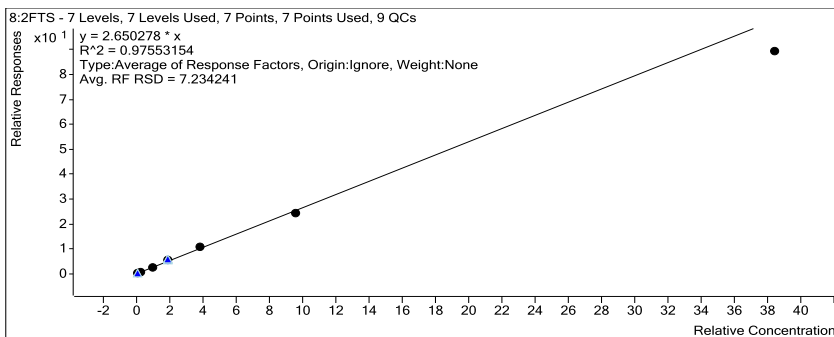
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	18851	5.0000	3770.1442
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	17605	5.0000	3521.0621
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	17515	5.0000	3503.0160
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	15728	5.0000	3145.6258
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	14115	5.0000	2822.9081
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	12547	5.0000	2509.4677
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	8760	5.0000	1751.9226

Target Compound

8:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	4567	0.4800	2.5236
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	11679	1.2000	2.7642
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	45130	4.8000	2.6840
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	86828	9.6000	2.8753
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	152809	19.2000	2.8194
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	307713	48.0000	2.5546
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	784032	192.0000	2.3309

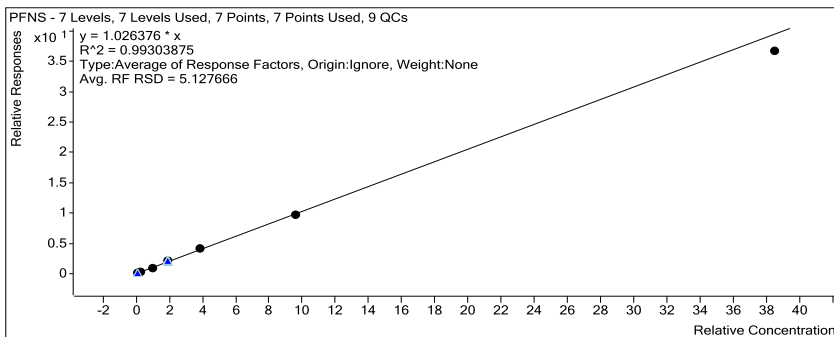
Quantitative Analysis Calibration Report



Target Compound

PFNS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	4123	0.4810	1.0597
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	9507	1.2025	0.9959
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	38974	4.8100	0.9799
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	80013	9.6200	1.0842
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	153564	19.2400	1.0905
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	349069	48.1000	1.0182
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1155499	192.4000	0.9564

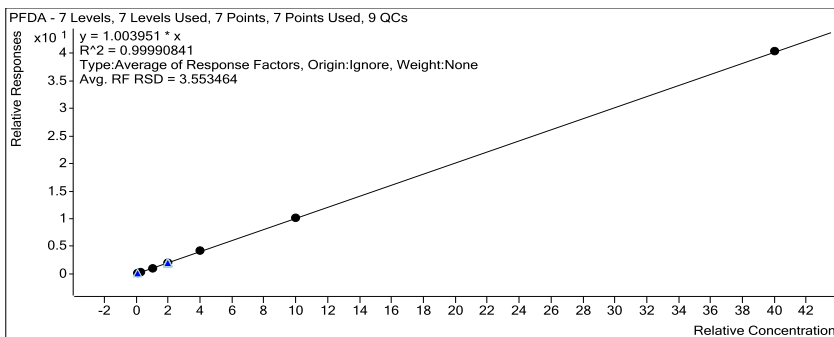


Extracted ISTD

M6PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	216946	5.0000	43389.2861
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	212720	5.0000	42543.9415
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	224844	5.0000	44968.8775
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	205185	5.0000	41037.0182
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	189963	5.0000	37992.5559

Quantitative Analysis Calibration Report



Extracted *ISTD*

d3-NMeFOSAA

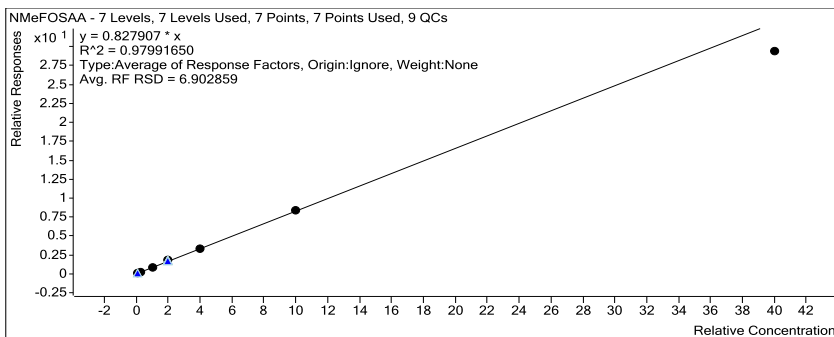
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	23524	5.0000	4704.7023
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	22406	5.0000	4481.2902
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	23373	5.0000	4674.6792
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	21596	5.0000	4319.2465
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	21364	5.0000	4272.8297
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	21721	5.0000	4344.2362
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	23841	5.0000	4768.2423

Target Compound

NMeFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	1865	0.5000	0.7930
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	4930	1.2500	0.8801
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	18739	5.0000	0.8017
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	39166	10.0000	0.9068
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	72169	20.0000	0.8445
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	181001	50.0000	0.8333
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	701911	200.0000	0.7360

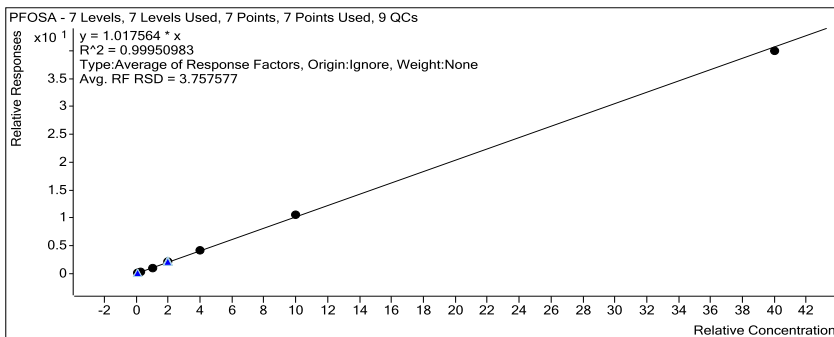
Quantitative Analysis Calibration Report



Target Compound

PFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	7761	0.5000	0.9747
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	19116	1.2500	0.9951
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	78473	5.0000	0.9800
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	159679	10.0000	1.0594
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	303511	20.0000	1.0561
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	756007	50.0000	1.0565
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	2961775	200.0000	1.0012



Extracted ISTD

M8FOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	79619	5.0000	15923.7221
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	76840	5.0000	15367.9117
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	80078	5.0000	16015.6126
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	75362	5.0000	15072.3118
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	71849	5.0000	14369.7297

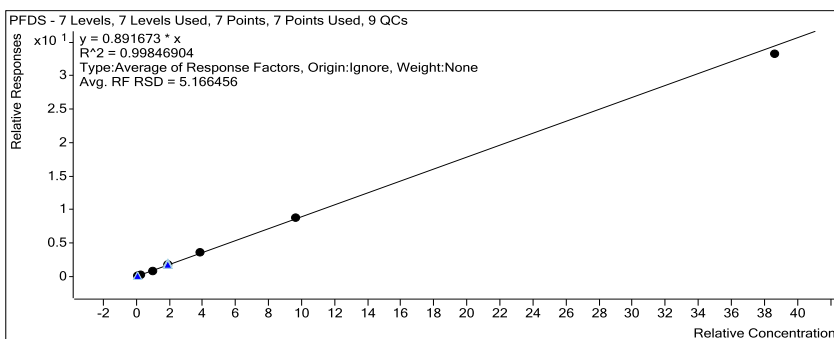
Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	71559	5.0000	14311.8170
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	73959	5.0000	14791.7733

Target Compound

PFDS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	3291	0.4825	0.8433
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	8451	1.2063	0.8825
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	33675	4.8250	0.8440
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	70538	9.6500	0.9529
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	133947	19.3000	0.9482
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	312276	48.2500	0.9080
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1045784	193.0000	0.8629

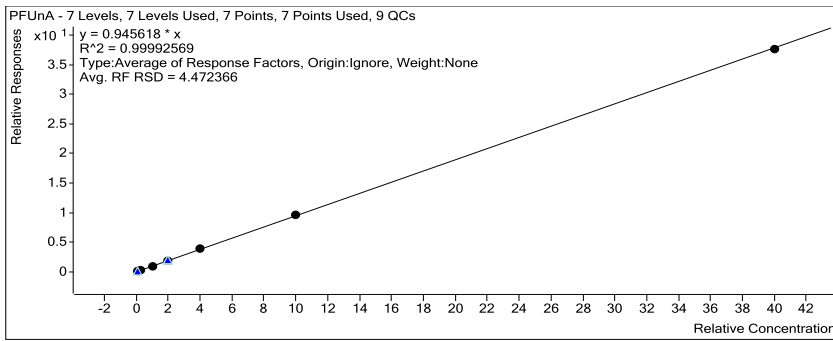


Target Compound

PFUnA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	24075	0.5000	0.9939
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	53925	1.2500	0.8976
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	220972	5.0000	0.8823
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	441991	10.0000	0.9571
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	855087	20.0000	0.9871
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	1975193	50.0000	0.9601
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	7015357	200.0000	0.9413

Quantitative Analysis Calibration Report



Extracted ISTD

d5-NEtFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	39366	5.0000	7873.2108
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	38380	5.0000	7675.9768
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	39512	5.0000	7902.3252
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	36570	5.0000	7314.0774
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	33861	5.0000	6772.2620
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	33622	5.0000	6724.3879
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	26830	5.0000	5366.0660

Extracted ISTD

M7PFUnA

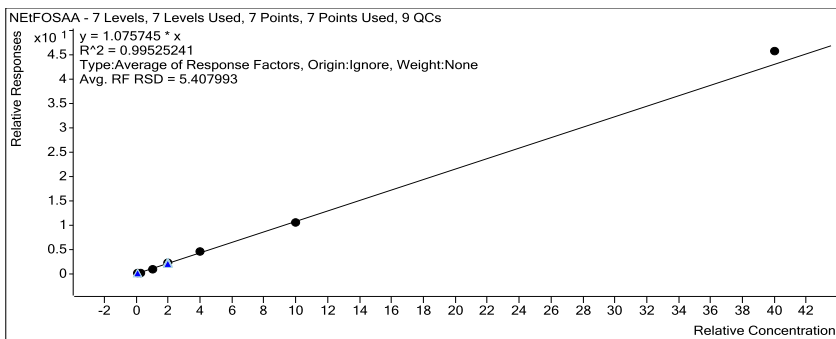
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	242231	5.0000	48446.2333
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	240315	5.0000	48063.0454
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	250456	5.0000	50091.2547
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	230902	5.0000	46180.4405
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	216563	5.0000	43312.6796
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	205738	5.0000	41147.6369
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	186313	5.0000	37262.6017

Target Compound

NEtFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	4239	0.5000	1.0769
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	9542	1.2500	0.9945
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	39932	5.0000	1.0106
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	81649	10.0000	1.1163
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	152752	20.0000	1.1278
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	356018	50.0000	1.0589
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	1229025	200.0000	1.1452

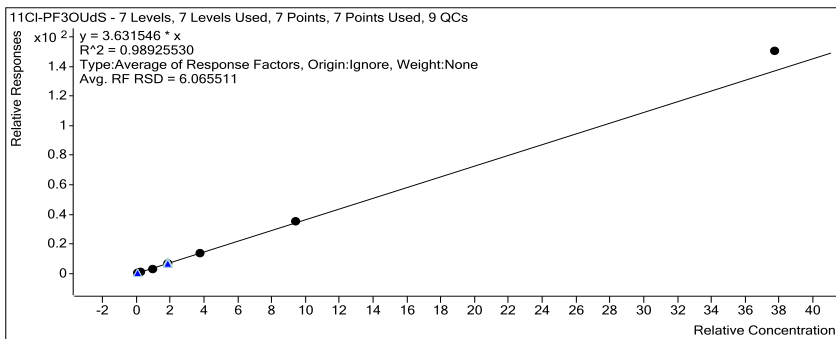
Quantitative Analysis Calibration Report



Target Compound

11CI-PF3OUdS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	13544	0.4715	3.5513
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	31629	1.1788	3.3798
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	131337	4.7150	3.3686
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	266909	9.4300	3.6896
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	512684	18.8600	3.7140
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	1250044	47.1500	3.7196
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	4734969	188.6000	3.9980

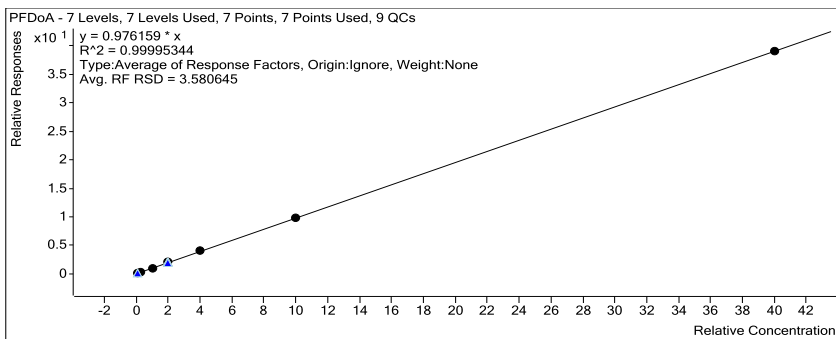


Target Compound

10:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	4969	0.4820	2.7343
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	11866	1.2050	2.7967
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	45222	4.8200	2.6783
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	88082	9.6400	2.9047
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	163117	19.2800	2.9971

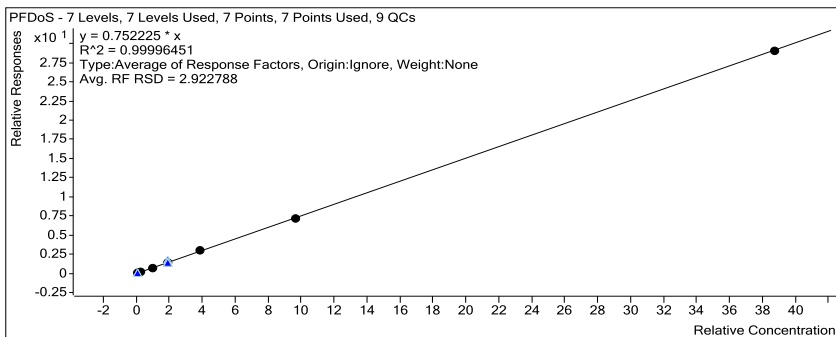
Quantitative Analysis Calibration Report



Target Compound

PFDoS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	3027	0.4840	0.7731
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	7165	1.2100	0.7459
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	28516	4.8400	0.7125
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	57254	9.6800	0.7710
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	109302	19.3600	0.7714
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	255635	48.4000	0.7410
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	912697	193.6000	0.7507



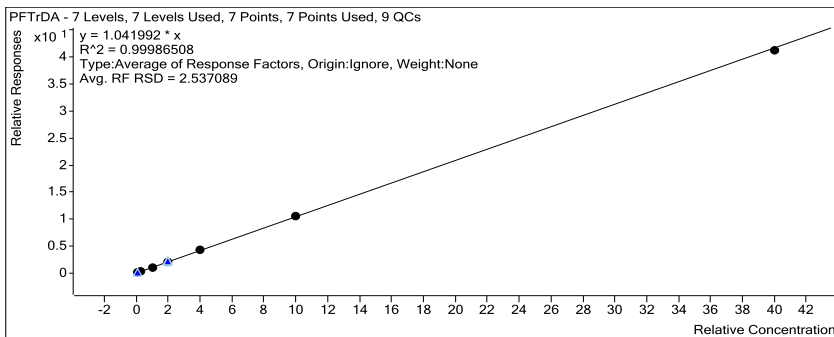
Target Compound

PFTrDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	33427	0.5000	1.0448
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	79116	1.2500	1.0362
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	318052	5.0000	0.9926
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	641095	10.0000	1.0669
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	1211111	20.0000	1.0730

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	3001186	50.0000	1.0483
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	11089608	200.0000	1.0321



Extracted ISTD

d-NMeFOSA

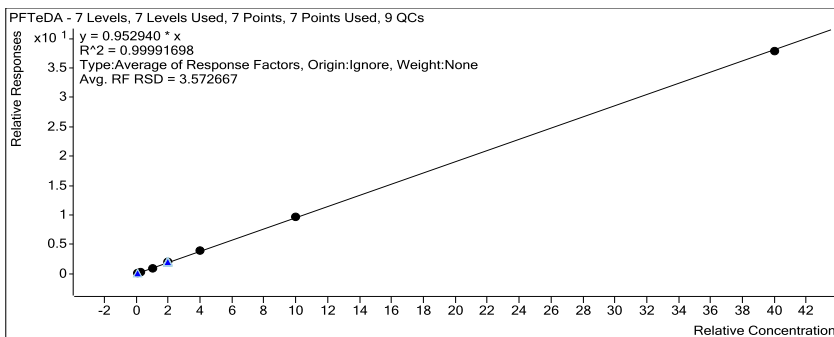
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	16790	5.0000	3358.0532
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	16694	5.0000	3338.7940
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	17665	5.0000	3532.9451
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	16551	5.0000	3310.2910
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	16387	5.0000	3277.3837
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	16701	5.0000	3340.2281
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	18088	5.0000	3617.5488

Target Compound

NMeFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	1913	0.5000	1.1392
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	4574	1.2500	1.0960
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	19164	5.0000	1.0849
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	39119	10.0000	1.1817
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	75577	20.0000	1.1530
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	185166	50.0000	1.1087
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	736974	200.0000	1.0186

Quantitative Analysis Calibration Report



Extracted ISTD

d9-NetFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	14473	5.0000	2894.5981
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	14659	5.0000	2931.8589
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	14798	5.0000	2959.6085
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	13716	5.0000	2743.2648
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	13551	5.0000	2710.1337
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	13917	5.0000	2783.3480
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	13467	5.0000	2693.3266

Extracted ISTD

d-NetFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	17257	5.0000	3451.4249
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	16877	5.0000	3375.4153
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	17682	5.0000	3536.4838
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	16245	5.0000	3249.0203
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	16289	5.0000	3257.8536
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	16008	5.0000	3201.5600
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	15434	5.0000	3086.7362

Target Compound

NetFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220511BCAL\2220511B_1.d	Calibration	1	<input checked="" type="checkbox"/>	1608	0.5000	1.1114
D:\MassHunter\Data\2220511BCAL\2220511B_2.d	Calibration	2	<input checked="" type="checkbox"/>	3868	1.2500	1.0553
D:\MassHunter\Data\2220511BCAL\2220511B_3.d	Calibration	3	<input checked="" type="checkbox"/>	15969	5.0000	1.0791
D:\MassHunter\Data\2220511BCAL\2220511B_4.d	Calibration	4	<input checked="" type="checkbox"/>	33344	10.0000	1.2155
D:\MassHunter\Data\2220511BCAL\2220511B_5.d	Calibration	5	<input checked="" type="checkbox"/>	62800	20.0000	1.1586
D:\MassHunter\Data\2220511BCAL\2220511B_6.d	Calibration	6	<input checked="" type="checkbox"/>	153603	50.0000	1.1037
D:\MassHunter\Data\2220511BCAL\2220511B_7.d	Calibration	7	<input checked="" type="checkbox"/>	597309	200.0000	1.1089

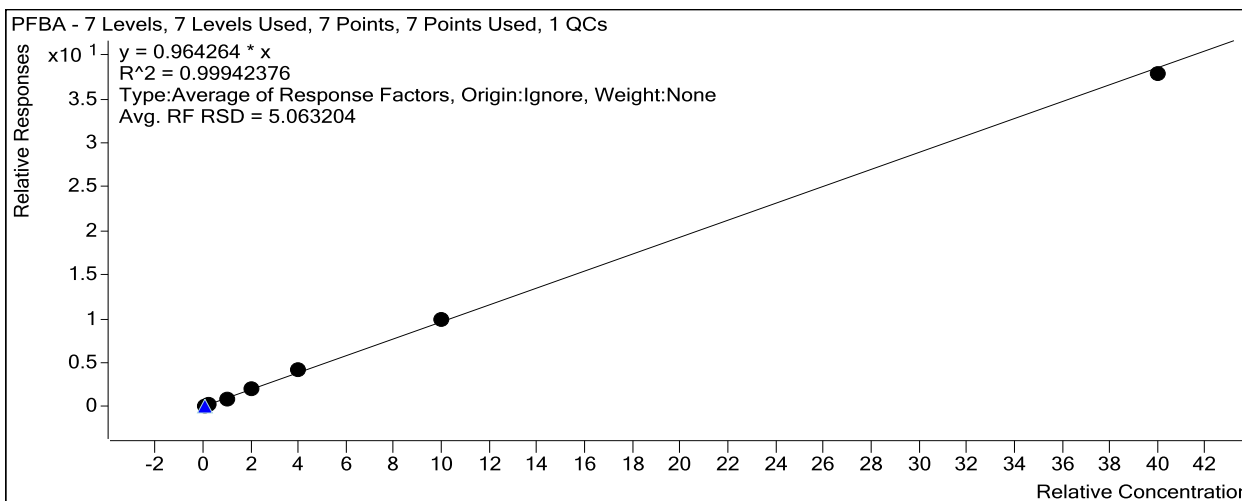
Quantitative Analysis Calibration Report

Batch Data Path	C:\MassHunter\Data\QQQ4\2220412BCAL\QuantResults\2220418B.batch.bin		
Analysis Time	4/19/2022 4:39 PM	Analyst Name	GCAL\jcms
Report Time	4/20/2022 8:56 AM	Reporter Name	GCAL\jcms
Last Calib Update	4/13/2022 9:39 AM	Batch State	Processed

Calibration Info

Target Compound PFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	9253	0.5000	0.9252
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	23259	1.2500	0.9109
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	96924	5.0000	0.9254
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	203327	10.0000	1.0166
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	422714	20.0000	1.0317
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1034877	50.0000	0.9930
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	3674143	200.0000	0.9470



Extracted ISTD

MPFBA

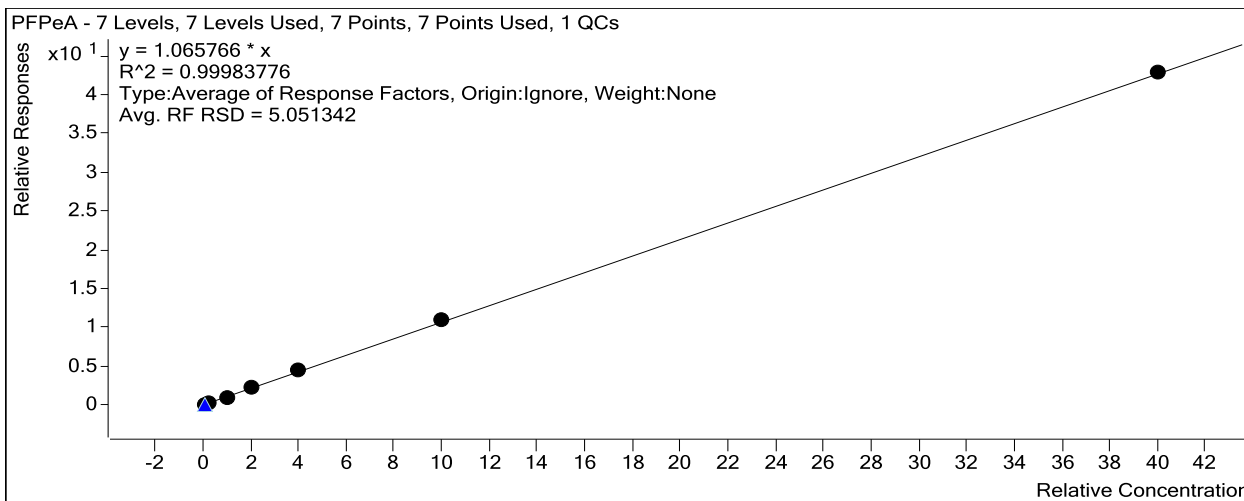
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	100011	5.0000	20002.2128
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	102141	5.0000	20428.2966
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	104739	5.0000	20947.7597
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	100004	5.0000	20000.8618
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	102429	5.0000	20485.7396
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	104212	5.0000	20842.4858
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	96995	5.0000	19398.9391

Target Compound

PFMPA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1454	0.5000	0.1135
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	3758	1.2500	0.1135
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	14822	5.0000	0.1110
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	31144	10.0000	0.1225

Quantitative Analysis Calibration Report



Extracted ISTD

M3PFBS

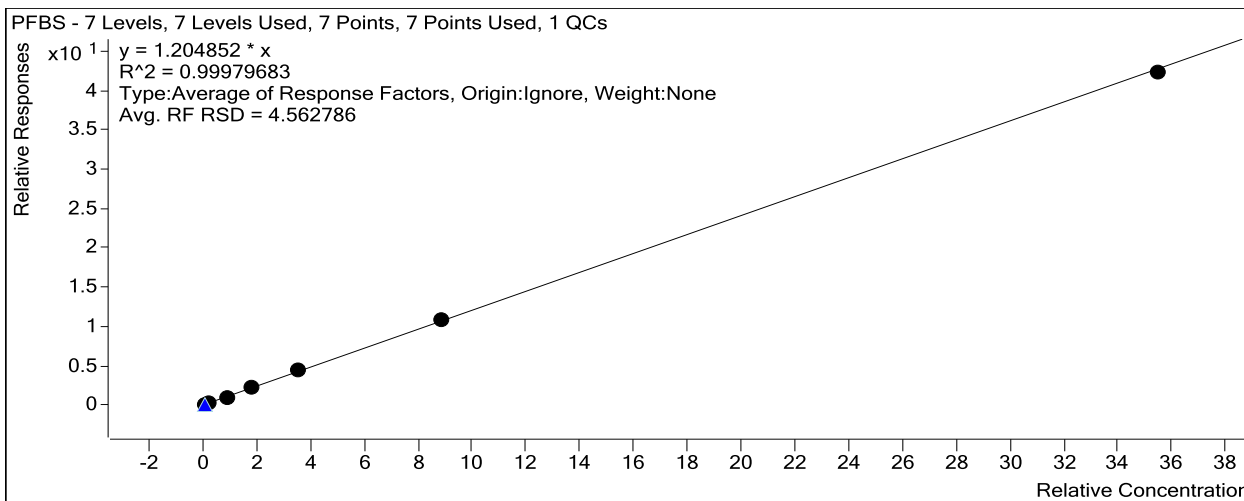
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	42029	5.0000	8405.7706
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	42986	5.0000	8597.2450
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	43420	5.0000	8683.9831
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	41175	5.0000	8235.0330
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	42361	5.0000	8472.2841
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	41929	5.0000	8385.7303
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	36600	5.0000	7320.0804

Target Compound

PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	4454	0.4435	1.1948
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	10704	1.1088	1.1228
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	44643	4.4350	1.1592
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	92581	8.8700	1.2675
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	191544	17.7400	1.2744
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	454675	44.3500	1.2225
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1548893	177.4000	1.1928

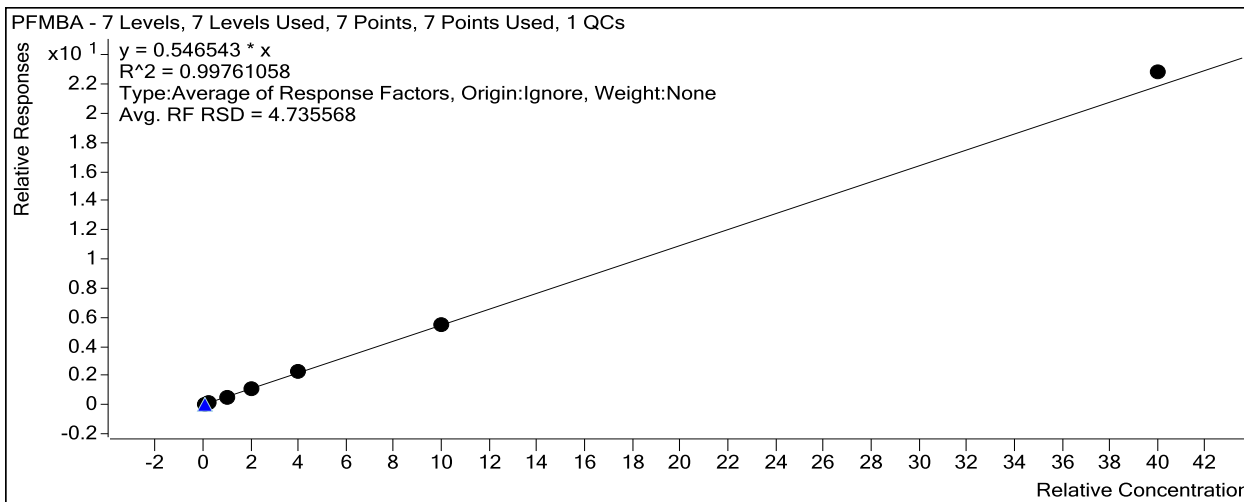
Quantitative Analysis Calibration Report



Target Compound

PFMBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	7889	0.5000	0.5204
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	20153	1.2500	0.5169
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	83650	5.0000	0.5218
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	172898	10.0000	0.5637
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	360705	20.0000	0.5761
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	867336	50.0000	0.5559
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	3240737	200.0000	0.5709



Target Compound

PFEESA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	12715	0.4450	4.2364
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	31812	1.1125	4.1420
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	131655	4.4500	4.2119
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	277652	8.9000	4.6069
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	568170	17.8000	4.7096

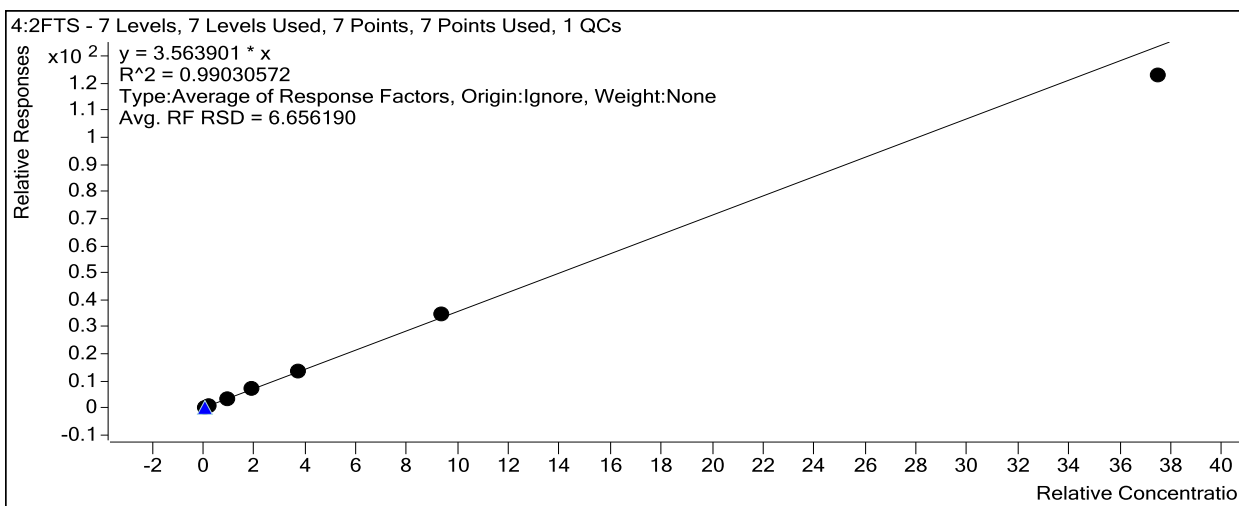
Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	9591	5.0000	1918.2633
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	9673	5.0000	1934.6001
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	8846	5.0000	1769.1046
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	7507	5.0000	1501.4075

Target Compound

4:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3485	0.4685	3.8349
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	7589	1.1713	3.2505
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	32349	4.6850	3.4336
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	66565	9.3700	3.7034
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	135109	18.7400	3.7267
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	308049	46.8500	3.7167
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	923323	187.4000	3.2816



Extracted ISTD

M5PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	151601	5.0000	30320.2217
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	155947	5.0000	31189.4354
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	160297	5.0000	32059.3330
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	153352	5.0000	30670.3382
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	156537	5.0000	31307.3865
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	156022	5.0000	31204.4245
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	141909	5.0000	28381.8407

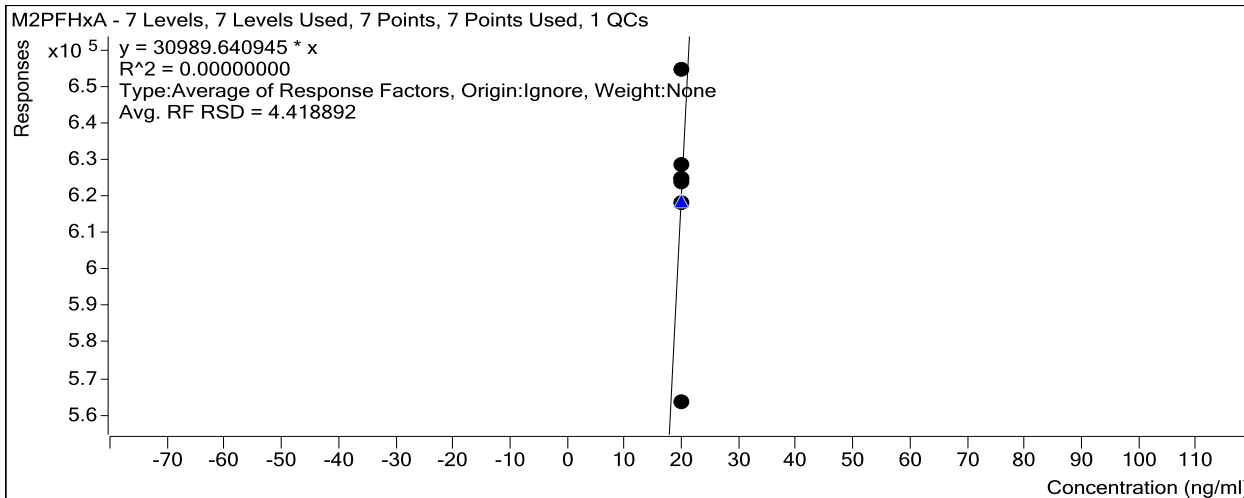
Instrument ISTD

M2PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	624643	20.0000	31232.1384
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	625011	20.0000	31250.5375
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	628415	20.0000	31420.7321
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	618332	20.0000	30916.6060
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	654568	20.0000	32728.4237

Quantitative Analysis Calibration Report

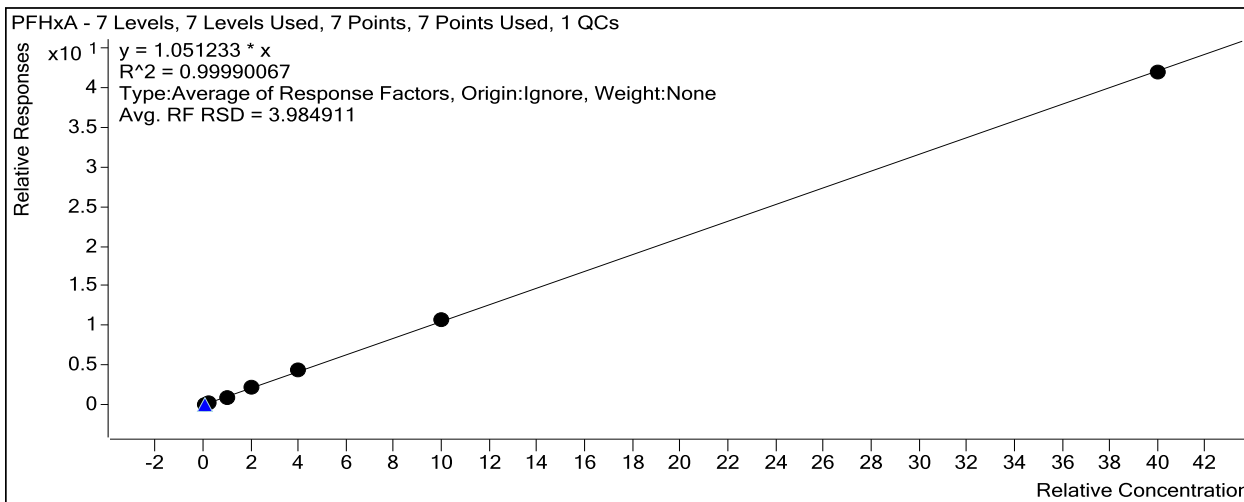
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	623889	20.0000	31194.4333
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	563692	20.0000	28184.6157



Target Compound

PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	15671	0.5000	1.0337
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	38676	1.2500	0.9920
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	162398	5.0000	1.0131
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	336150	10.0000	1.0960
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	691036	20.0000	1.1036
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1674790	50.0000	1.0734
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5941361	200.0000	1.0467



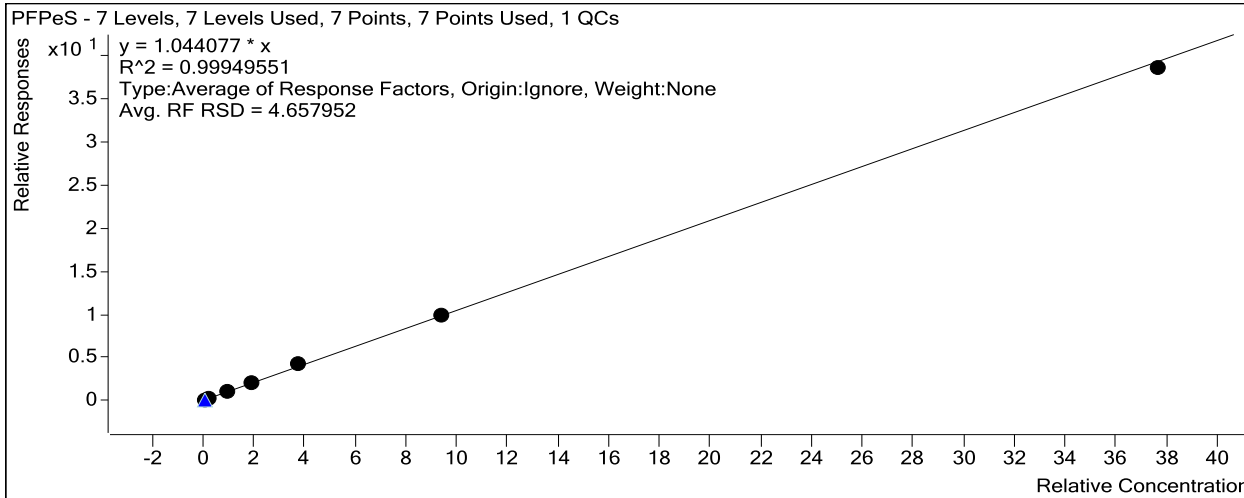
Target Compound

PFPeS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3826	0.4705	0.9675
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	10426	1.1763	1.0309
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	41793	4.7050	1.0229

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	84848	9.4100	1.0949
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	177340	18.8200	1.1122
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	416190	47.0500	1.0549
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1412471	188.2000	1.0253



Extracted ISTD

M3HFPODA

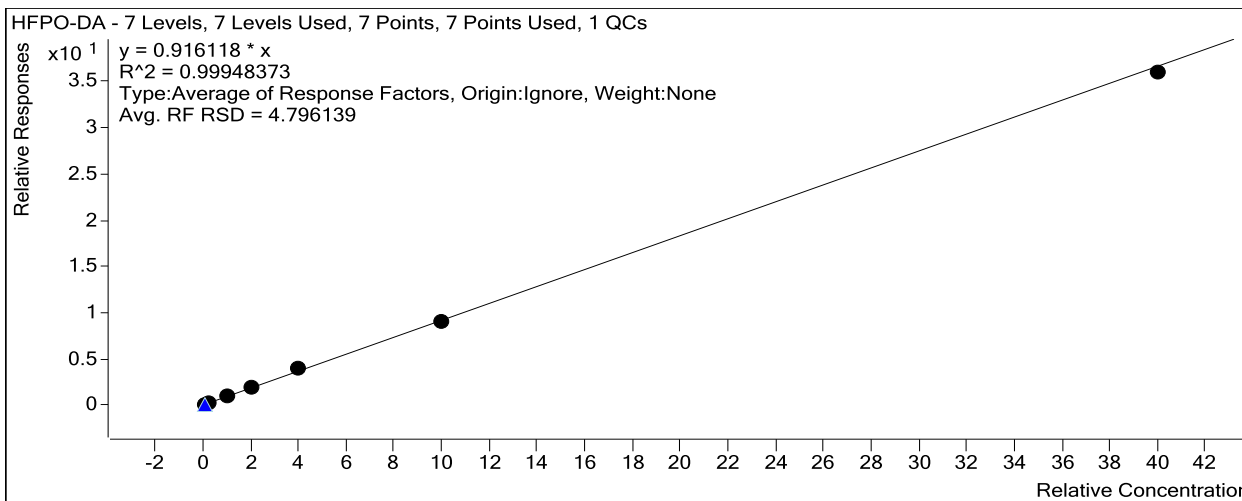
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	40354	10.0000	4035.4393
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	41561	10.0000	4156.0677
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	42390	10.0000	4238.9540
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	41622	10.0000	4162.1844
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	41824	10.0000	4182.4352
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	42297	10.0000	4229.7297
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	37047	10.0000	3704.6775

Target Compound

HFPO-DA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3590	1.0000	0.8895
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	8939	2.5000	0.8603
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	38510	10.0000	0.9085
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	81189	20.0000	0.9753
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	163491	40.0000	0.9772
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	381611	100.0000	0.9022
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1333344	400.0000	0.8998

Quantitative Analysis Calibration Report



Extracted ISTD

M4PFHpA

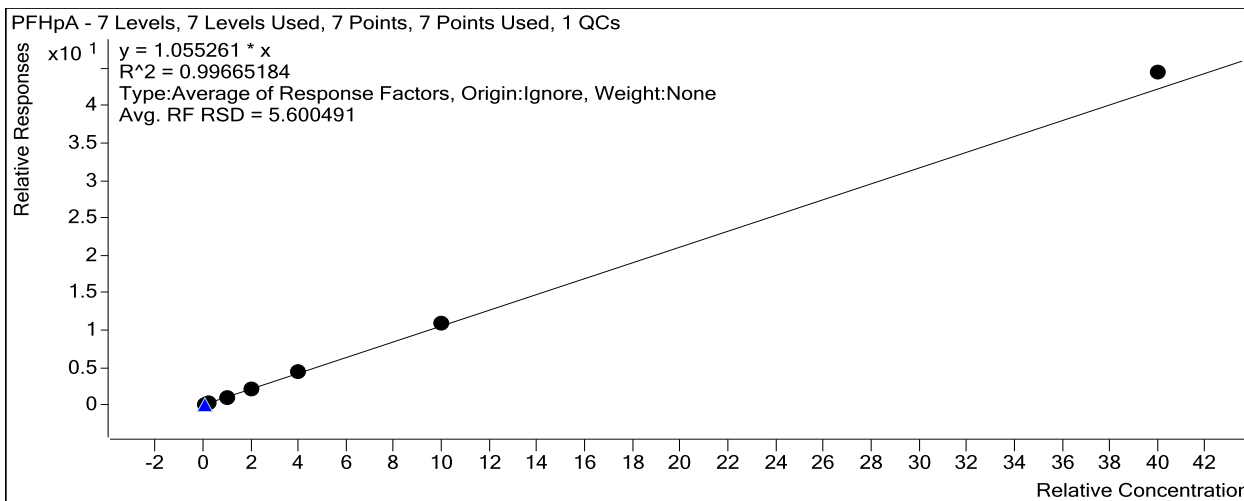
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	243014	5.0000	48602.7171
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	249678	5.0000	49935.6601
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	254223	5.0000	50844.6714
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	244352	5.0000	48870.3472
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	247395	5.0000	49479.0159
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	250747	5.0000	50149.3404
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	224690	5.0000	44938.0909

Target Compound

PFHpA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	23994	0.5000	0.9874
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	61731	1.2500	0.9890
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	255469	5.0000	1.0049
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	533199	10.0000	1.0910
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1108600	20.0000	1.1203
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2715480	50.0000	1.0830
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	9988057	200.0000	1.1113

Quantitative Analysis Calibration Report



Extracted ISTD

M3PFHxS

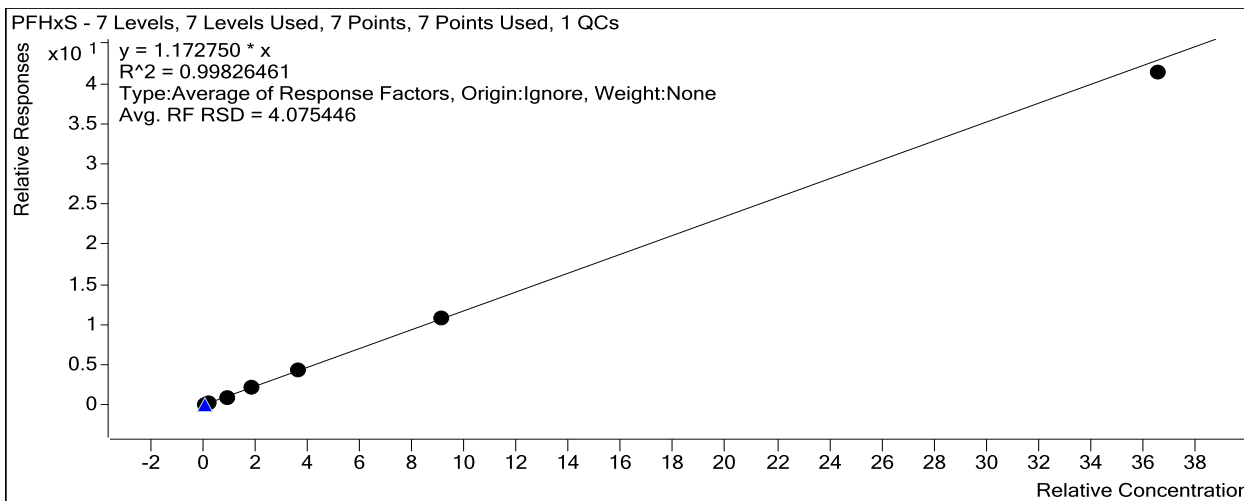
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	33722	5.0000	6744.4753
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	34519	5.0000	6903.7246
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	35121	5.0000	7024.2097
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	33859	5.0000	6771.8178
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	33888	5.0000	6777.5628
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	33519	5.0000	6703.7593
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	29731	5.0000	5946.1925

Target Compound

PFHxS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3797	0.4570	1.2319
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	9013	1.1425	1.1427
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	35487	4.5700	1.1055
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	73232	9.1400	1.1832
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	151730	18.2800	1.2247
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	364438	45.7000	1.1896
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1230080	182.8000	1.1317

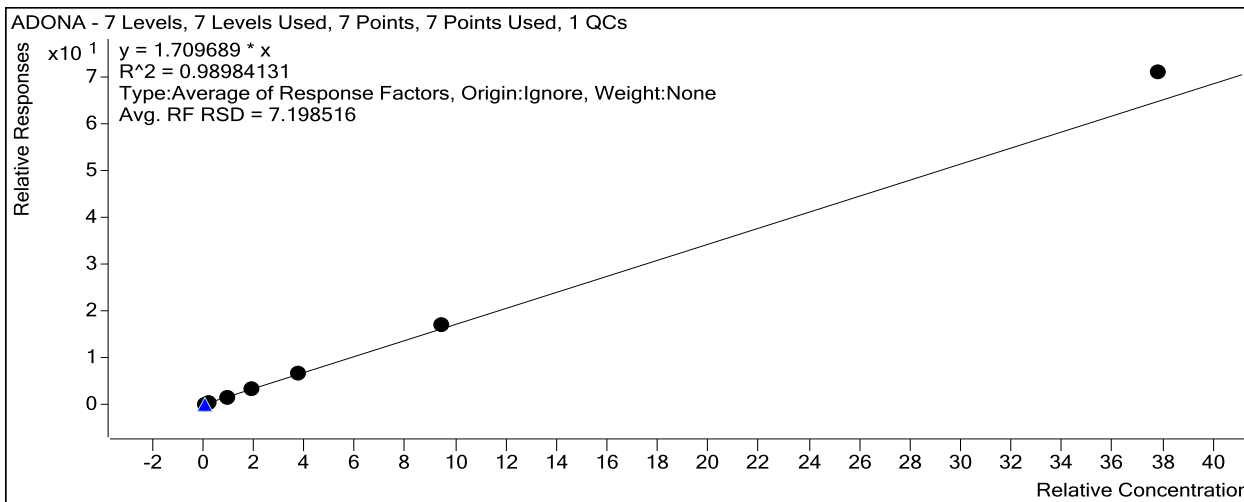
Quantitative Analysis Calibration Report



Target Compound

ADONA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	28980	0.4725	1.5725
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	73699	1.1813	1.5718
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	309297	4.7250	1.6086
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	643290	9.4500	1.7611
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1332142	18.9000	1.7907
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	3315259	47.2500	1.7874
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	12415155	189.0000	1.8758



Extracted ISTD

M2 6:2 FTS

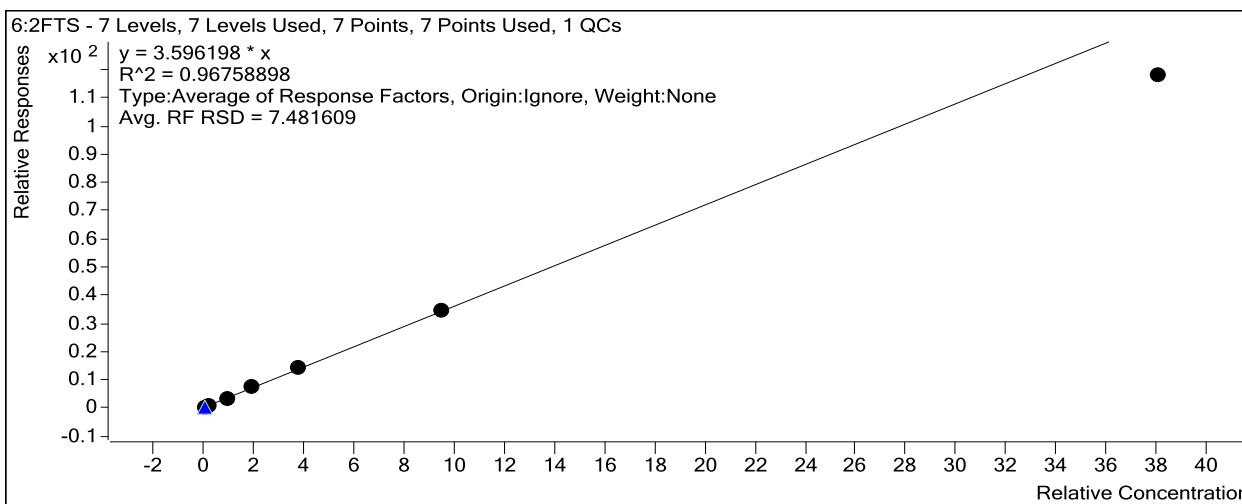
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	8908	5.0000	1781.6614
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	8686	5.0000	1737.2151
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	8901	5.0000	1780.2649
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	8199	5.0000	1639.7658
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	8629	5.0000	1725.8529

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	8369	5.0000	1673.8530
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	7324	5.0000	1464.7487

Target Compound 6:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3083	0.4755	3.6386
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	7156	1.1888	3.4649
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	30459	4.7550	3.5982
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	62017	9.5100	3.9769
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	123483	19.0200	3.7618
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	288807	47.5500	3.6286
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	864869	190.2000	3.1044



Extracted ISTD M8PFOA

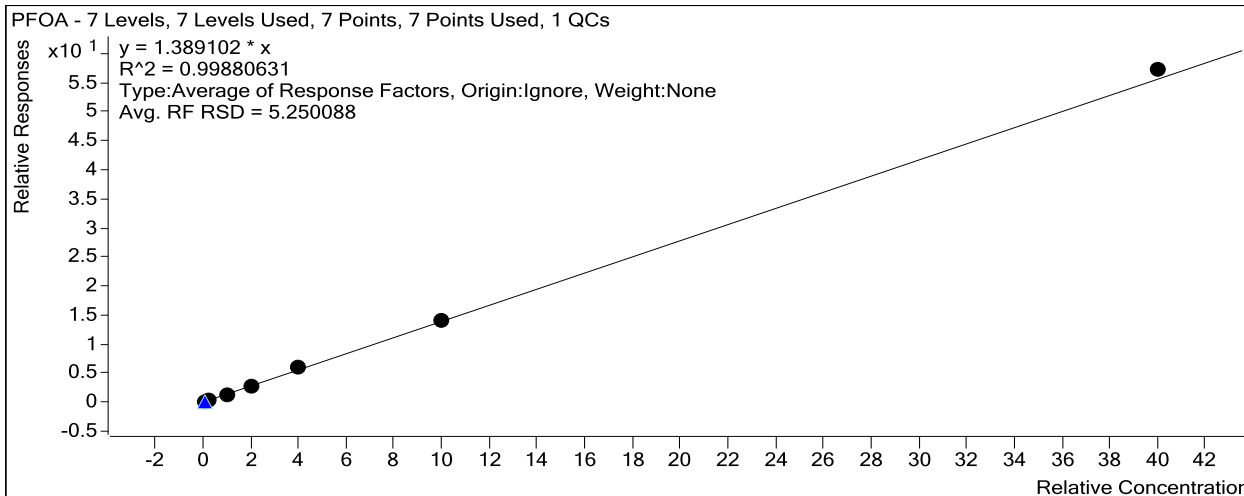
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	195016	5.0000	39003.1458
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	198460	5.0000	39692.0985
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	203471	5.0000	40694.2280
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	193272	5.0000	38654.3547
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	196805	5.0000	39361.0846
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	196280	5.0000	39255.9963
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	175094	5.0000	35018.8531

Instrument ISTD MPFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1332011	25.0000	53280.4408
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	1320598	25.0000	52823.9029
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	1367361	25.0000	54694.4584
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	1349269	25.0000	53970.7650
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1348694	25.0000	53947.7573
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1290257	25.0000	51610.2611
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1174327	25.0000	46973.0945

Quantitative Analysis Calibration Report

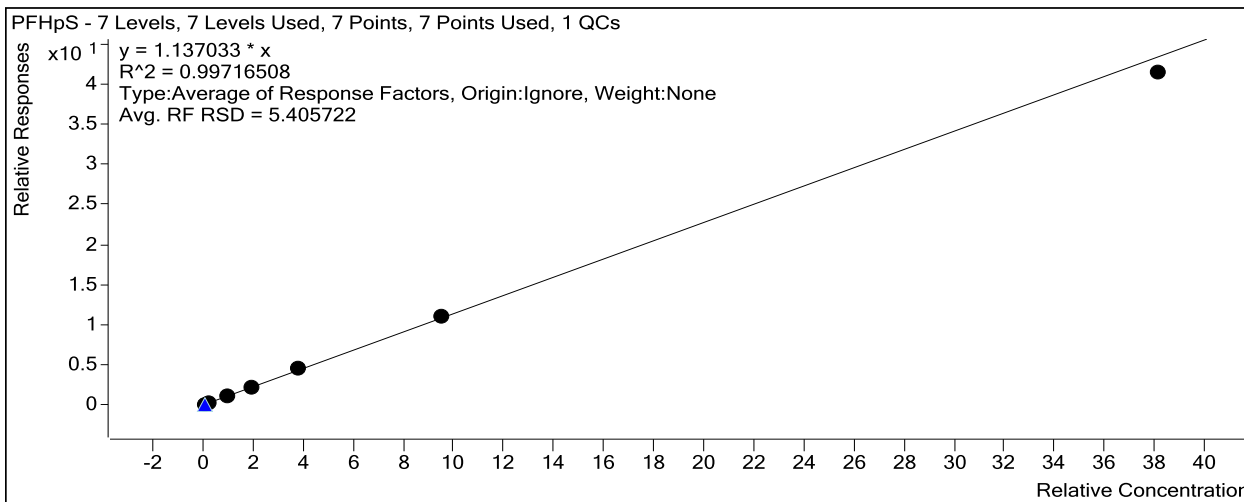
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2791083	50.0000	1.4220
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	10021638	200.0000	1.4309



Target Compound

PFHpS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3543	0.4765	1.1024
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	8829	1.1913	1.0736
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	36779	4.7650	1.0988
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	77939	9.5300	1.2077
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	158276	19.0600	1.2252
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	371881	47.6500	1.1642
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1232268	190.6000	1.0873



Extracted ISTD

M9PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	239155	5.0000	47831.0083
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	240281	5.0000	48056.2176
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	246747	5.0000	49349.4280

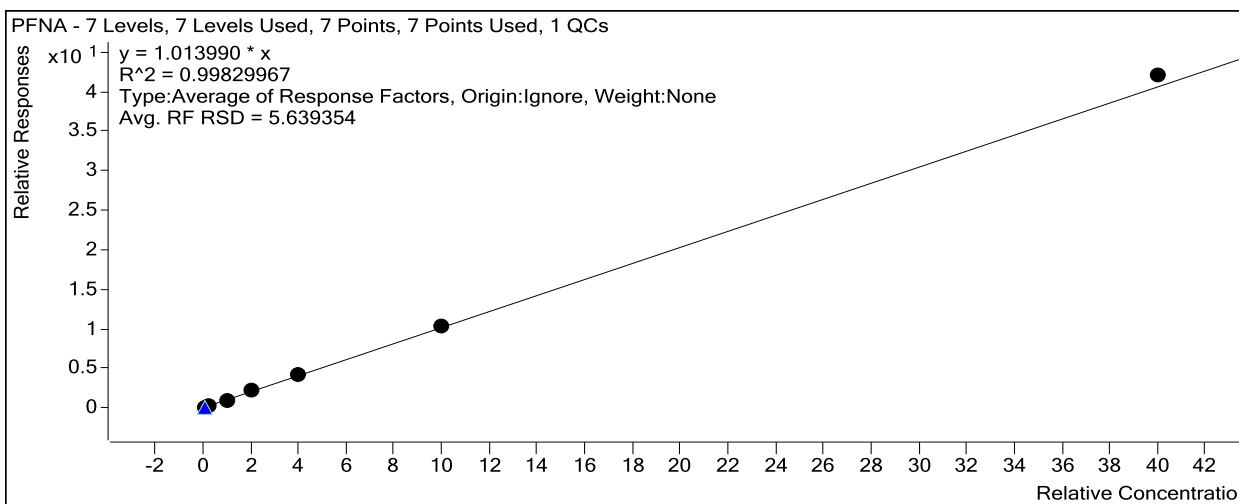
Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	233815	5.0000	46763.0292
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	241084	5.0000	48216.7290
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	239324	5.0000	47864.8157
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	208117	5.0000	41623.4094

Target Compound

PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	22664	0.5000	0.9477
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	56694	1.2500	0.9438
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	240070	5.0000	0.9729
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	502165	10.0000	1.0738
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1030245	20.0000	1.0683
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2489216	50.0000	1.0401
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	8751208	200.0000	1.0512

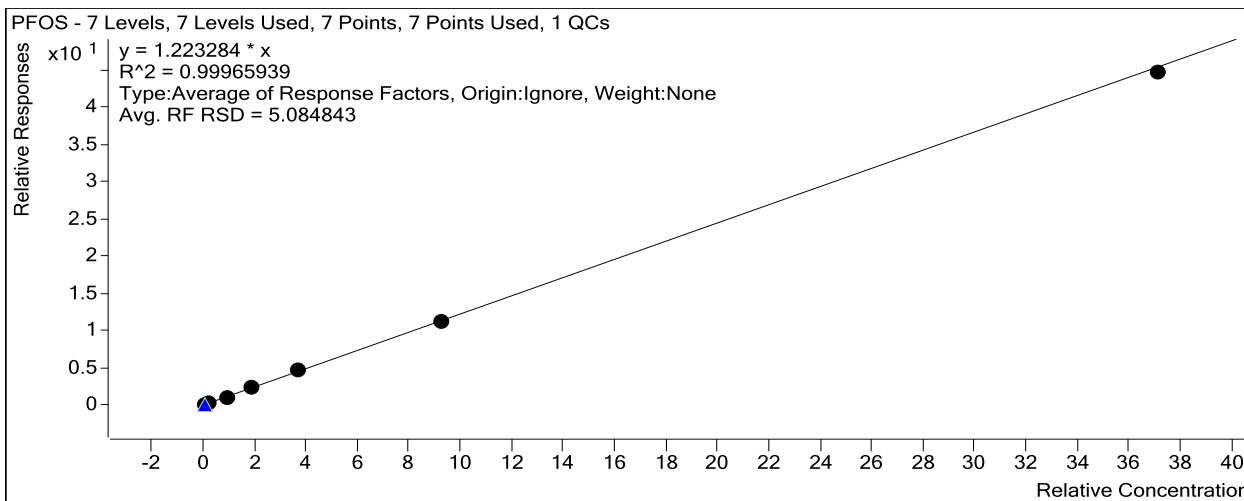


Target Compound

PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3850	0.4640	1.3270
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	8736	1.1600	1.1831
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	33870	4.6400	1.1309
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	70866	9.2800	1.2440
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	145514	18.5600	1.2608
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	348129	46.4000	1.2127
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1157687	185.6000	1.2044

Quantitative Analysis Calibration Report



Extracted ISTD

M8PFOS

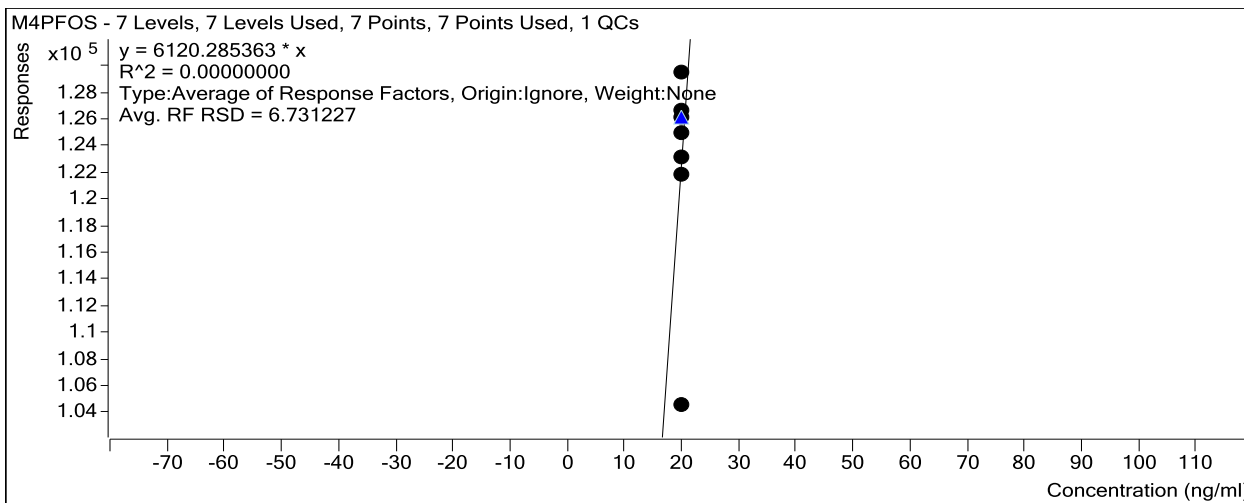
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	31267	5.0000	6253.3879
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	31827	5.0000	6365.4808
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	32272	5.0000	6454.4055
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	30692	5.0000	6138.4129
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	31092	5.0000	6218.3245
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	30934	5.0000	6186.8648
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	25896	5.0000	5179.1510

Instrument ISTD

M4PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	125019	20.0000	6250.9427
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	126663	20.0000	6333.1407
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	126096	20.0000	6304.7775
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	123092	20.0000	6154.5751
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	129493	20.0000	6474.6326
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	121900	20.0000	6095.0044
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	104578	20.0000	5228.9245

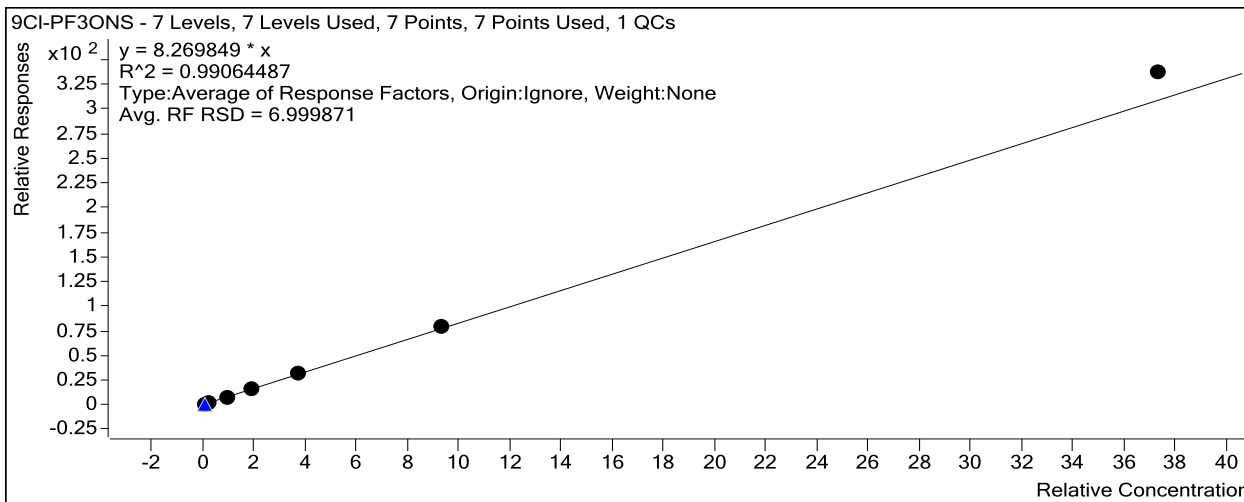
Quantitative Analysis Calibration Report



Target Compound

9CI-PF3ONS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	22357	0.4665	7.6640
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	56733	1.1663	7.6418
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	232870	4.6650	7.7340
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	494405	9.3300	8.6327
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1011489	18.6600	8.7172
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2435946	46.5500	8.4582
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	8737559	186.6000	9.0411



Extracted ISTD

M2 8:2 FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	7753	5.0000	1550.6118
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	7584	5.0000	1516.7639
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	7534	5.0000	1506.7569
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	7029	5.0000	1405.7546
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	6975	5.0000	1394.9771

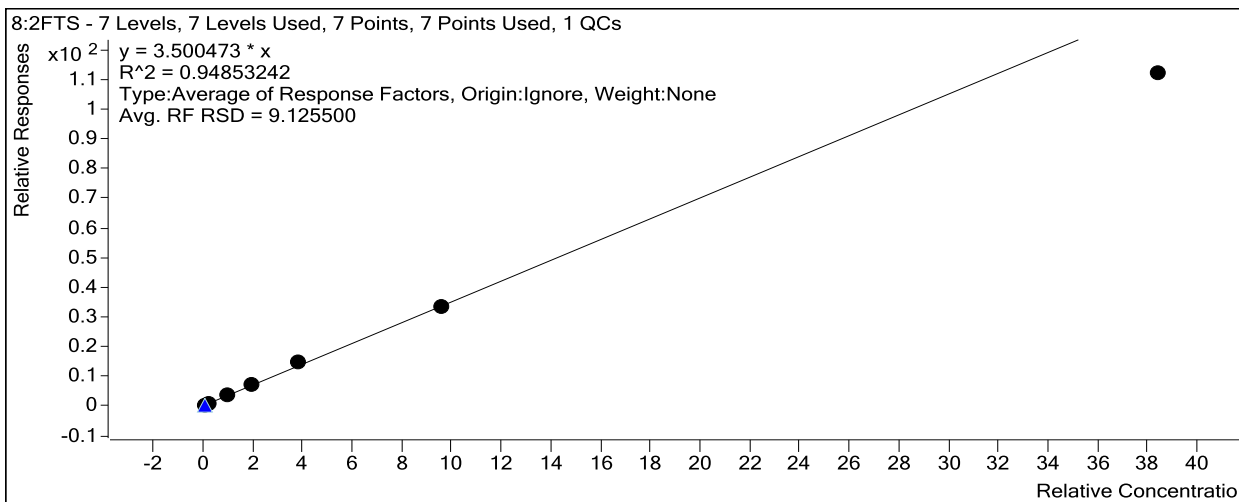
Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	6864	5.0000	1372.8405
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5871	5.0000	1174.2222

Target Compound

8:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2584	0.4800	3.4717
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	6092	1.2000	3.3470
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	26068	4.8000	3.6043
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	50368	9.6000	3.7322
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	105294	19.2000	3.9313
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	230465	48.0000	3.4974
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	658163	192.0000	2.9193



Extracted ISTD

M6PFDA

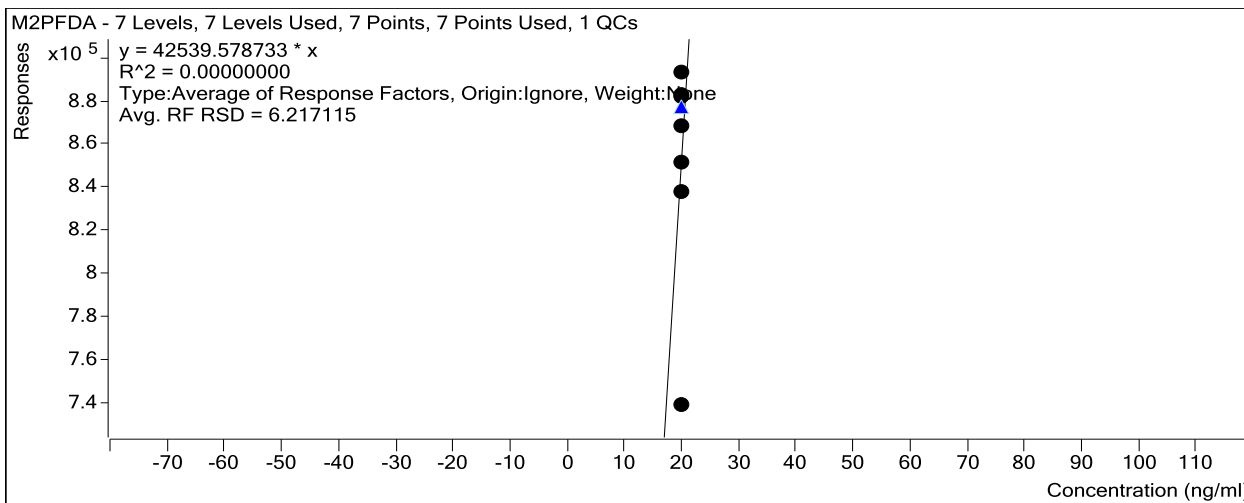
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	231683	5.0000	46336.6962
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	237826	5.0000	47565.2317
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	242150	5.0000	48429.9165
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	229091	5.0000	45818.2577
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	233179	5.0000	46635.7574
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	230373	5.0000	46074.6473
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	197605	5.0000	39520.9962

Instrument ISTD

M2PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	882032	20.0000	44101.5876
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	868829	20.0000	43441.4709
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	883235	20.0000	44161.7268
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	837626	20.0000	41881.3143
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	893216	20.0000	44660.8202
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	851434	20.0000	42571.6872
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	739169	20.0000	36958.4441

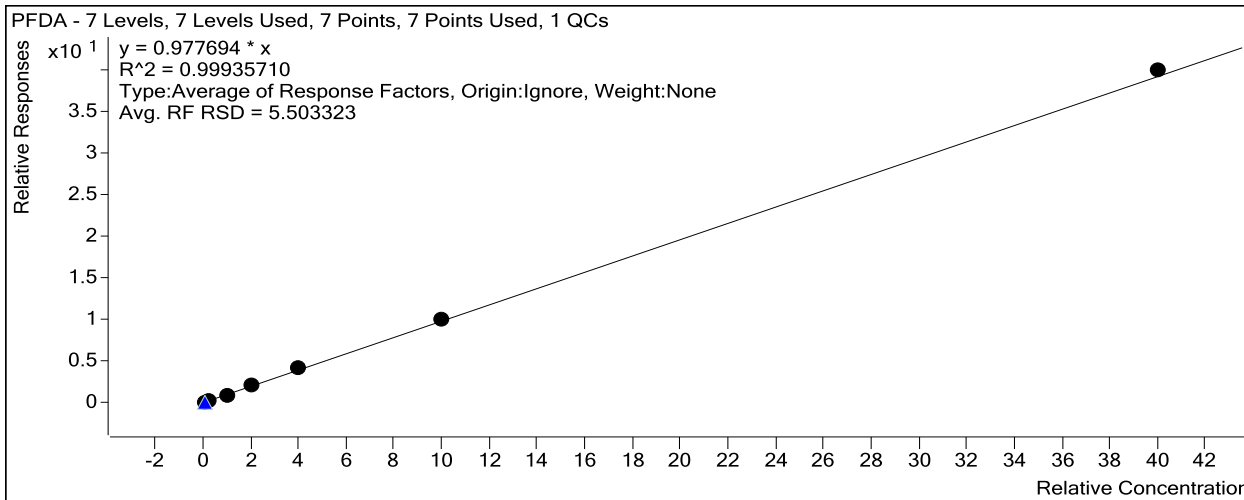
Quantitative Analysis Calibration Report



Target Compound

PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	21293	0.5000	0.9191
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	53831	1.2500	0.9054
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	228953	5.0000	0.9455
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	470895	10.0000	1.0277
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	968915	20.0000	1.0388
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2326508	50.0000	1.0099
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	7884136	200.0000	0.9975



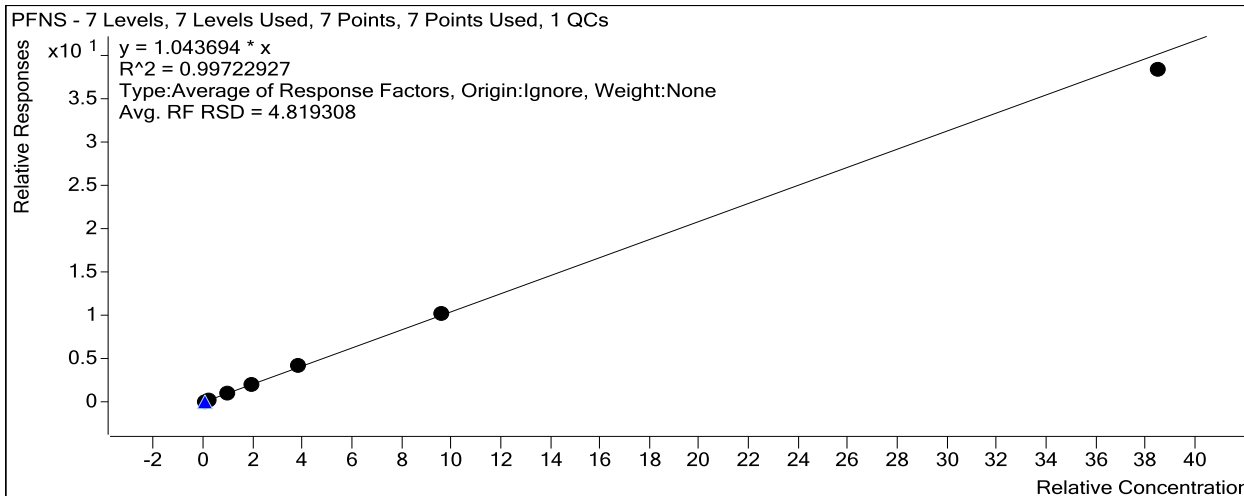
Target Compound

PFNS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3100	0.4810	1.0307
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	7475	1.2025	0.9766
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	31953	4.8100	1.0292
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	65231	9.6200	1.1046
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	132722	19.2400	1.1093

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	314657	48.1000	1.0574
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	994493	192.4000	0.9980



Extracted *ISTD*

d3-NMeFOSAA

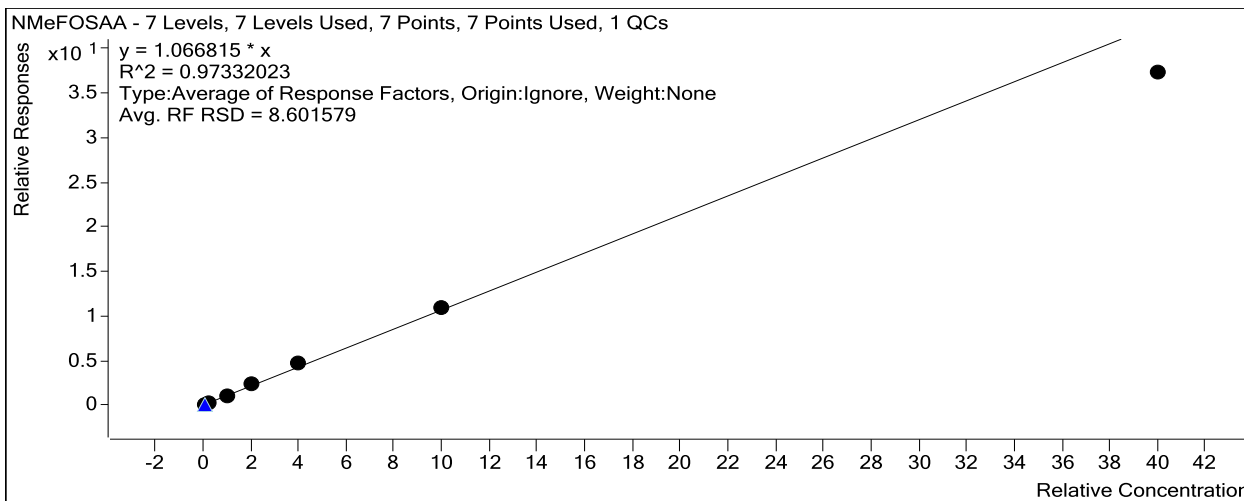
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	20703	5.0000	4140.5546
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	21146	5.0000	4229.1622
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	20901	5.0000	4180.2810
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	20463	5.0000	4092.6835
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	20532	5.0000	4106.4617
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	21391	5.0000	4278.2761
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	22953	5.0000	4590.5040

Target Compound

NMeFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2210	0.5000	1.0673
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	5064	1.2500	0.9580
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	22489	5.0000	1.0760
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	47264	10.0000	1.1548
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	96486	20.0000	1.1748
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	236071	50.0000	1.1036
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	856817	200.0000	0.9332

Quantitative Analysis Calibration Report



Extracted ISTD

M8FOSA

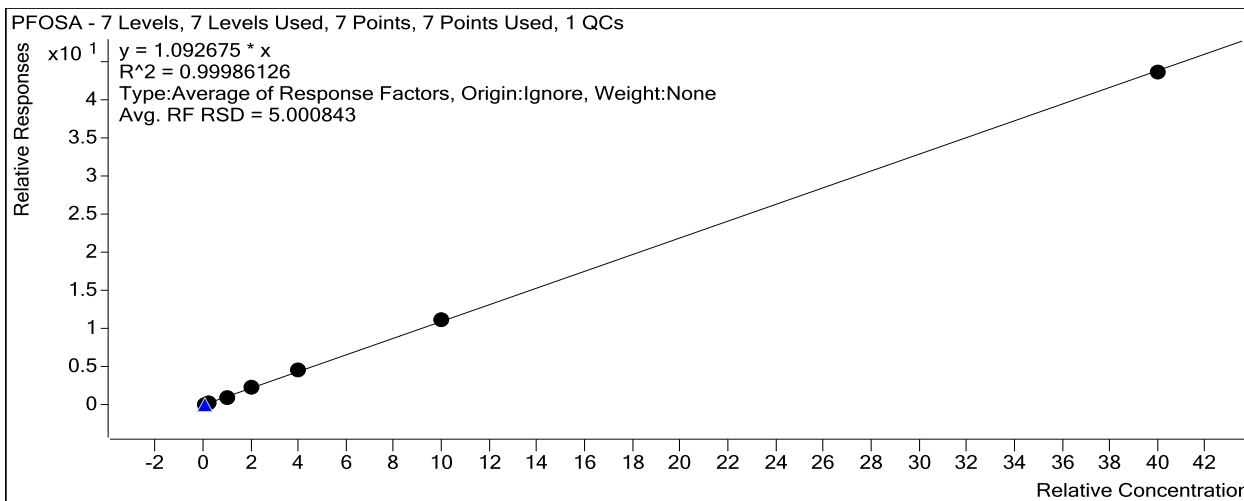
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	68968	5.0000	13793.6639
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	70184	5.0000	14036.8706
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	71361	5.0000	14272.2200
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	67753	5.0000	13550.6883
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	70264	5.0000	14052.7657
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	70636	5.0000	14127.1881
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	66135	5.0000	13227.0100

Target Compound

PFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	7219	0.5000	1.0467
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	17713	1.2500	1.0095
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	76689	5.0000	1.0747
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	156263	10.0000	1.1532
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	325091	20.0000	1.1567
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	791565	50.0000	1.1206
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	2876408	200.0000	1.0873

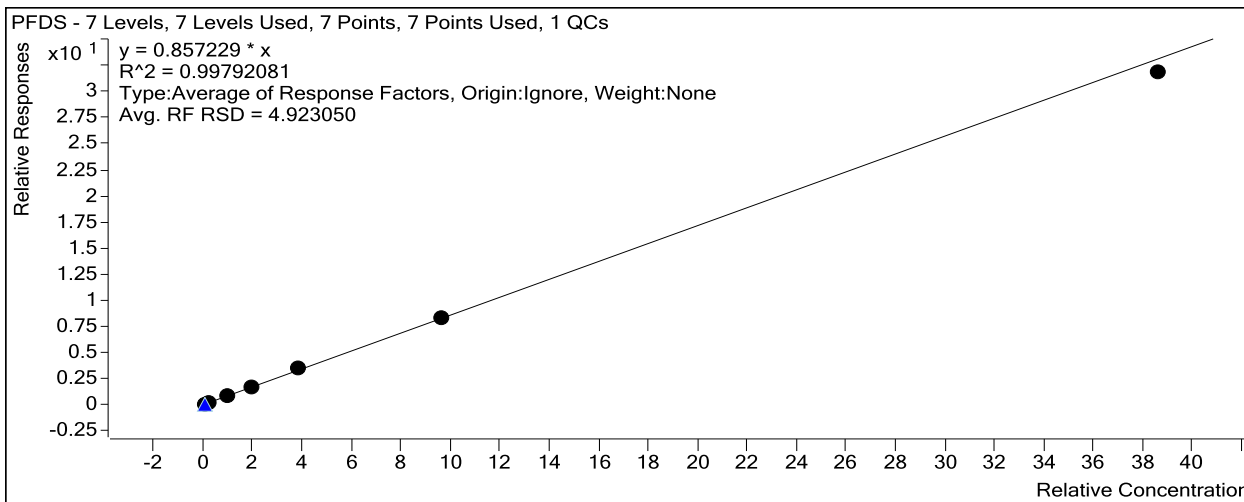
Quantitative Analysis Calibration Report



Target Compound

PFDS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2574	0.4825	0.8531
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	6161	1.2063	0.8023
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	25881	4.8250	0.8311
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	52942	9.6500	0.8937
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	110816	19.3000	0.9234
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	260334	48.2500	0.8721
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	824602	193.0000	0.8250



Extracted ISTD

d5-NEtFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	36388	5.0000	7277.5643
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	38043	5.0000	7608.6025
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	38995	5.0000	7799.0804
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	34662	5.0000	6932.4079
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	35829	5.0000	7165.8338

Quantitative Analysis Calibration Report

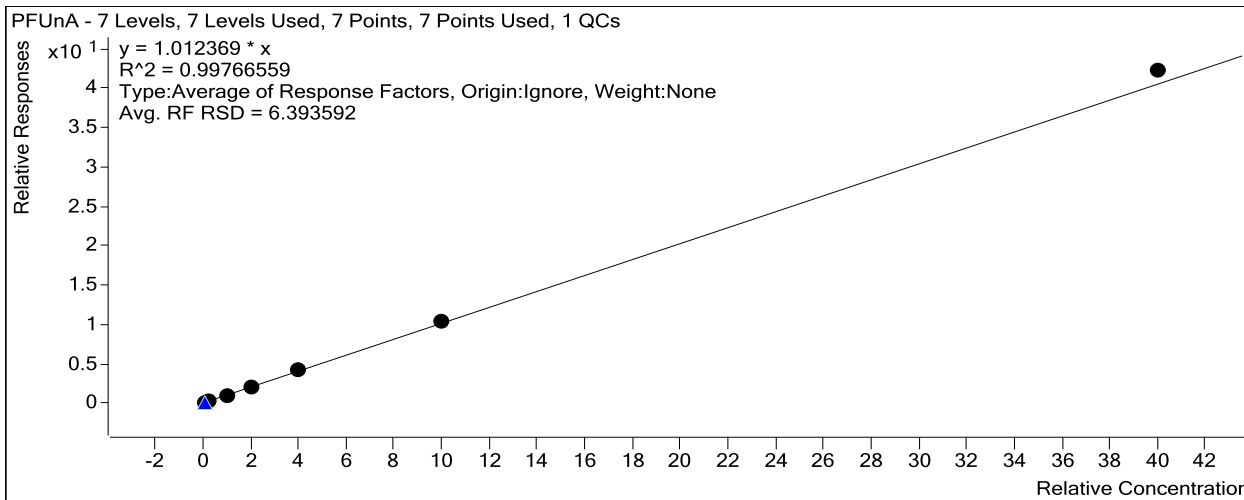
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	34906	5.0000	6981.2452
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	29052	5.0000	5810.3979

Extracted ISTD *M7PFUnA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	217908	5.0000	43581.5544
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	224184	5.0000	44836.8285
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	228060	5.0000	45611.9457
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	215458	5.0000	43091.5630
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	219045	5.0000	43808.9167
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	217989	5.0000	43597.8899
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	183758	5.0000	36751.6456

Target Compound *PFUnA*

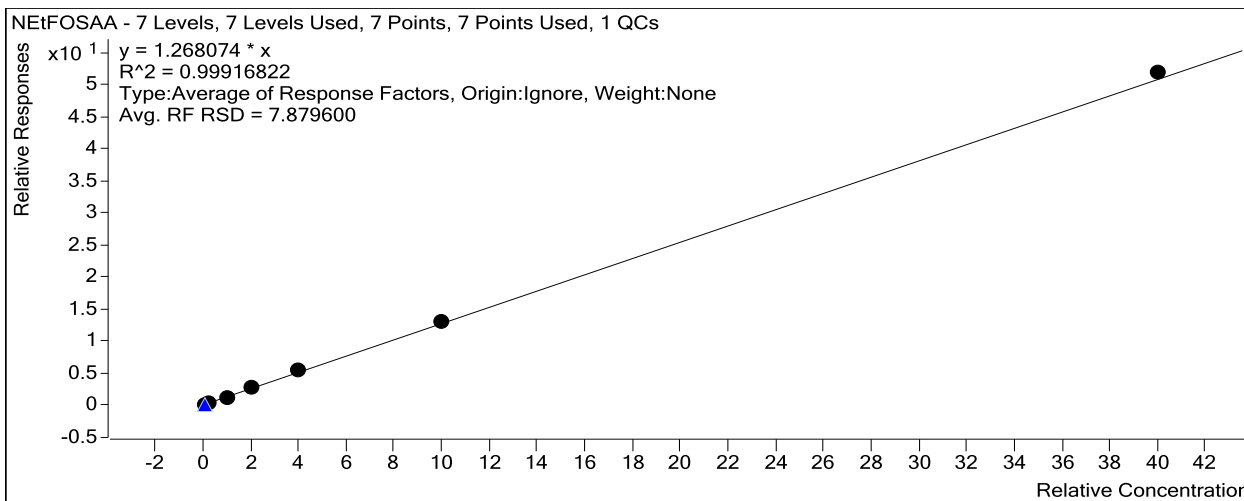
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	20663	0.5000	0.9483
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	52768	1.2500	0.9415
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	215178	5.0000	0.9435
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	462522	10.0000	1.0733
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	947069	20.0000	1.0809
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2273326	50.0000	1.0429
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	7763299	200.0000	1.0562



Target Compound *NETFOSAA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	4407	0.5000	1.2110
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	10773	1.2500	1.1327
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	45387	5.0000	1.1639
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	95968	10.0000	1.3843
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	196672	20.0000	1.3723
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	459343	50.0000	1.3159
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1506455	200.0000	1.2963

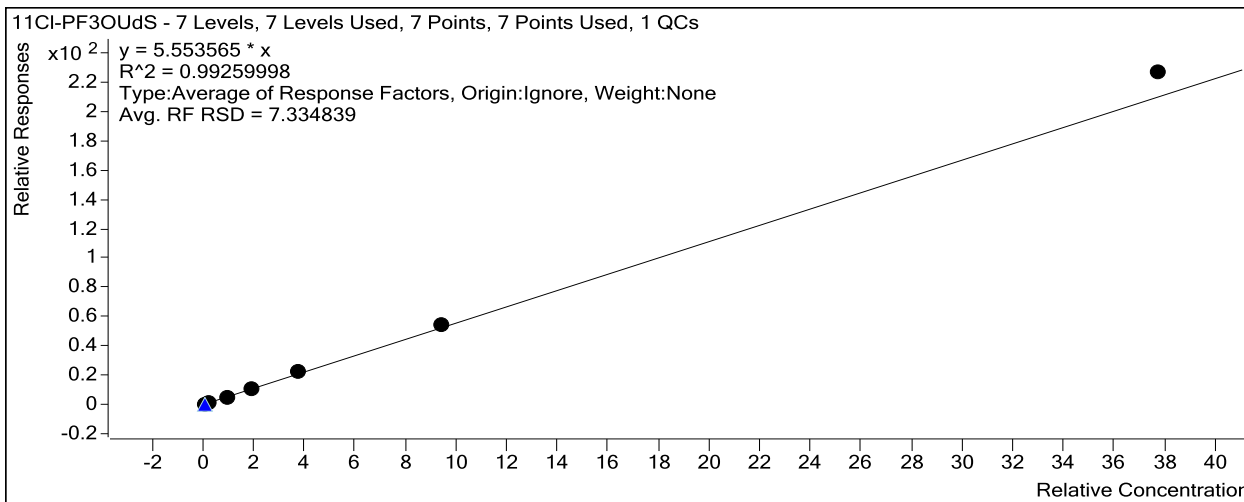
Quantitative Analysis Calibration Report



Target Compound

11CI-PF3OUdS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	15174	0.4715	5.1463
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	37527	1.1788	5.0012
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	160176	4.7150	5.2633
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	335478	9.4300	5.7956
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	696240	18.8600	5.9367
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1669967	47.1500	5.7247
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5867683	188.6000	6.0071



Extracted ISTD

MPFDoA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	256993	5.0000	51398.5359
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	261920	5.0000	52383.9758
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	263677	5.0000	52735.3005
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	251322	5.0000	50264.3603
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	257099	5.0000	51419.7898

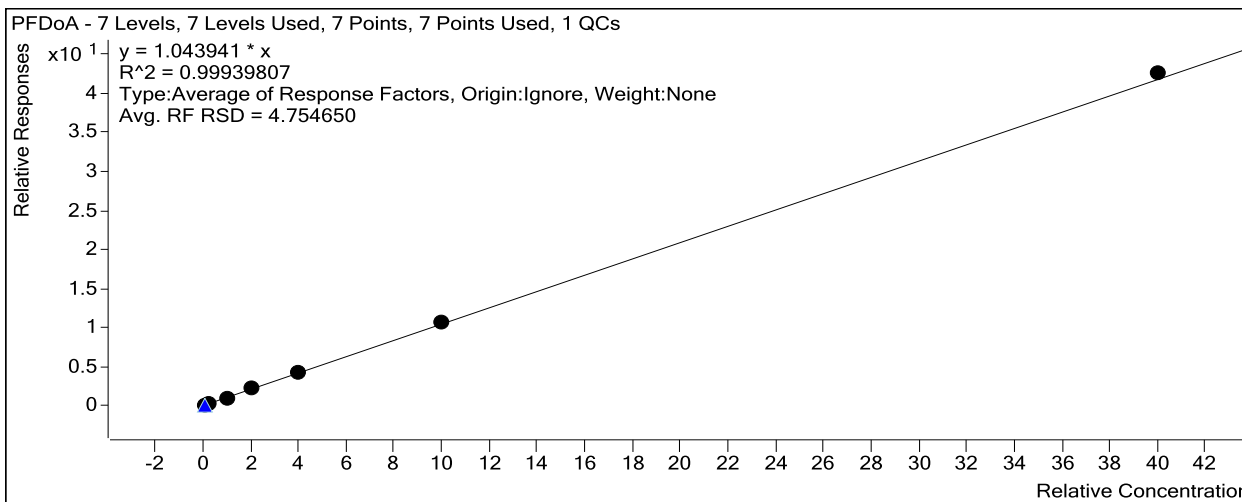
Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	262183	5.0000	52436.6053
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	234205	5.0000	46840.9257

Target Compound

PFD_oA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	25567	0.5000	0.9948
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	64504	1.2500	0.9851
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	263061	5.0000	0.9977
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	551399	10.0000	1.0970
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1127405	20.0000	1.0963
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2809427	50.0000	1.0716
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	9978657	200.0000	1.0652

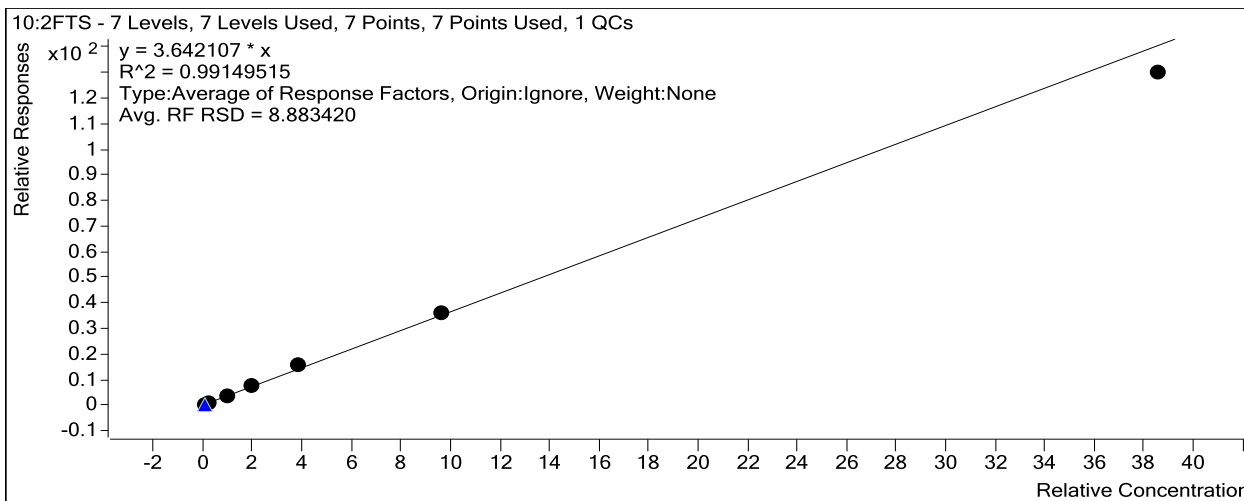


Target Compound

10:2F7S

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2417	0.4820	3.2346
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	6374	1.2050	3.4873
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	25851	4.8200	3.5595
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	55275	9.6400	4.0789
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	108781	19.2800	4.0446
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	245980	48.2000	3.7173
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	763493	192.8000	3.3725

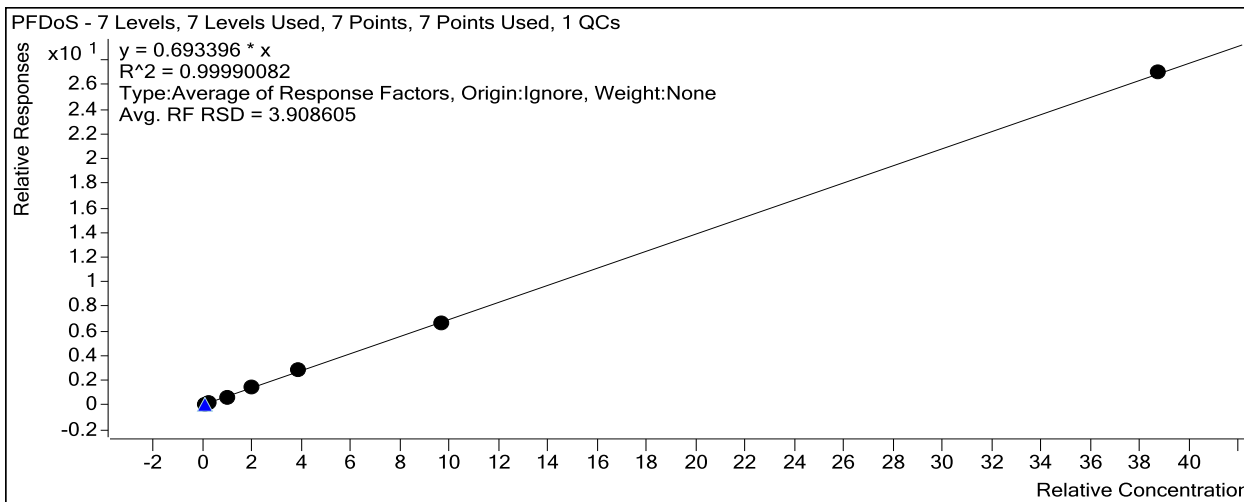
Quantitative Analysis Calibration Report



Target Compound

PFDoS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2019	0.4840	0.6671
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	5150	1.2100	0.6687
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	21036	4.8400	0.6734
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	43550	9.6800	0.7329
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	87443	19.3600	0.7263
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	205850	48.4000	0.6874
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	699791	193.6000	0.6979



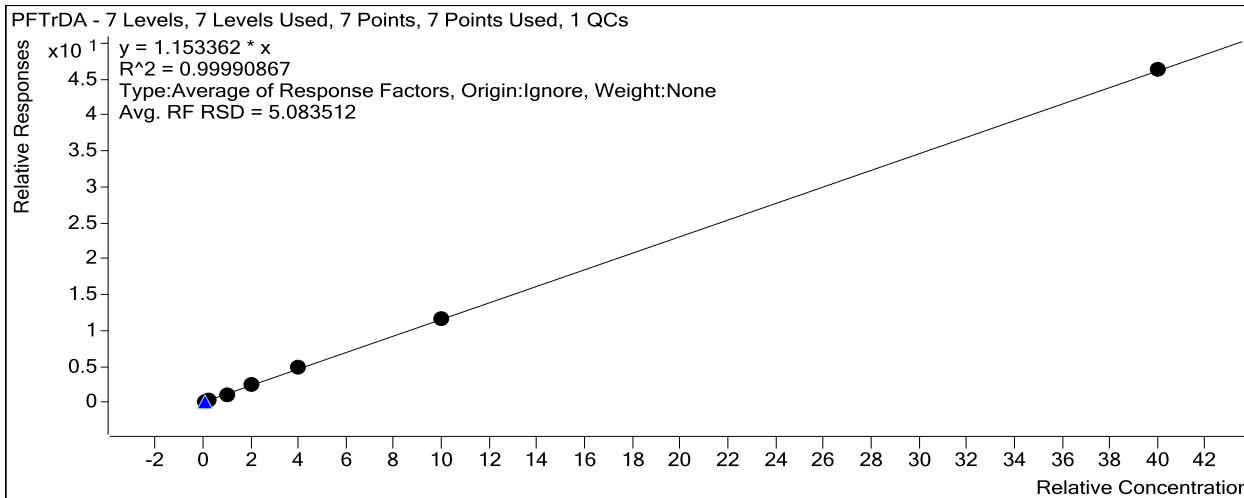
Target Compound

PFTrDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	27640	0.5000	1.0755
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	72515	1.2500	1.1074
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	293940	5.0000	1.1148
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	619556	10.0000	1.2326
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	1255526	20.0000	1.2209

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	3051346	50.0000	1.1638
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	10853168	200.0000	1.1585



Extracted *ISTD*

d-NMeFOSA

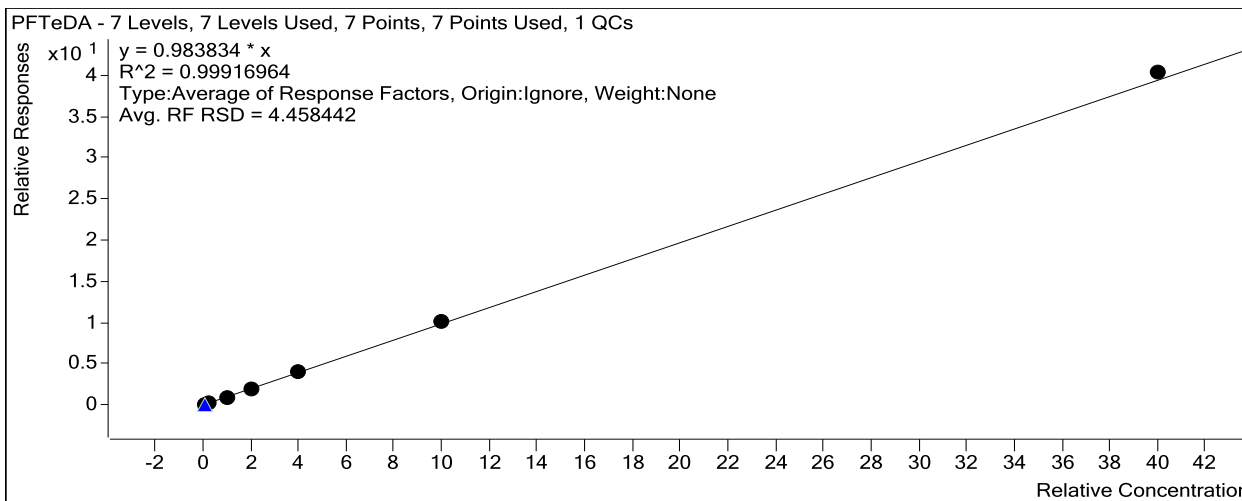
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	16869	5.0000	3373.7638
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	16463	5.0000	3292.6839
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	17243	5.0000	3448.6356
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	16689	5.0000	3337.8883
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	17192	5.0000	3438.3630
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	17299	5.0000	3459.8927
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	18496	5.0000	3699.1412

Target Compound

NMeFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1949	0.5000	1.1555
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4817	1.2500	1.1703
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	19061	5.0000	1.1054
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	39363	10.0000	1.1793
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	82605	20.0000	1.2012
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	201247	50.0000	1.1633
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	756759	200.0000	1.0229

Quantitative Analysis Calibration Report



Extracted ISTD

d9-NEtFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	16910	5.0000	3381.9360
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	17031	5.0000	3406.2199
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	17098	5.0000	3419.5692
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	16557	5.0000	3311.4341
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	16500	5.0000	3299.9232
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	16632	5.0000	3326.3168
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	15148	5.0000	3029.5586

Extracted ISTD

d-NEtFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	17713	5.0000	3542.6043
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	17778	5.0000	3555.6324
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	19098	5.0000	3819.5703
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	17409	5.0000	3481.7105
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	17991	5.0000	3598.1808
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	18425	5.0000	3685.0992
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	17115	5.0000	3423.0415

Target Compound

NEtFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220412BCAL\2220412B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1881	0.5000	1.1125
D:\MassHunter\Data\2220412BCAL\2220412B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4634	1.2500	1.0883
D:\MassHunter\Data\2220412BCAL\2220412B_4.d	Calibration	3	<input checked="" type="checkbox"/>	19102	5.0000	1.1172
D:\MassHunter\Data\2220412BCAL\2220412B_5.d	Calibration	4	<input checked="" type="checkbox"/>	39862	10.0000	1.2038
D:\MassHunter\Data\2220412BCAL\2220412B_6.d	Calibration	5	<input checked="" type="checkbox"/>	82680	20.0000	1.2528
D:\MassHunter\Data\2220412BCAL\2220412B_7.d	Calibration	6	<input checked="" type="checkbox"/>	200353	50.0000	1.2047
D:\MassHunter\Data\2220412BCAL\2220412B_8.d	Calibration	7	<input checked="" type="checkbox"/>	742750	200.0000	1.2258

Quantitative Analysis Calibration Report

Batch Data Path
Analysis Time
Report Time
Last Calib Update

C:\MassHunter\Data\QQQ4\2220419CCAL\QuantResults\2220421A.batch.bin
 4/22/2022 10:29 AM **Analyst Name** GCAL\lcms
 4/25/2022 12:25 PM **Reporter Name** GCAL\lcms
 4/20/2022 7:10 AM **Batch State** Processed

Calibration Info
Extracted ISTD

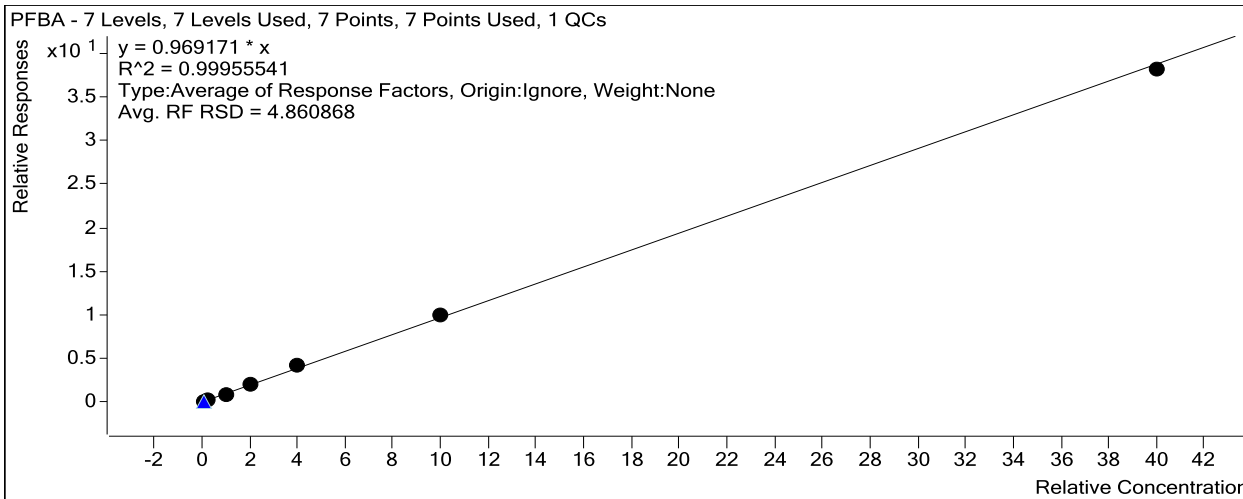
MPFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	92611	5.0000	18522.1608
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	95457	5.0000	19091.4296
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	94859	5.0000	18971.8508
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	92036	5.0000	18407.1601
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	96361	5.0000	19272.1797
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	98021	5.0000	19604.1980
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	89697	5.0000	17939.4917

Target Compound

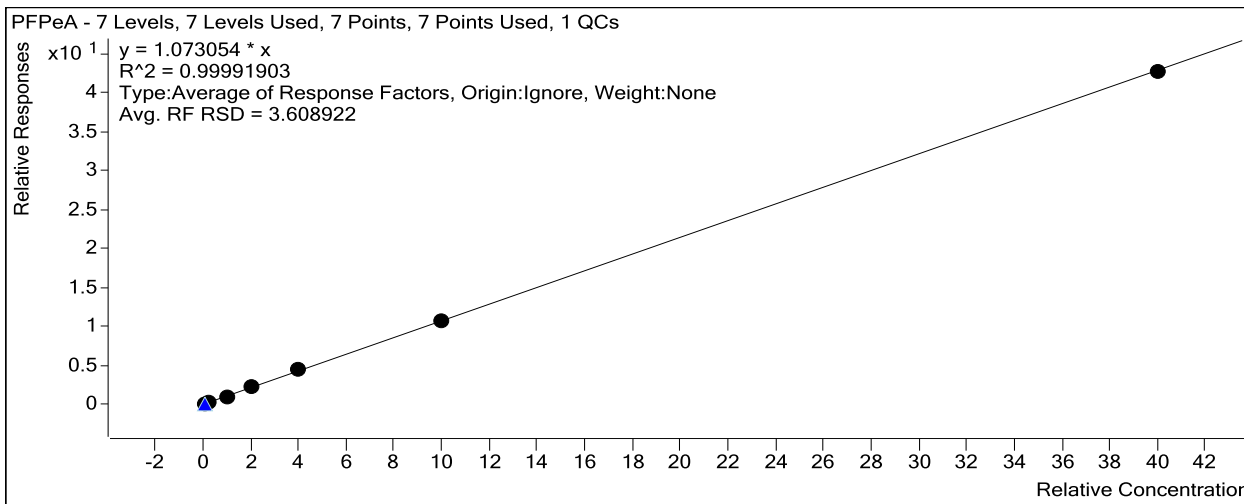
PFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	8666	0.5000	0.9358
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	21816	1.2500	0.9142
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	88569	5.0000	0.9337
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	186493	10.0000	1.0132
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	401498	20.0000	1.0417
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	971986	50.0000	0.9916
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	3423334	200.0000	0.9541



Quantitative Analysis Calibration Report

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	12104	0.5000	1.0424
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	31466	1.2500	1.0428
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	123921	5.0000	1.0307
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	260236	10.0000	1.1076
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	556584	20.0000	1.1366
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	1338673	50.0000	1.0829
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	4634631	200.0000	1.0684



Extracted ISTD

M3PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	39455	5.0000	7891.0657
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	40722	5.0000	8144.3733
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	39935	5.0000	7987.0348
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	39098	5.0000	7819.6104
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	40378	5.0000	8075.6670
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	40069	5.0000	8013.8729
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	34046	5.0000	6809.2610

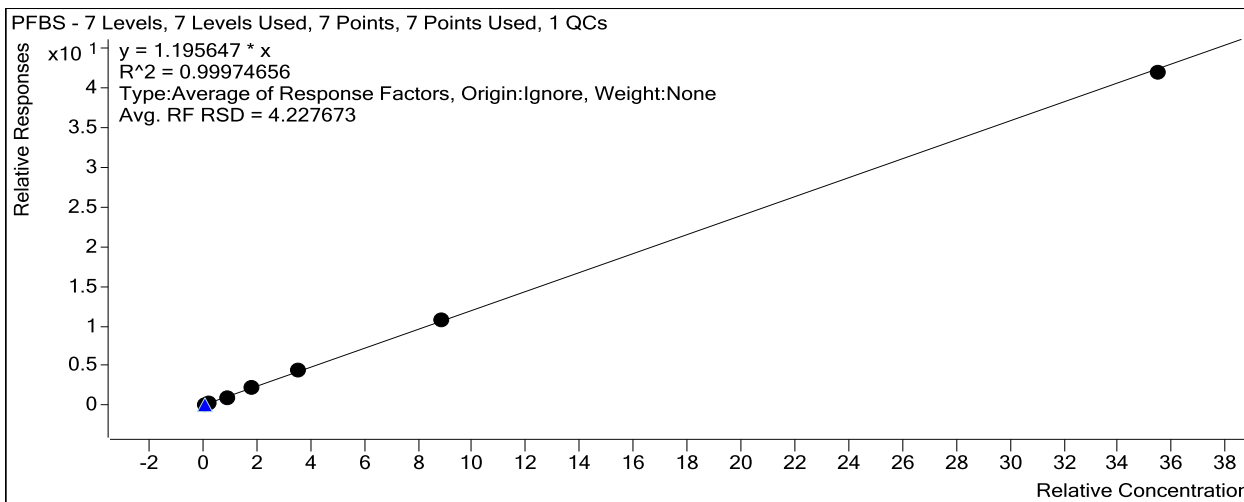
Target Compound

PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	4074	0.4435	1.1641

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	10195	1.1088	1.1290
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	41142	4.4350	1.1615
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	85647	8.8700	1.2348
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	182685	17.7400	1.2752
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	434365	44.3500	1.2221
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1428780	177.4000	1.1828



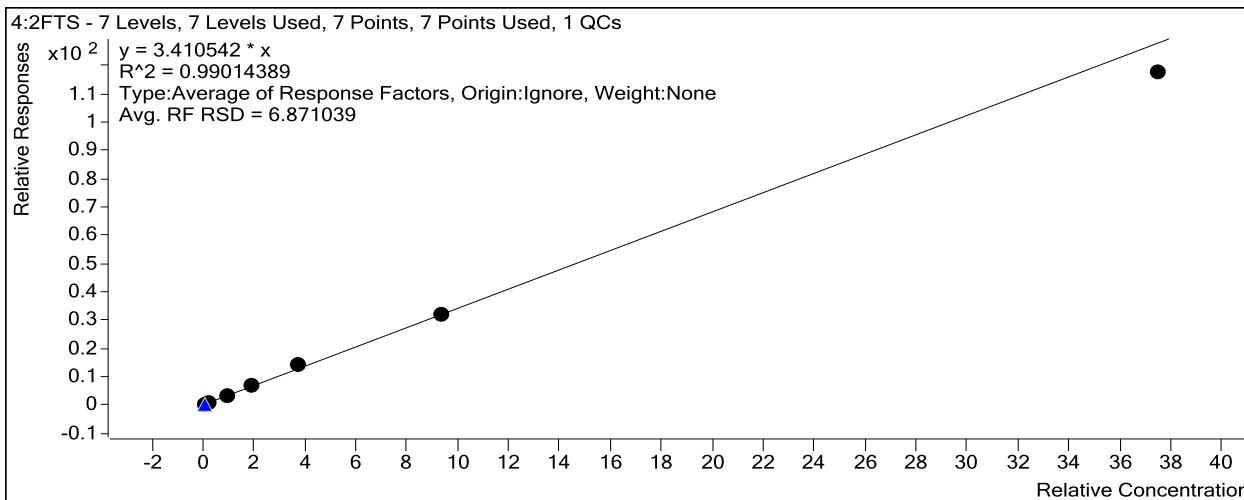
Target Compound

PFMBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	7536	0.5000	0.5305
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	19293	1.2500	0.5231
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	77304	5.0000	0.5220
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	163127	10.0000	0.5791
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	347599	20.0000	0.5843
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	836929	50.0000	0.5617
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	3062476	200.0000	0.5829

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	57015	9.3700	3.5982
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	122531	18.7400	3.7816
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	278956	46.8500	3.4466
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	846307	187.4000	3.1386



Extracted ISTD

M5PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	142046	5.0000	28409.2057
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	147525	5.0000	29504.9559
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	148090	5.0000	29618.0075
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	140853	5.0000	28170.5886
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	148717	5.0000	29743.3261
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	149001	5.0000	29800.2262
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	131337	5.0000	26267.3953

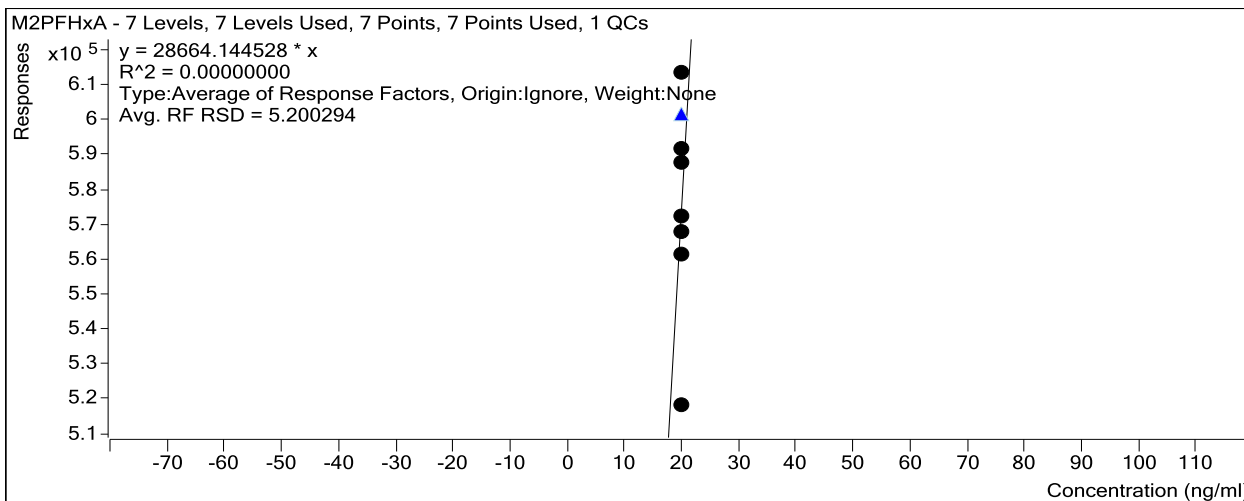
Instrument ISTD

M2PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	572548	20.0000	28627.3869
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	591614	20.0000	29580.6971
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	567975	20.0000	28398.7386
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	561613	20.0000	28080.6659
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	613401	20.0000	30670.0269
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	587503	20.0000	29375.1340

Quantitative Analysis Calibration Report

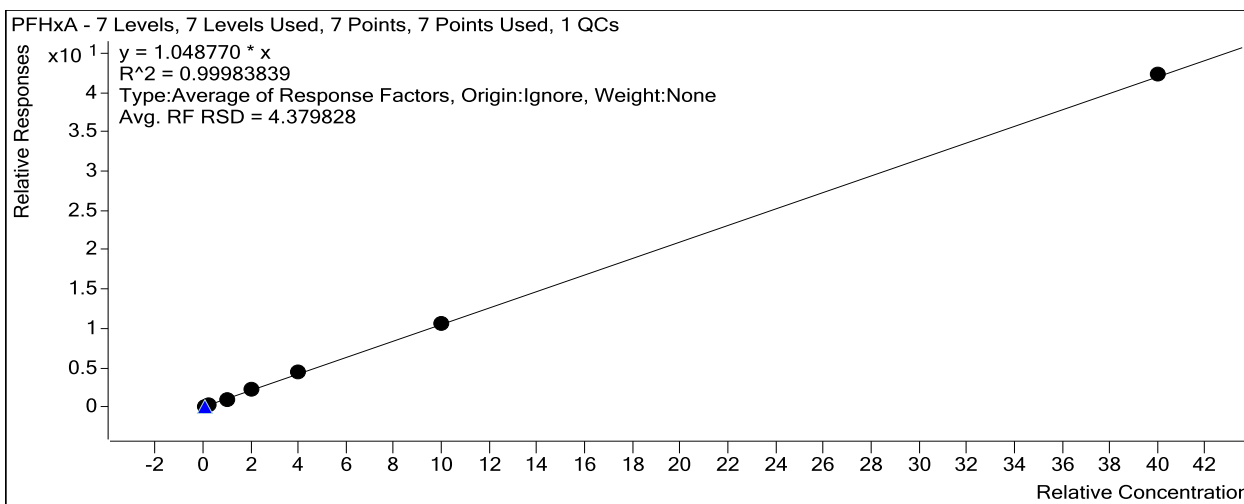
D:\MassHunter\Data\2220419CCAL\2220419C_7.d Calibration 7 518327 20.0000 25916.3623



Target Compound

PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	14548	0.5000	1.0242
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	36754	1.2500	0.9965
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	147165	5.0000	0.9938
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	306077	10.0000	1.0865
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	663499	20.0000	1.1154
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	1591377	50.0000	1.0680
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	5553003	200.0000	1.0570

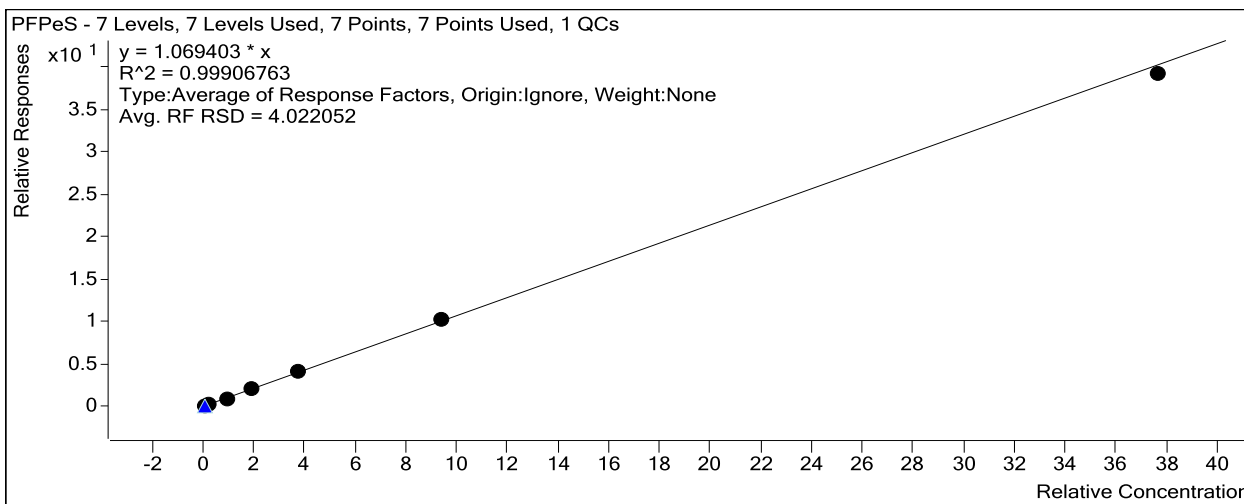


Target Compound

PFPeS

Quantitative Analysis Calibration Report

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	4093	0.4705	1.1025
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	9837	1.1763	1.0268
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	37954	4.7050	1.0100
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	80794	9.4100	1.0980
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	170719	18.8200	1.1233
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	408427	47.0500	1.0832
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1335457	188.2000	1.0421



Extracted ISTD

M3HFPODA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	42194	10.0000	4219.3856
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	40750	10.0000	4075.0451
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	42480	10.0000	4247.9864
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	41369	10.0000	4136.9224
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	44155	10.0000	4415.4935
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	44543	10.0000	4454.3494
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	37481	10.0000	3748.0812

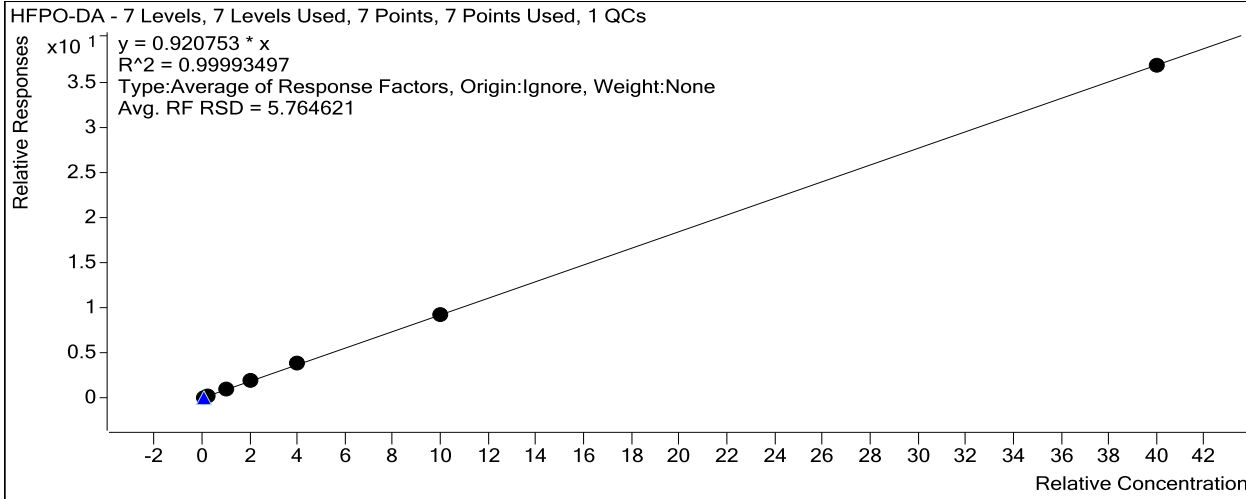
Target Compound

HFPO-DA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	3427	1.0000	0.8122

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	9593	2.5000	0.9416
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	38833	10.0000	0.9142
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	78523	20.0000	0.9491
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	173542	40.0000	0.9826
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	412417	100.0000	0.9259
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1378962	400.0000	0.9198



Extracted *ISTD*

M4PFHpA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	228197	5.0000	45639.4045
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	234132	5.0000	46826.3334
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	231987	5.0000	46397.4018
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	225771	5.0000	45154.1928
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	235287	5.0000	47057.4230
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	237412	5.0000	47482.4784
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	209016	5.0000	41803.1715

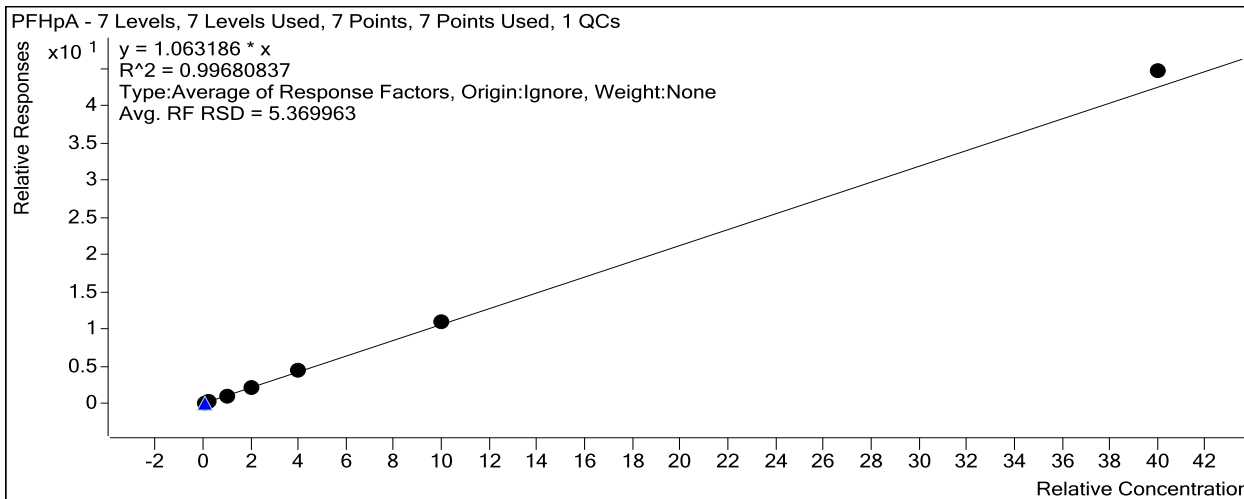
Target Compound

PFHpA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	22709	0.5000	0.9952
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	58169	1.2500	0.9938
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	237386	5.0000	1.0233
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	496011	10.0000	1.0985

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1055787	20.0000	1.1218
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2591386	50.0000	1.0915
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	9349567	200.0000	1.1183



Extracted ISTD

M3PFHxS

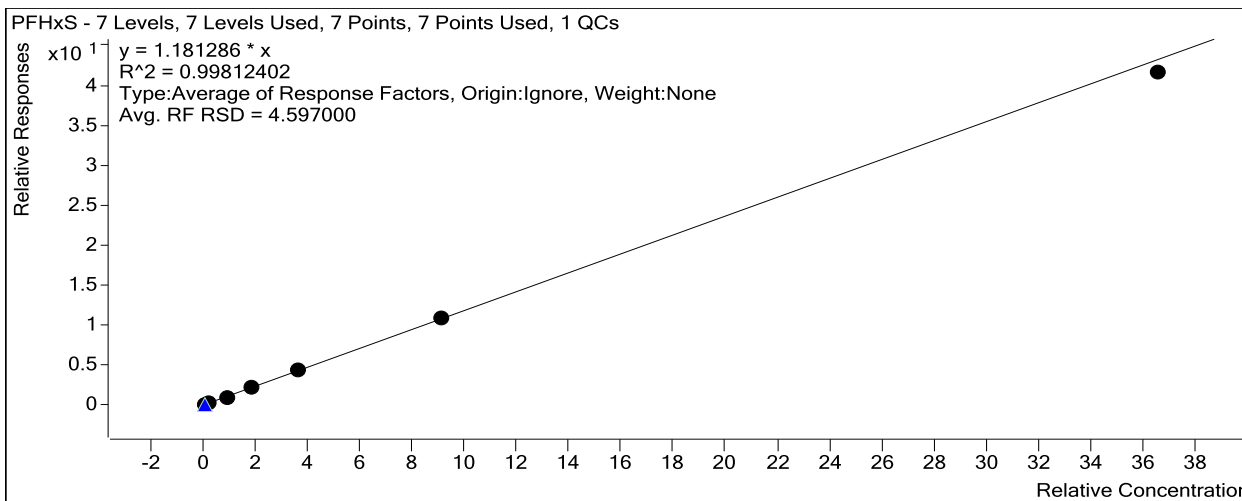
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	32336	5.0000	6467.1344
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	32927	5.0000	6585.3063
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	32879	5.0000	6575.7524
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	31498	5.0000	6299.6760
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	33158	5.0000	6631.6631
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	32606	5.0000	6521.1910
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	28254	5.0000	5650.8259

Target Compound

PFHxS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	3717	0.4570	1.2575
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	8672	1.1425	1.1526
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	33122	4.5700	1.1022
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	69483	9.1400	1.2067
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	149004	18.2800	1.2291
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	352477	45.7000	1.1827
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1175590	182.8000	1.1381

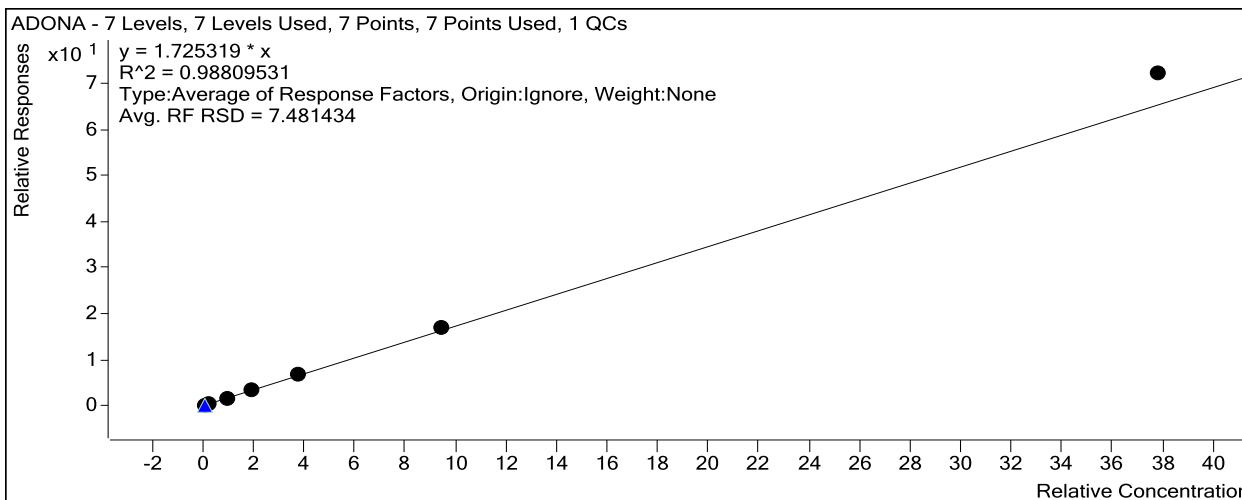
Quantitative Analysis Calibration Report



Target Compound

ADONA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	27814	0.4725	1.6309
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	69953	1.1813	1.5595
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	282249	4.7250	1.6008
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	600439	9.4500	1.7719
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1286473	18.9000	1.8144
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	3162746	47.2500	1.7907
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	11547943	189.0000	1.9089



Extracted ISTD

M2 6:2 FTS

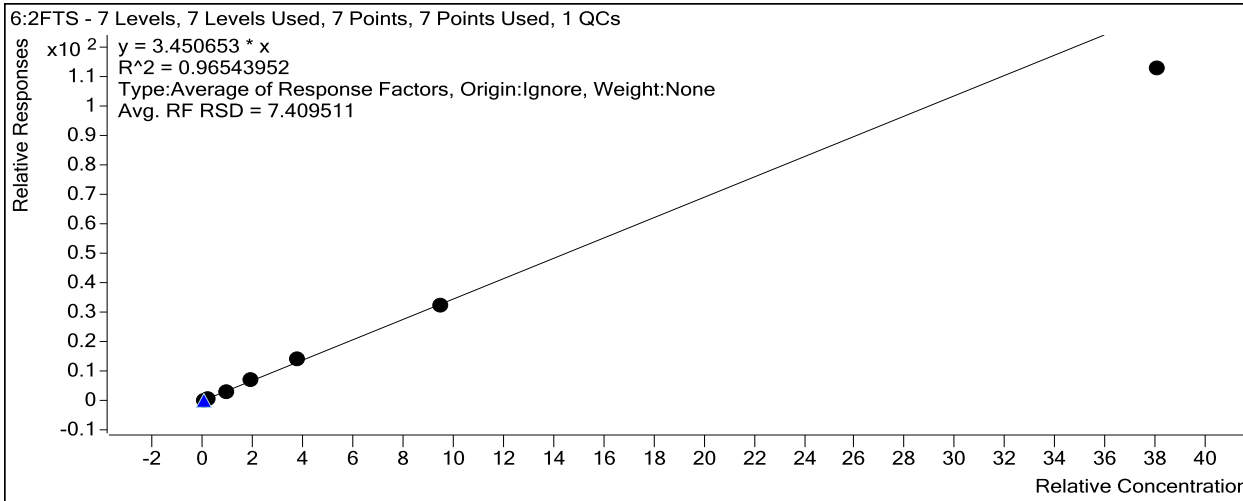
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

File Path	Calibration	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	9399	5.0000	1879.7798
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	9350	5.0000	1869.9532
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	9136	5.0000	1827.2275
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	8810	5.0000	1761.9490
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	10163	5.0000	2032.5324
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	9330	5.0000	1866.0877
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	7648	5.0000	1529.5508

Target Compound *6:2FTS*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	3041	0.4755	3.4022
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	7639	1.1888	3.4363
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	30131	4.7550	3.4679
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	62042	9.5100	3.7026
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	145037	19.0200	3.7517
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	304146	47.5500	3.4277
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	862927	190.2000	2.9662

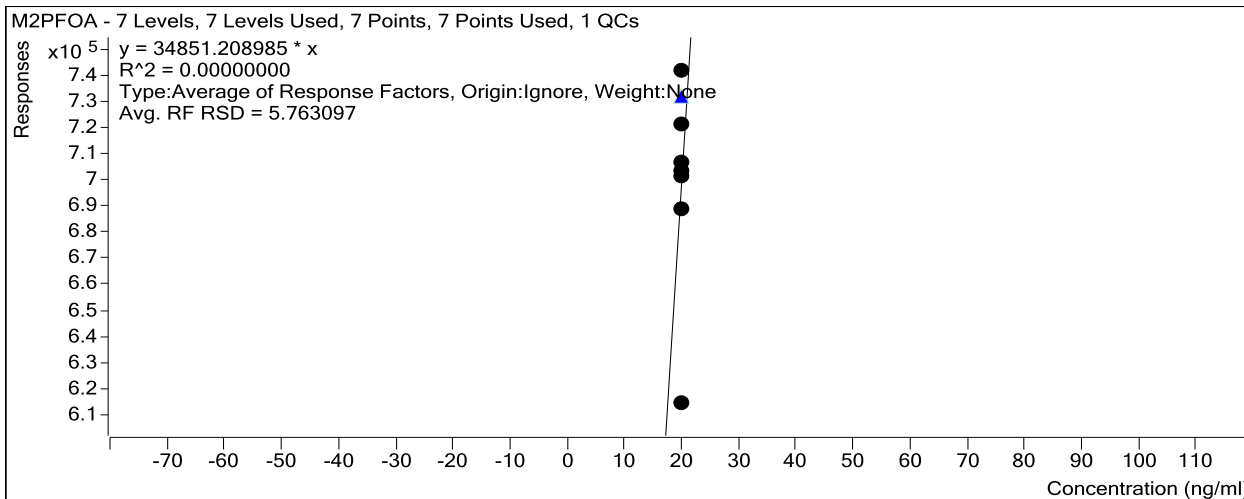


Extracted ISTD *M8PFOA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	180467	5.0000	36093.3479
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	189858	5.0000	37971.5443
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	186574	5.0000	37314.8346

Quantitative Analysis Calibration Report

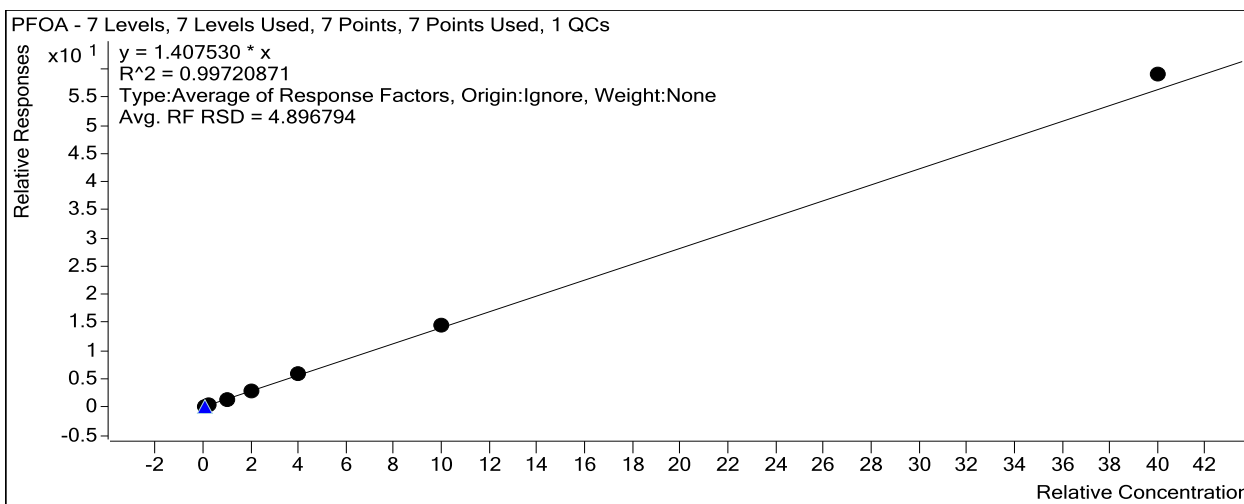
D:\MassHunter\Data\2220419CCAL\2220419C_7.d Calibration 7 614483 20.0000 30724.1385



Target Compound

PFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	24722	0.5000	1.3699
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	62111	1.2500	1.3086
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	248764	5.0000	1.3333
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	521370	10.0000	1.4540
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1102301	20.0000	1.4692
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2695346	50.0000	1.4422
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	9446597	200.0000	1.4756

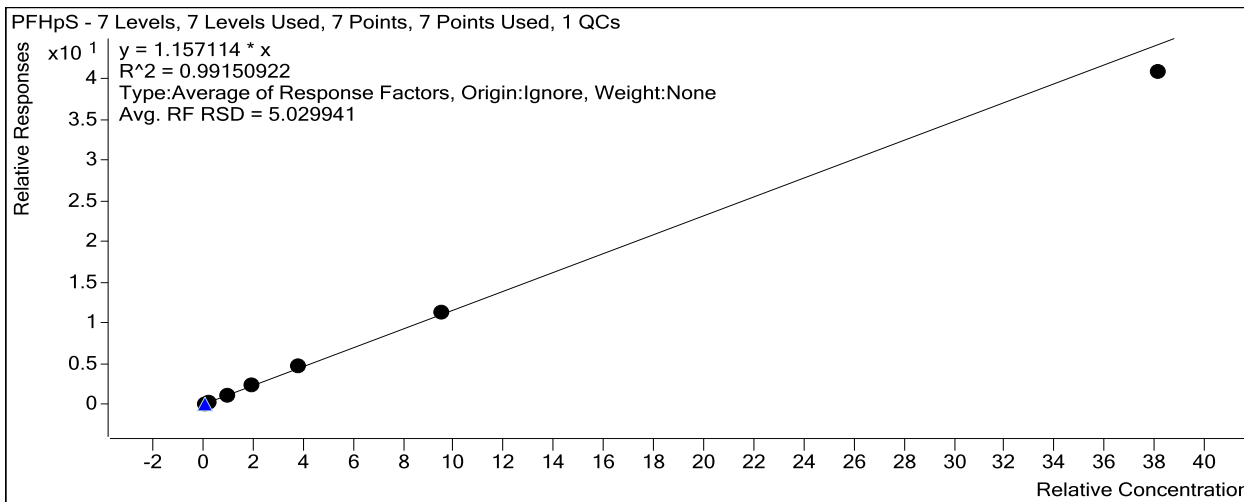


Target Compound

PFHpS

Quantitative Analysis Calibration Report

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	3518	0.4765	1.1417
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	8824	1.1913	1.1248
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	35256	4.7650	1.1252
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	73320	9.5300	1.2213
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	155846	19.0600	1.2330
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	367668	47.6500	1.1832
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1153171	190.6000	1.0707



Extracted ISTD

M9PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	235052	5.0000	47010.3855
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	238004	5.0000	47600.8571
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	237730	5.0000	47545.9366
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	224711	5.0000	44942.2686
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	234540	5.0000	46907.9558
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	232888	5.0000	46577.5024
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	199412	5.0000	39882.3043

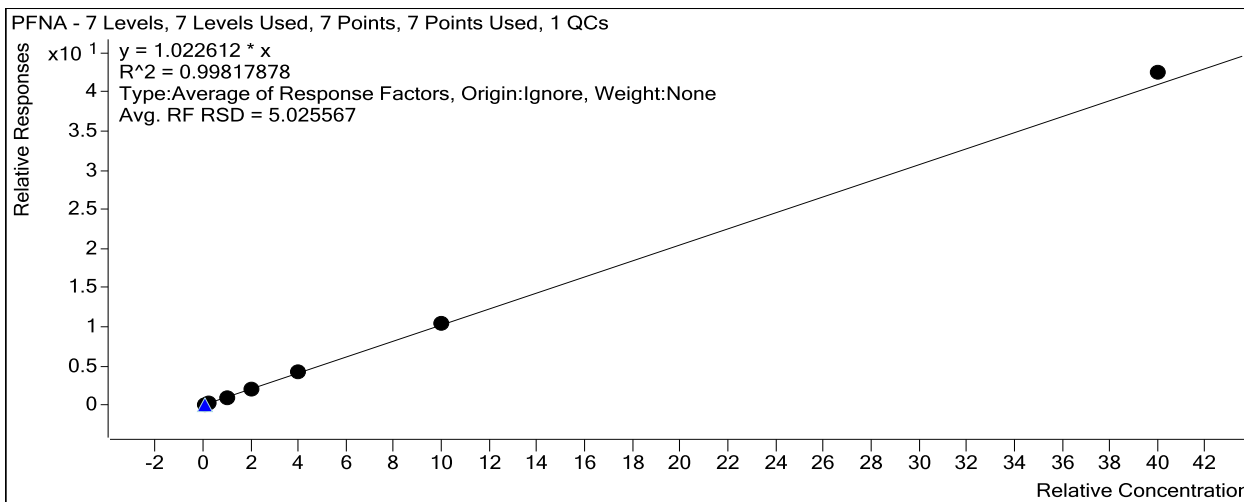
Target Compound

PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	22761	0.5000	0.9684

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	57510	1.2500	0.9665
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	231673	5.0000	0.9745
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	469835	10.0000	1.0454
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1022791	20.0000	1.0902
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2449602	50.0000	1.0518
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	8466113	200.0000	1.0614



Extracted *ISTD*

M8PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	29867	5.0000	5973.4299
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	31677	5.0000	6335.4171
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	30768	5.0000	6153.6074
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	28922	5.0000	5784.4729
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	30548	5.0000	6109.6443
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	29172	5.0000	5834.4134
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	26263	5.0000	5252.5288

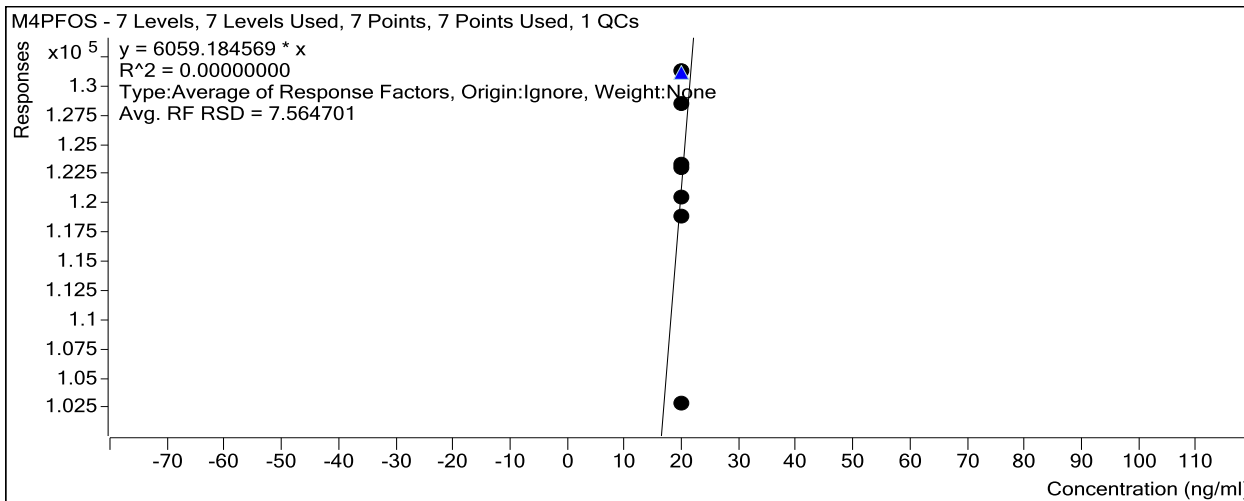
Instrument *ISTD*

M4PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	123261	20.0000	6163.0425
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	128546	20.0000	6427.3158
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	122960	20.0000	6147.9971
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	118889	20.0000	5944.4463

Quantitative Analysis Calibration Report

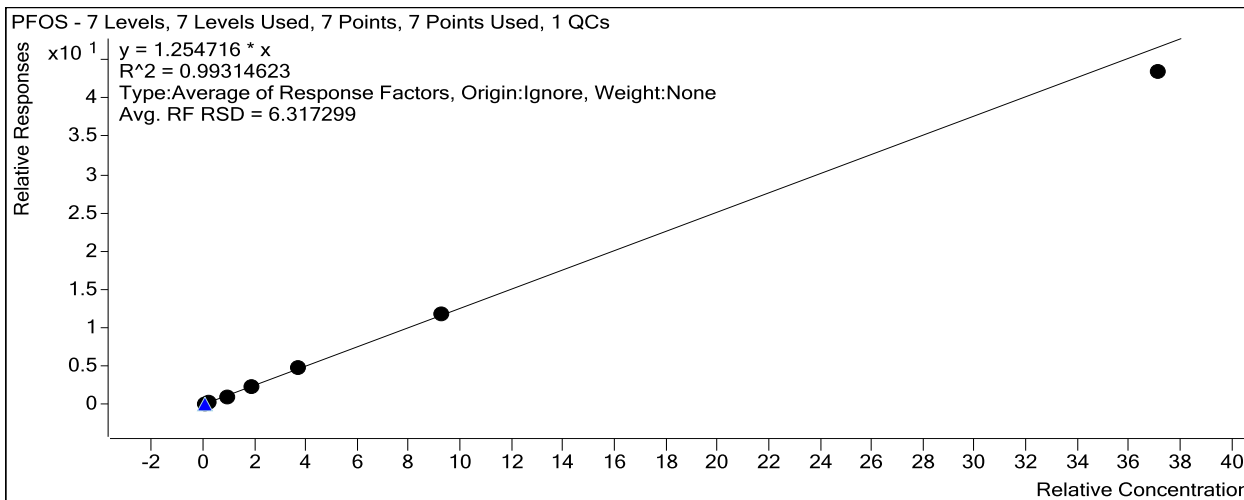
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	131286	20.0000	6564.3061
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	120454	20.0000	6022.7248
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	102889	20.0000	5144.4593



Target Compound

PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	3863	0.4640	1.3939
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	8914	1.1600	1.2130
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	33432	4.6400	1.1709
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	68185	9.2800	1.2702
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	147175	18.5600	1.2979
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	343193	46.4000	1.2677
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1140008	185.6000	1.1694

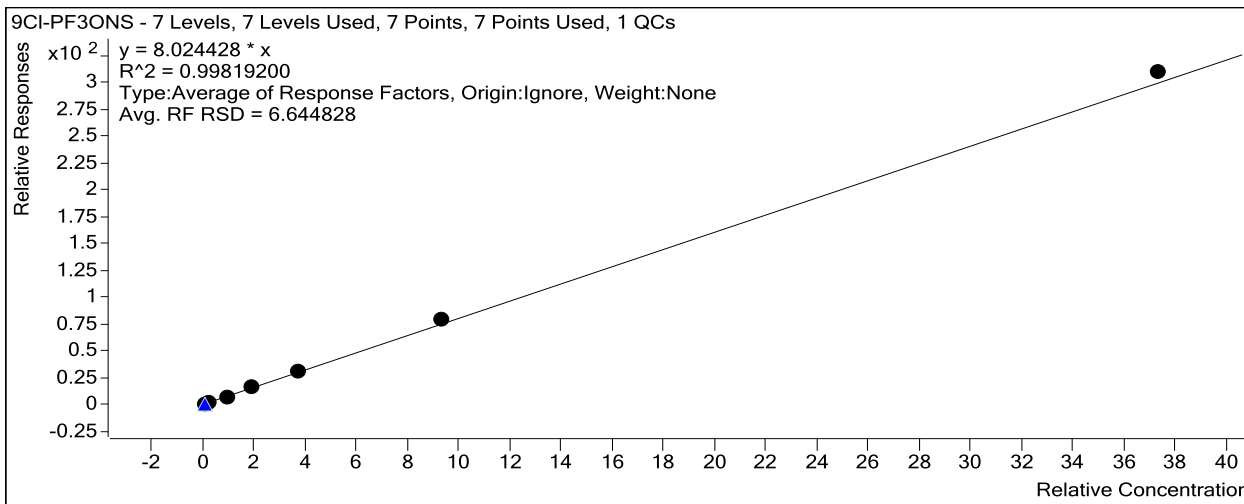


Quantitative Analysis Calibration Report

Target Compound

9CI-PF3ONS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	20833	0.4665	7.4762
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	53881	1.1663	7.2921
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	219742	4.6650	7.6548
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	463719	9.3300	8.5923
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	951759	18.6600	8.3483
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2307622	46.5500	8.4967
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	8145469	186.6000	8.3107



Extracted ISTD

M2 8:2 FTS

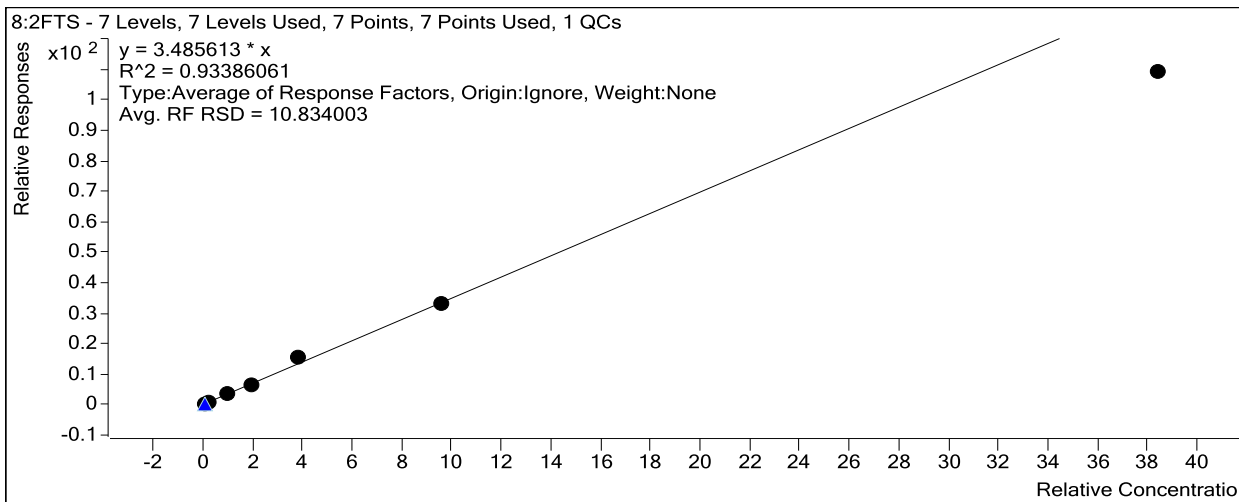
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	7539	5.0000	1507.7491
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	7569	5.0000	1513.8296
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	7241	5.0000	1448.1211
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	7329	5.0000	1465.7307
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	6454	5.0000	1290.8327
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	6819	5.0000	1363.7921
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	5629	5.0000	1125.7537

Target Compound

8:2FTS

Quantitative Analysis Calibration Report

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	2682	0.4800	3.7053
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	5929	1.2000	3.2637
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	24849	4.8000	3.5748
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	48834	9.6000	3.4705
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	100810	19.2000	4.0675
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	227349	48.0000	3.4730
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	614804	192.0000	2.8444

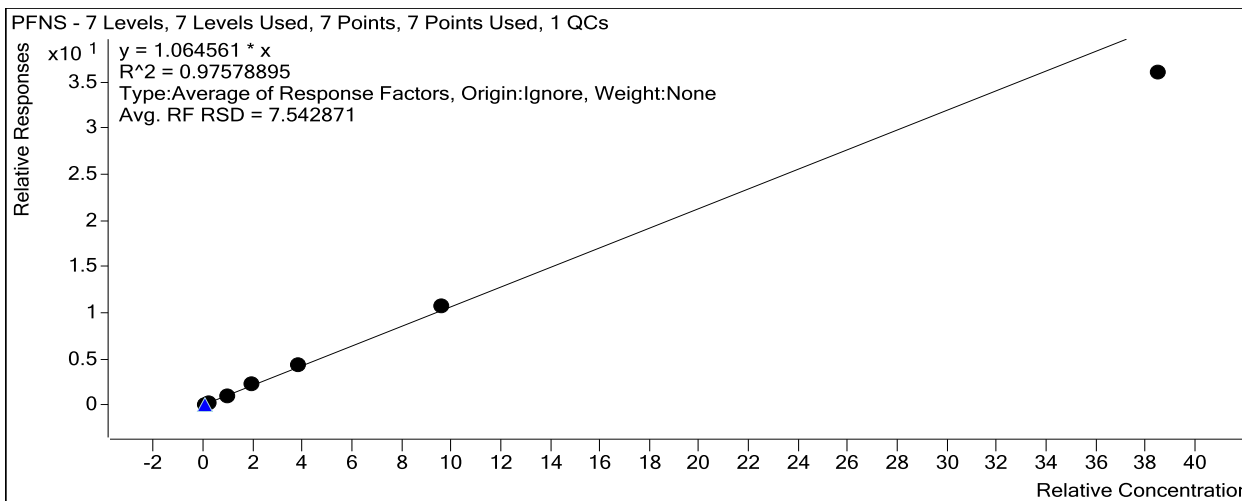


Target Compound

PFNS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	3183	0.4810	1.1077
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	7594	1.2025	0.9968
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	30261	4.8100	1.0224
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	64546	9.6200	1.1599
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	131606	19.2400	1.1196
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	311190	48.1000	1.1089
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	946543	192.4000	0.9366

Quantitative Analysis Calibration Report



Extracted ISTD

M6PFDA

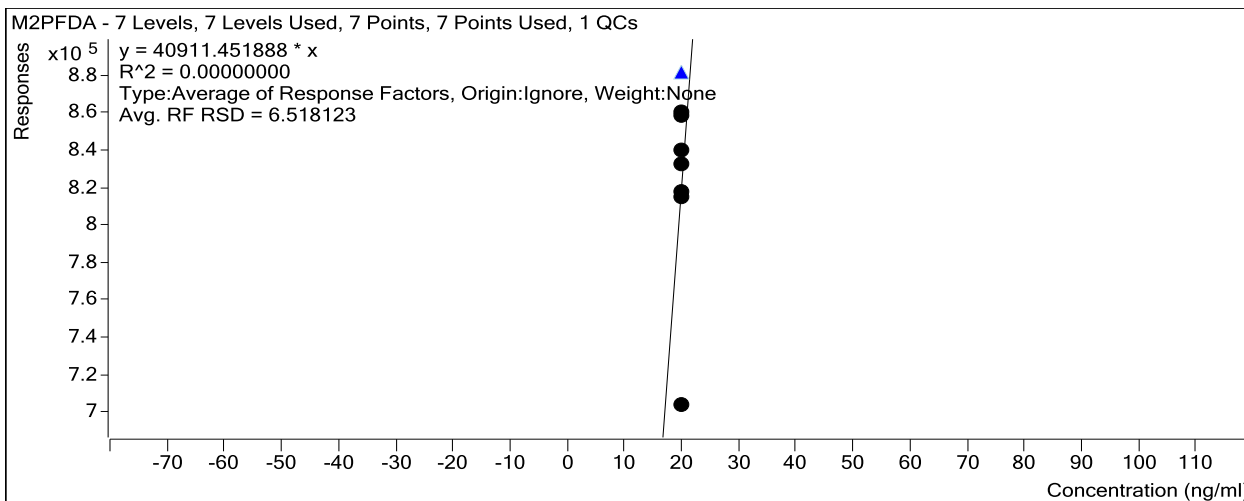
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	225169	5.0000	45033.7144
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	230773	5.0000	46154.5051
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	227846	5.0000	45569.1033
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	220219	5.0000	44043.7703
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	227731	5.0000	45546.2698
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	225191	5.0000	45038.2308
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	188342	5.0000	37668.3353

Instrument ISTD

M2PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	840349	20.0000	42017.4366
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	858123	20.0000	42906.1265
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	832780	20.0000	41639.0169
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	814704	20.0000	40735.1980
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	859831	20.0000	42991.5395
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	817740	20.0000	40886.9951
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	704077	20.0000	35203.8507

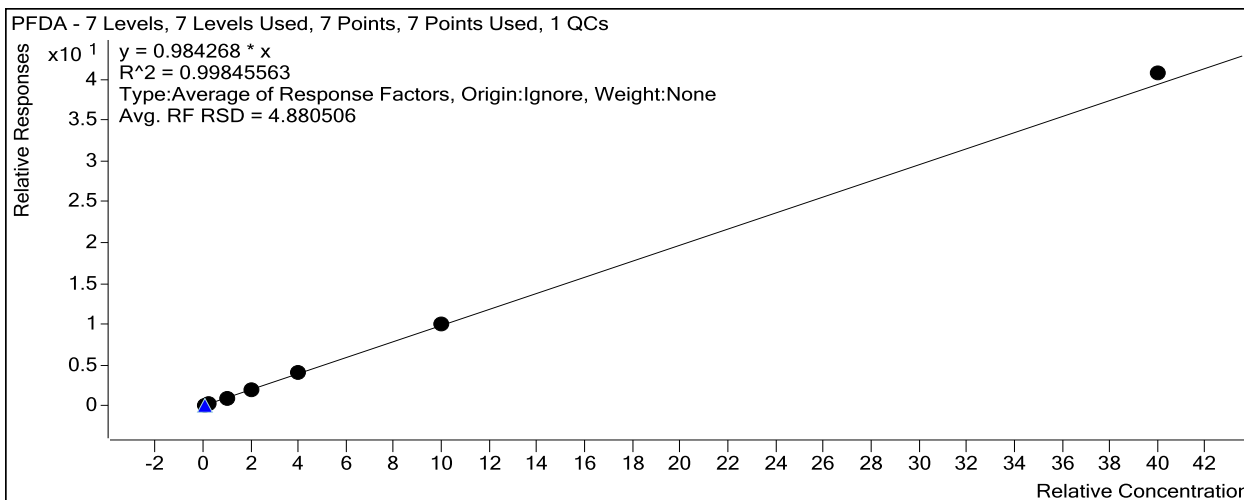
Quantitative Analysis Calibration Report



Target Compound

PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	21374	0.5000	0.9493
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	52948	1.2500	0.9178
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	214004	5.0000	0.9393
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	453731	10.0000	1.0302
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	943441	20.0000	1.0357
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2249006	50.0000	0.9987
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	7676993	200.0000	1.0190



Extracted ISTD

d3-NMeFOSAA

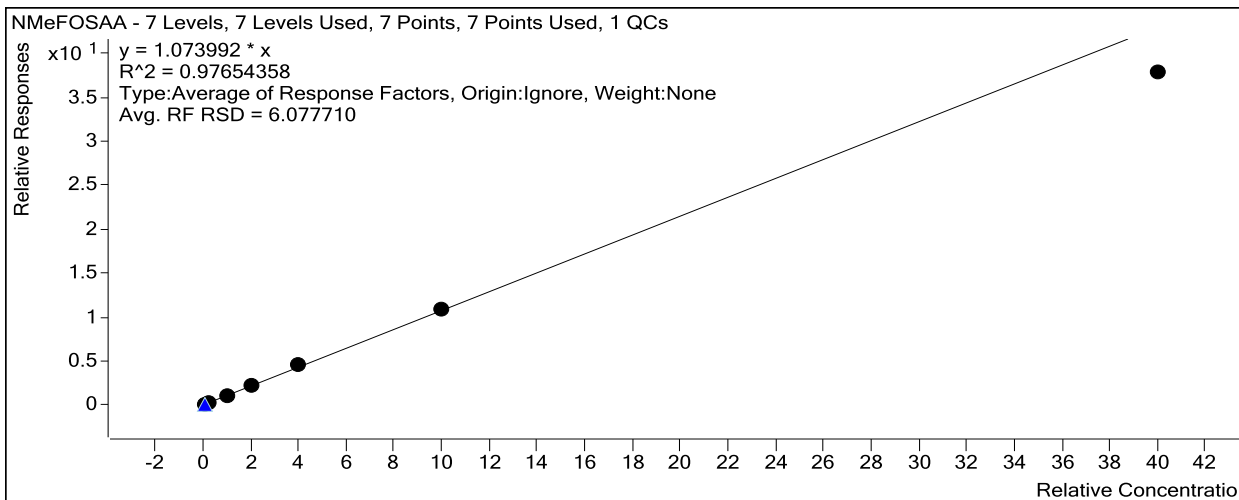
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

File Path	Calibration	Level	Enabled	Response	Exp Conc	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	21525	5.0000	4304.9577
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	22268	5.0000	4453.5590
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	21512	5.0000	4302.4052
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	21431	5.0000	4286.2426
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	22478	5.0000	4495.5840
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	23030	5.0000	4605.9403
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	23011	5.0000	4602.1751

Target Compound *NMeFOSAA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	2357	0.5000	1.0950
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	5814	1.2500	1.0443
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	22915	5.0000	1.0652
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	48796	10.0000	1.1384
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	101604	20.0000	1.1300
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	252970	50.0000	1.0985
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	871129	200.0000	0.9464



Extracted ISTD *M8FOSA*

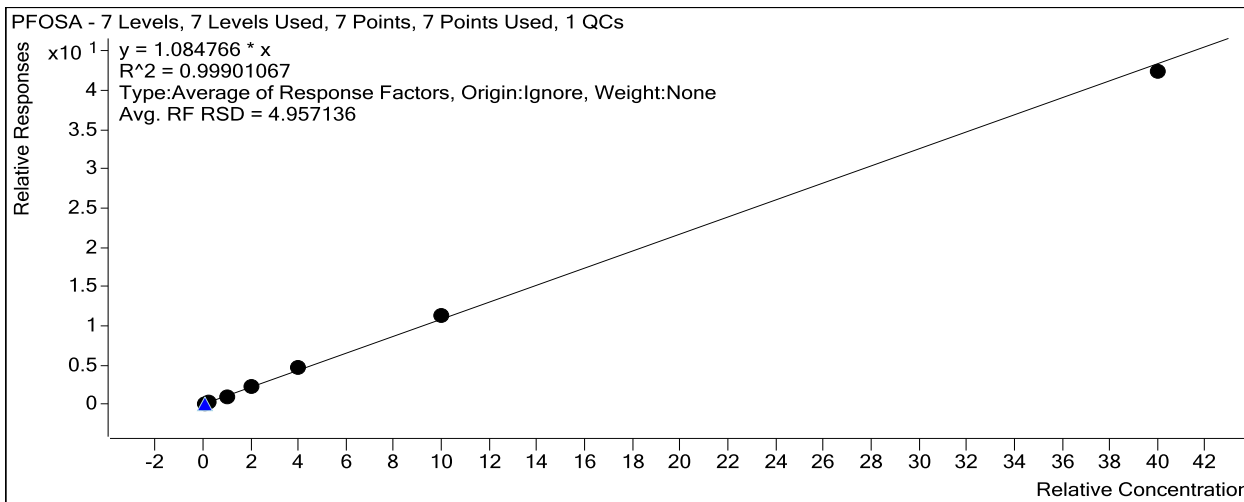
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	69601	5.0000	13920.1599
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	71464	5.0000	14292.7376
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	70811	5.0000	14162.1947

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	69628	5.0000	13925.5143
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	71618	5.0000	14323.5434
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	71582	5.0000	14316.3979
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	66182	5.0000	13236.4347

Target Compound *PFOSA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	7412	0.5000	1.0649
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	18238	1.2500	1.0208
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	72891	5.0000	1.0294
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	157277	10.0000	1.1294
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	329087	20.0000	1.1488
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	816257	50.0000	1.1403
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	2805371	200.0000	1.0597

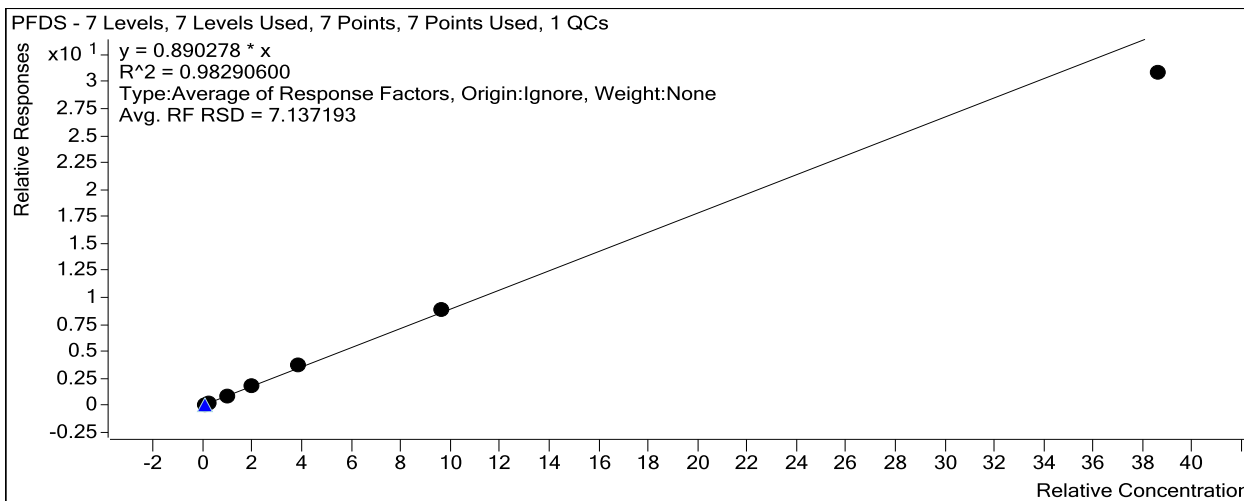


Target Compound *PFDS*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	2495	0.4825	0.8657
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	6328	1.2063	0.8280
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	26401	4.8250	0.8892
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	53738	9.6500	0.9627
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	113053	19.3000	0.9588
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	261412	48.2500	0.9286

Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_7.d Calibration 7 809918 193.0000 0.7989



Extracted *ISTD*

d5-NEtFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	39401	5.0000	7880.1685
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	39808	5.0000	7961.6970
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	38761	5.0000	7752.2049
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	37019	5.0000	7403.8556
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	37232	5.0000	7446.3849
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	36744	5.0000	7348.8153
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	28340	5.0000	5667.9212

Extracted *ISTD*

M7PFUnA

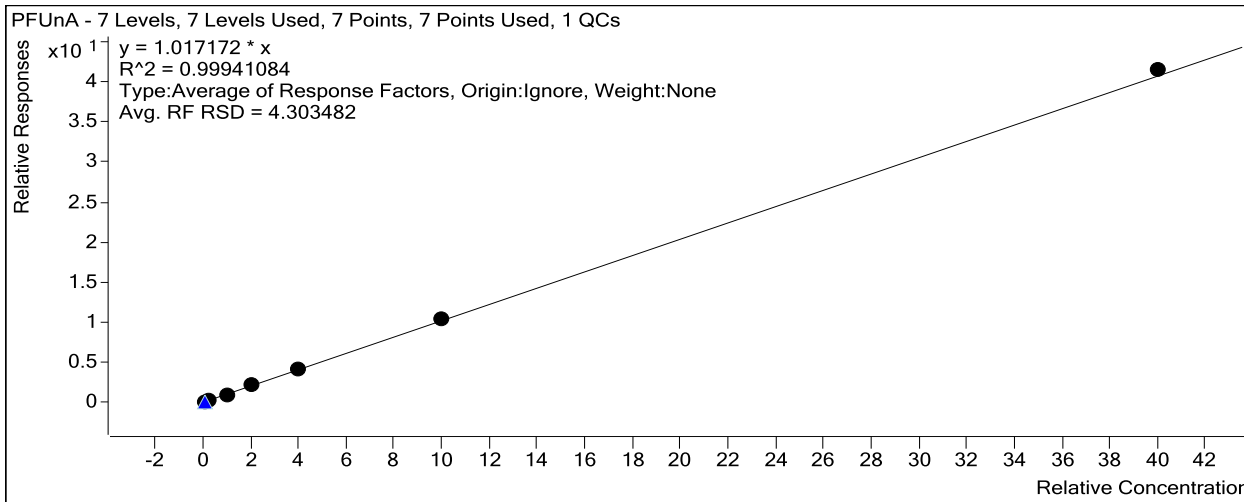
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	222872	5.0000	44574.3282
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	228414	5.0000	45682.8224
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	222765	5.0000	44553.0059
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	218576	5.0000	43715.2540
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	220396	5.0000	44079.2511
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	215184	5.0000	43036.7670
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	182264	5.0000	36452.7033

Target Compound

PFUnA

Quantitative Analysis Calibration Report

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	21627	0.5000	0.9704
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	55351	1.2500	0.9693
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	216904	5.0000	0.9737
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	463222	10.0000	1.0596
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	935193	20.0000	1.0608
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2257267	50.0000	1.0490
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	7562966	200.0000	1.0374

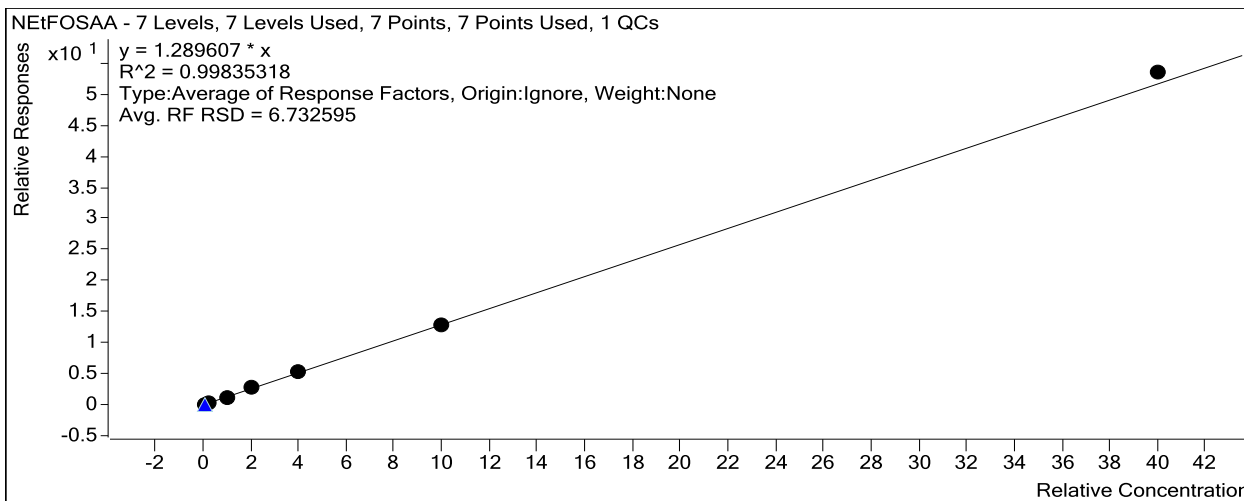


Target Compound

NETFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	5078	0.5000	1.2887
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	11438	1.2500	1.1493
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	46532	5.0000	1.2005
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	102942	10.0000	1.3904
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	202695	20.0000	1.3610
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	477961	50.0000	1.3008
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	1515170	200.0000	1.3366

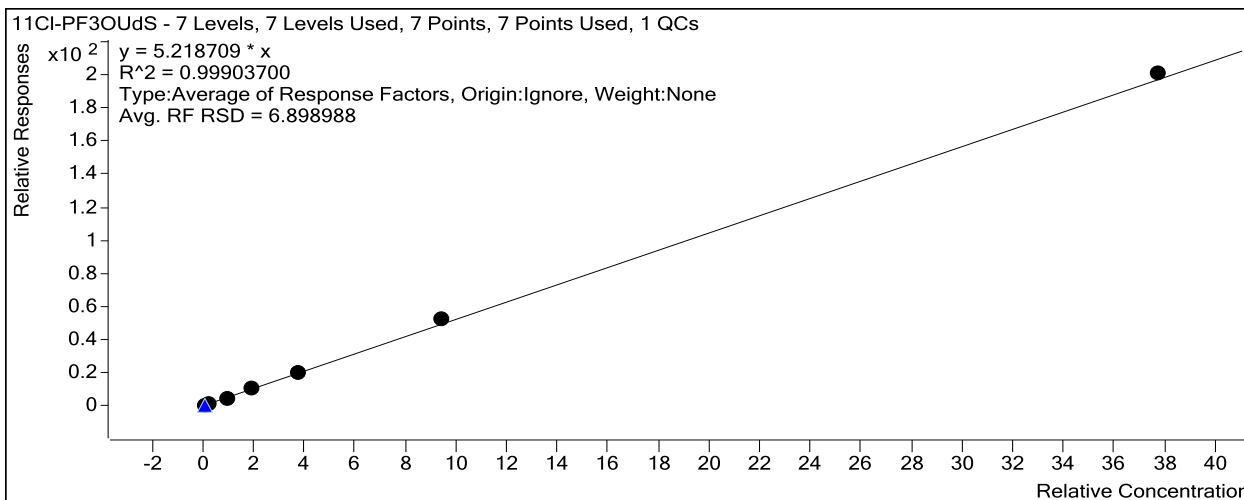
Quantitative Analysis Calibration Report



Target Compound

11CI-PF3OUdS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	14056	0.4715	4.9907
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	34531	1.1788	4.6238
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	144834	4.7150	4.9918
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	303415	9.4300	5.5624
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	626931	18.8600	5.4408
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	1538985	47.1500	5.5944
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	5277143	188.6000	5.3271



Extracted ISTD

MPFD0A

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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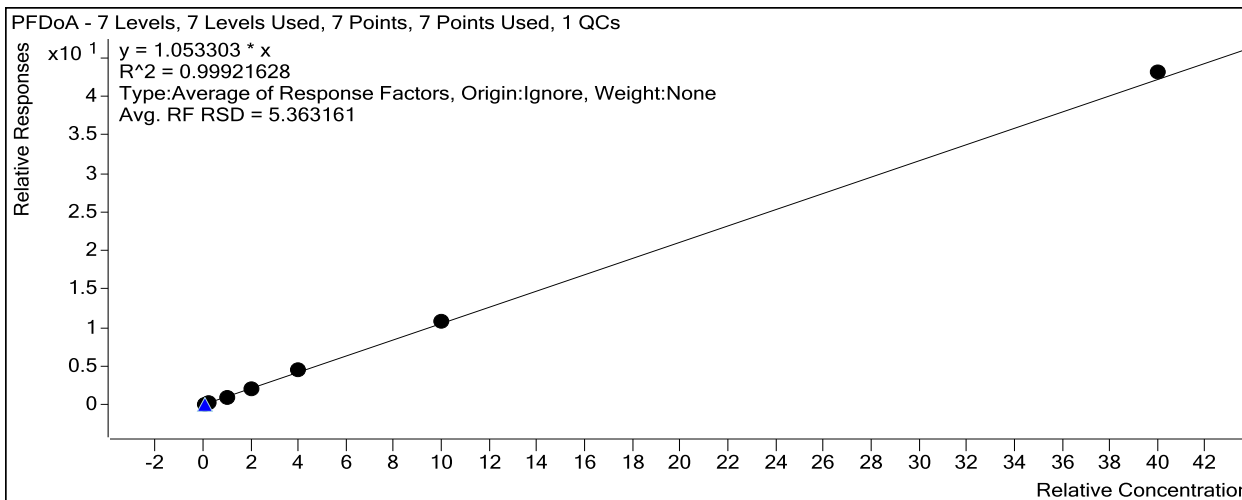
Quantitative Analysis Calibration Report

File Path	Calibration	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	249372	5.0000	49874.3402
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	256021	5.0000	51204.2502
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	251711	5.0000	50342.2372
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	246298	5.0000	49259.6706
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	250582	5.0000	50116.3079
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	253866	5.0000	50773.1348
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	227494	5.0000	45498.7039

Target Compound

PFD_oA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	24330	0.5000	0.9756
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	64017	1.2500	1.0002
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	254730	5.0000	1.0120
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	539301	10.0000	1.0948
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1126644	20.0000	1.1240
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	2765043	50.0000	1.0892
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	9803035	200.0000	1.0773

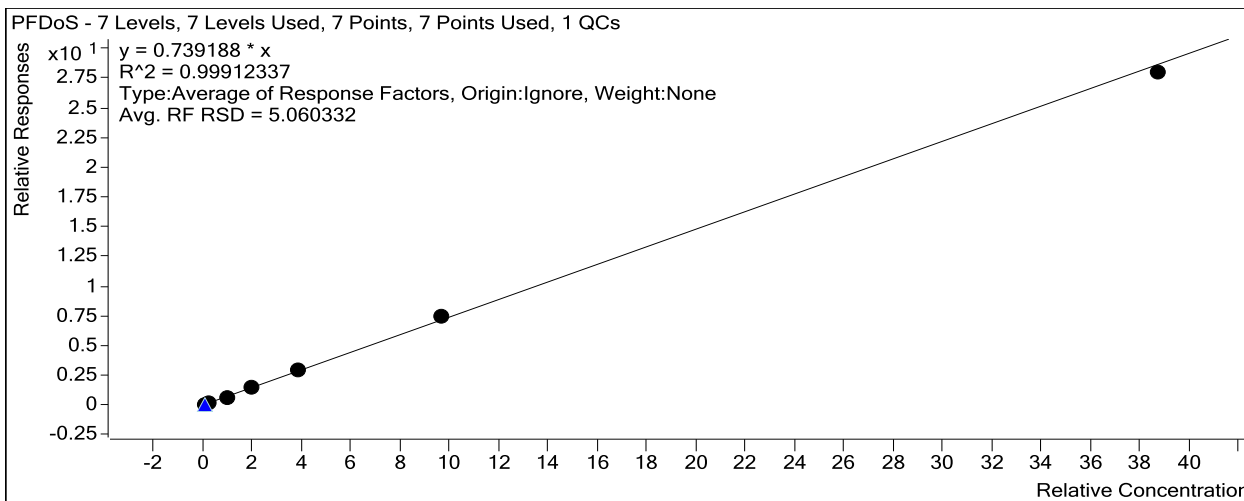


Target Compound

10:2F_{TS}

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	2570	0.4820	3.5361
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	6517	1.2050	3.5727
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	25512	4.8200	3.6551

Quantitative Analysis Calibration Report



Extracted ISTD

d-NMeFOSA

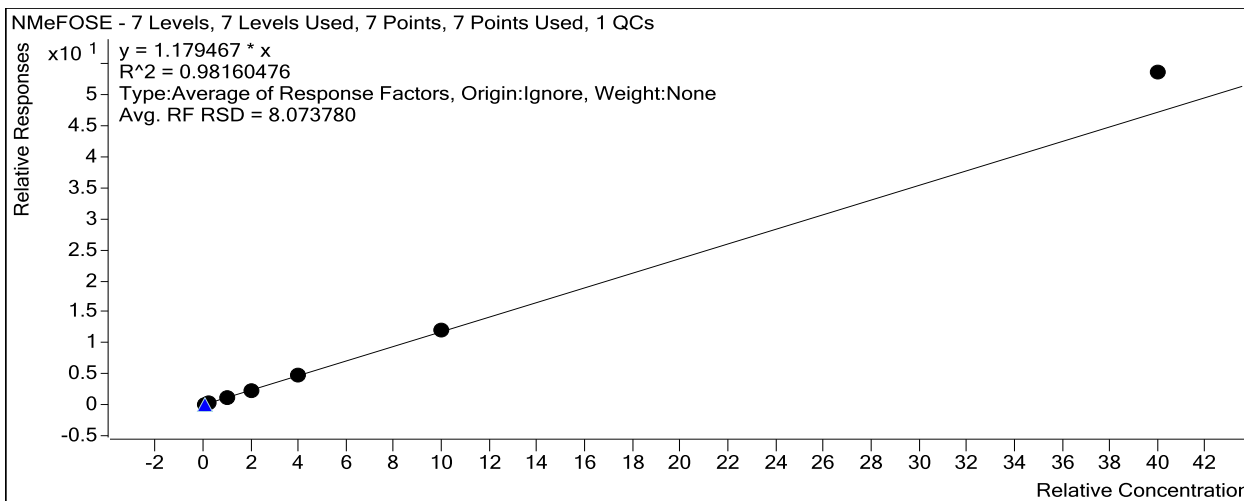
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	15484	5.0000	3096.7532
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	16013	5.0000	3202.5094
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	16253	5.0000	3250.6588
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	15657	5.0000	3131.3035
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	16204	5.0000	3240.7414
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	16205	5.0000	3241.0542
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	15151	5.0000	3030.1415

Target Compound

NMeFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	1794	0.5000	1.1587
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	4297	1.2500	1.0735
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	17781	5.0000	1.0940
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	38249	10.0000	1.2215
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	78478	20.0000	1.2108
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	189532	50.0000	1.1696
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	634634	200.0000	1.0472

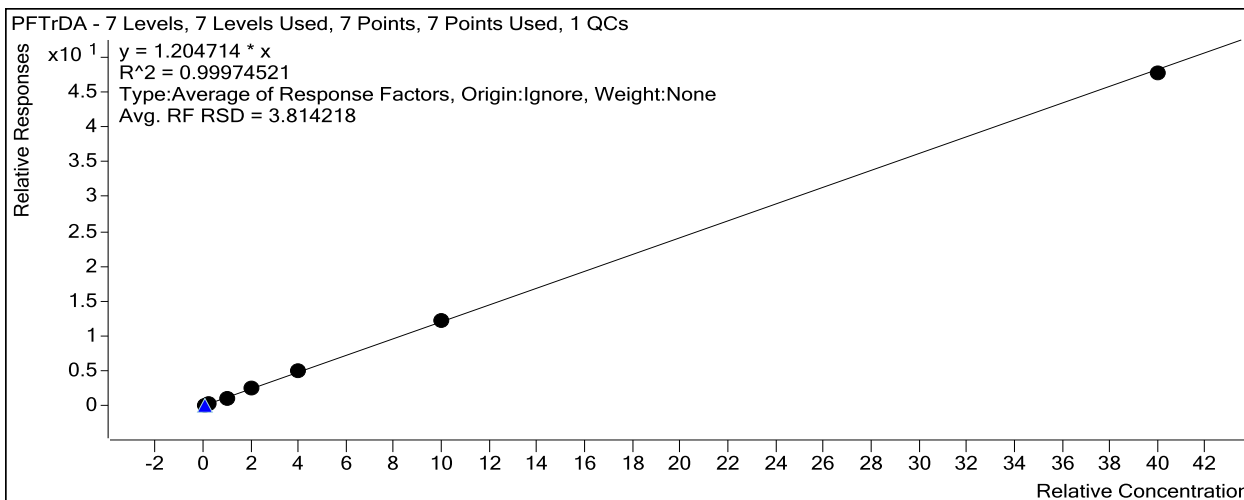
Quantitative Analysis Calibration Report



Target Compound

PFTrDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	29507	0.5000	1.1832
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	74511	1.2500	1.1641
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	288551	5.0000	1.1464
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	609904	10.0000	1.2381
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1278365	20.0000	1.2754
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	3133165	50.0000	1.2342
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	10842763	200.0000	1.1915



Extracted ISTD

d9-NEtFOSE

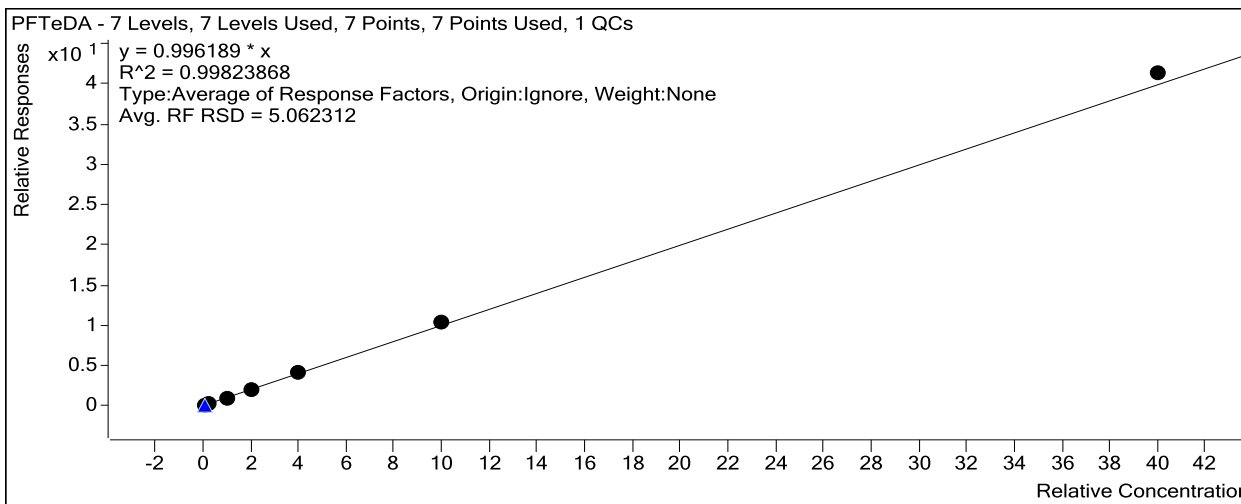
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
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Quantitative Analysis Calibration Report

D:\MassHunter\Data\2220419CCAL\2220419C_7.d Calibration 7 317141 5.0000 63428.1559

Target Compound *PFTeDA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	33469	0.5000	0.9626
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	81489	1.2500	0.9329
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	323712	5.0000	0.9345
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	680592	10.0000	1.0331
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1430425	20.0000	1.0412
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	3556936	50.0000	1.0361
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	13102668	200.0000	1.0329



Target Compound *PFHxDA*

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
D:\MassHunter\Data\2220419CCAL\2220419C_1.d	Calibration	1	<input checked="" type="checkbox"/>	44742	0.5000	12.0312
D:\MassHunter\Data\2220419CCAL\2220419C_2.d	Calibration	2	<input checked="" type="checkbox"/>	104596	1.2500	10.8632
D:\MassHunter\Data\2220419CCAL\2220419C_3.d	Calibration	3	<input checked="" type="checkbox"/>	419227	5.0000	10.8710
D:\MassHunter\Data\2220419CCAL\2220419C_4.d	Calibration	4	<input checked="" type="checkbox"/>	840385	10.0000	11.6059
D:\MassHunter\Data\2220419CCAL\2220419C_5.d	Calibration	5	<input checked="" type="checkbox"/>	1872004	20.0000	12.1666
D:\MassHunter\Data\2220419CCAL\2220419C_6.d	Calibration	6	<input checked="" type="checkbox"/>	4738735	50.0000	11.9293
D:\MassHunter\Data\2220419CCAL\2220419C_7.d	Calibration	7	<input checked="" type="checkbox"/>	17907227	200.0000	12.2367

Quantitative Analysis Calibration Report

Batch Data Path	C:\MassHunter\Data\QQQ5\2220506BCAL\QuantResults\2220508A.batch.bin		
Analysis Time	5/12/2022 8:45 AM	Analyst Name	GCAL\jcms
Report Time	5/12/2022 8:53 AM	Reporter Name	GCAL\jcms
Last Calib Update	5/8/2022 9:52 AM	Batch State	Processed

Calibration Info

Extracted ISTD

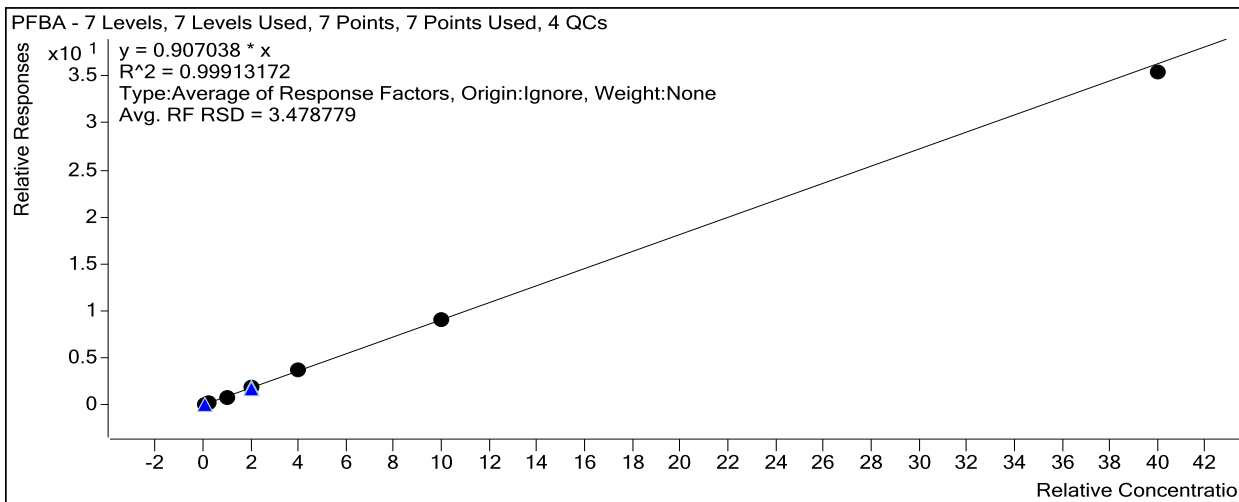
MPFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	48498	5.0000	9699.5087
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	49436	5.0000	9887.1005
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	51058	5.0000	10211.5437
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	49174	5.0000	9834.7534
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	48142	5.0000	9628.4626
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	50087	5.0000	10017.4420
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	48144	5.0000	9628.8700

Target Compound

PFBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	4510	0.5000	0.9300
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	10879	1.2500	0.8802
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	43945	5.0000	0.8607
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	91970	10.0000	0.9351
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	181274	20.0000	0.9413
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	459494	50.0000	0.9174
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1703319	200.0000	0.8845

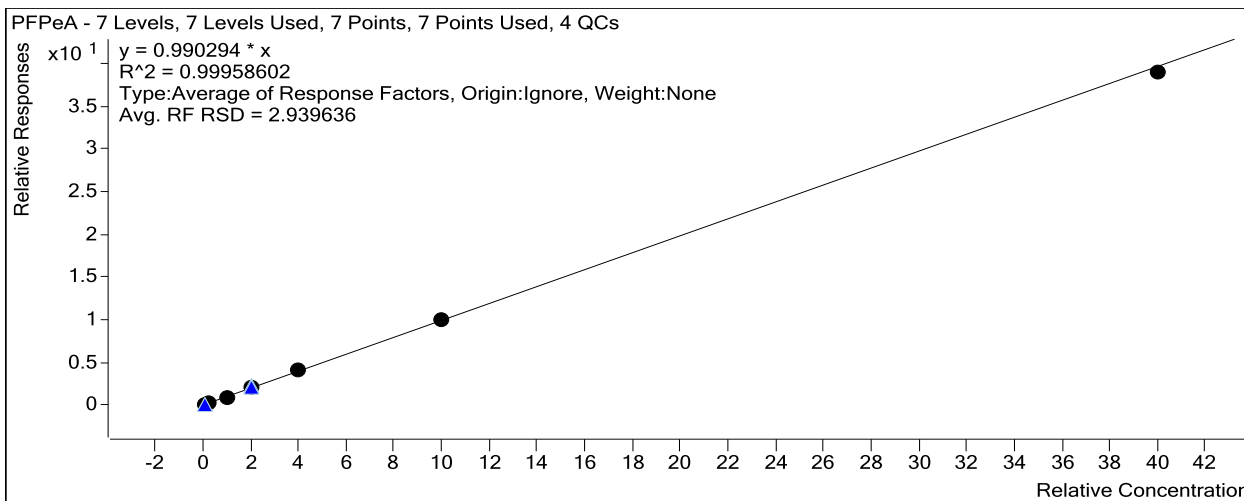


Target Compound

PFMPA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	896	0.5000	0.1283
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	2183	1.2500	0.1221
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	8636	5.0000	0.1182
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	17757	10.0000	0.1266

Quantitative Analysis Calibration Report



Extracted ISTD

M3PFBS

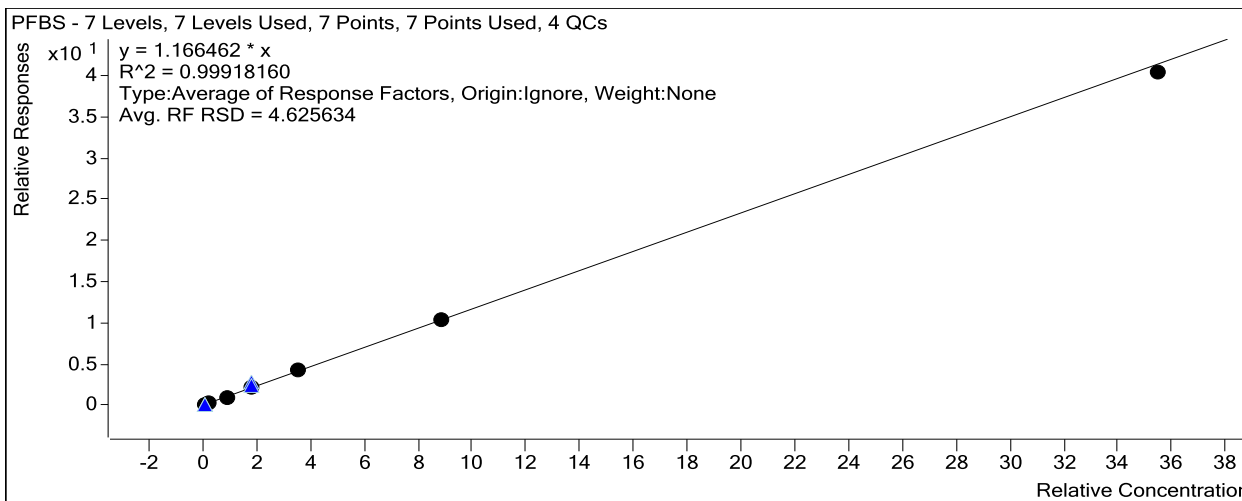
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	23831	5.0000	4766.2230
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	23678	5.0000	4735.6883
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	24269	5.0000	4853.7435
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	23426	5.0000	4685.2584
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	22001	5.0000	4400.1435
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	22766	5.0000	4553.2437
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	20543	5.0000	4108.5370

Target Compound

PFBS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2576	0.4435	1.2185
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	5805	1.1088	1.1055
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	23630	4.4350	1.0977
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	50126	8.8700	1.2062
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	95960	17.7400	1.2293
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	236163	44.3500	1.1695
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	829816	177.4000	1.1385

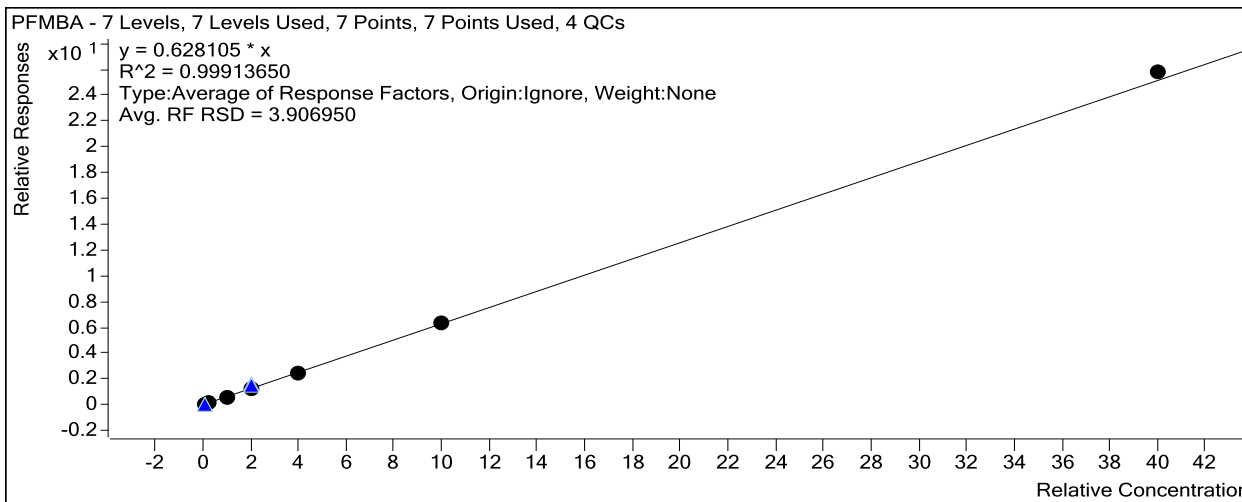
Quantitative Analysis Calibration Report



Target Compound

PFMBA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	5531	0.5000	0.6411
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	13053	1.2500	0.5927
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	54660	5.0000	0.5976
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	114389	10.0000	0.6566
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	212450	20.0000	0.6238
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	552765	50.0000	0.6405
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	2064143	200.0000	0.6445



Target Compound

PFEESA

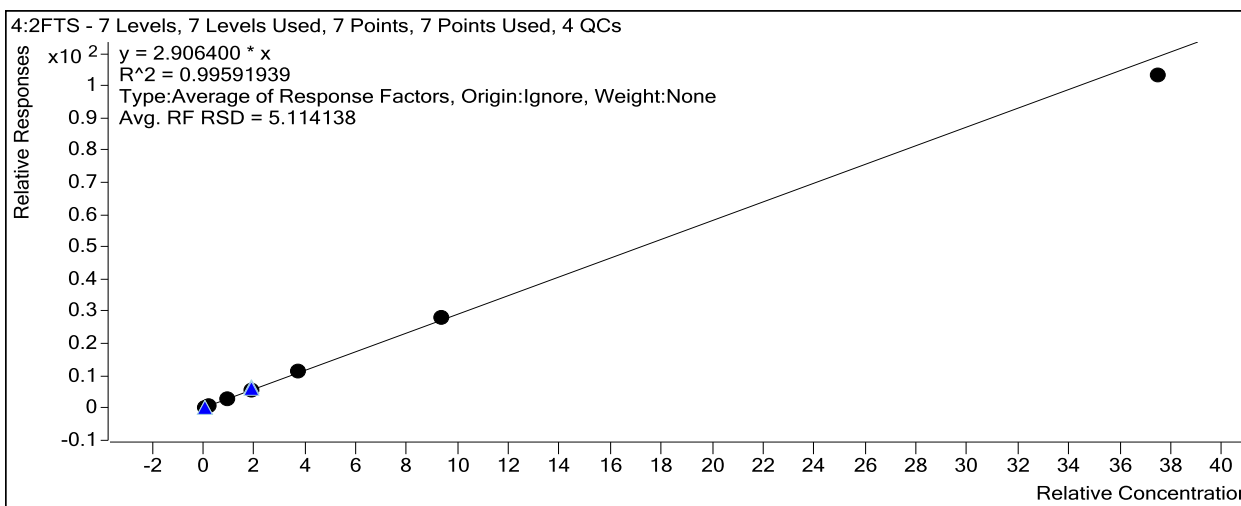
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	6023	0.4450	3.8629
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	14929	1.1125	3.7021
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	59880	4.4500	3.6768
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	125319	8.9000	3.8933
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	239414	17.8000	3.9164

Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	6191	5.0000	1238.2018
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	5806	5.0000	1161.1817
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	5626	5.0000	1125.1809
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	4872	5.0000	974.4213

Target Compound 4:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1710	0.4685	2.8489
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4140	1.1713	2.6845
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	17242	4.6850	2.9344
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	35276	9.3700	3.0405
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	66831	18.7400	3.0712
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	158722	46.8500	3.0110
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	502948	187.4000	2.7543



Extracted ISTD M5PFHxA

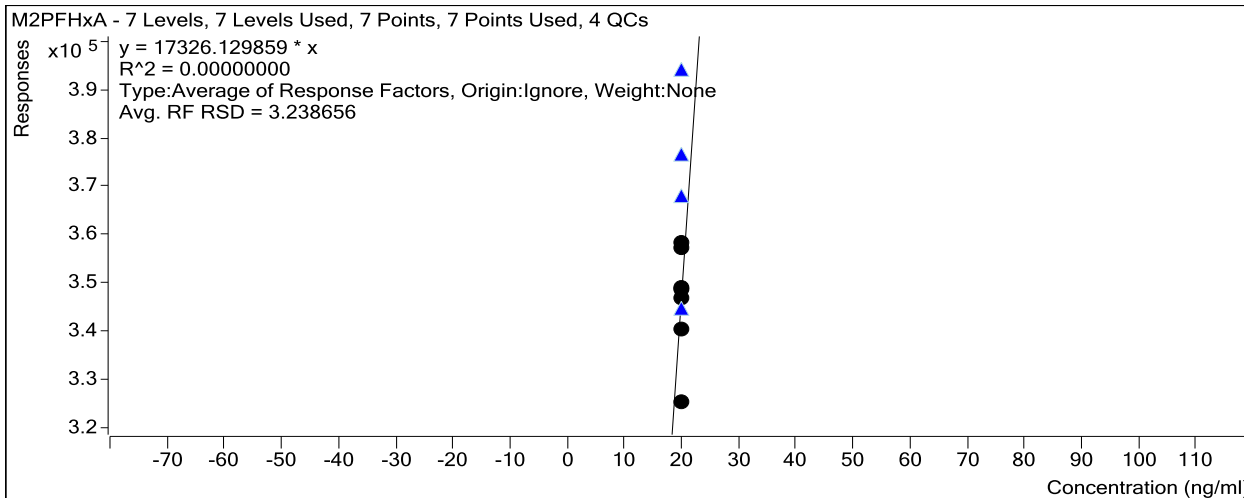
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	86264	5.0000	17252.7822
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	88094	5.0000	17618.7334
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	91472	5.0000	18294.4766
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	87105	5.0000	17420.9561
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	85150	5.0000	17030.0503
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	86301	5.0000	17260.2065
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	80069	5.0000	16013.8074

Instrument ISTD M2PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	358465	20.0000	17923.2500
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	357133	20.0000	17856.6508
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	346773	20.0000	17338.6534
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	348629	20.0000	17431.4679
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	340218	20.0000	17010.9204

Quantitative Analysis Calibration Report

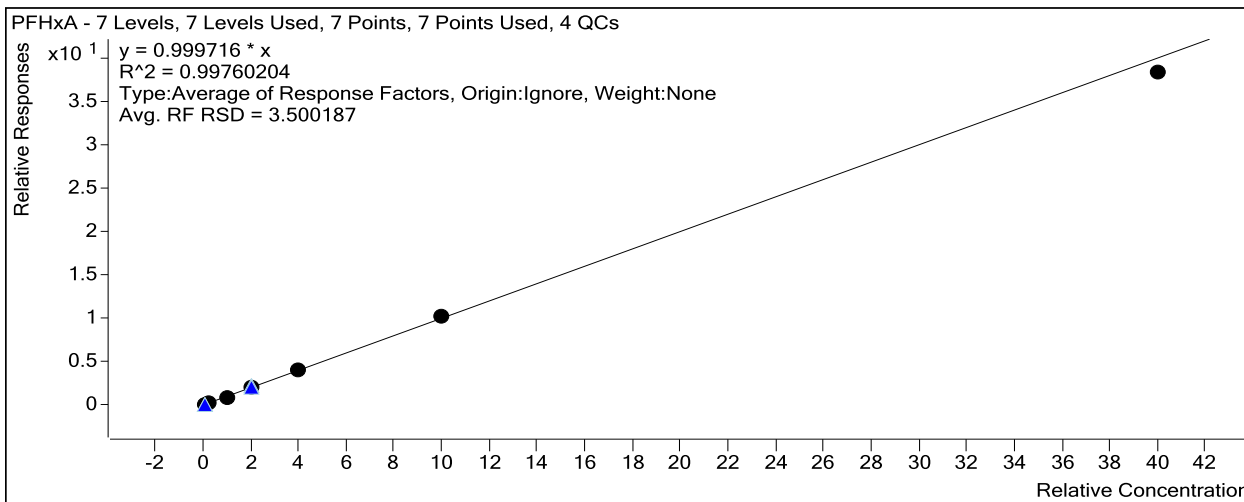
J:\MassHunter\Data\2220506BCAL\2220506B_7.d Calibration 6 349118 20.0000 17455.9154
 J:\MassHunter\Data\2220506BCAL\2220506B_8.d Calibration 7 325321 20.0000 16266.0511



Target Compound

PFHxA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	8729	0.5000	1.0119
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	21431	1.2500	0.9731
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	87940	5.0000	0.9614
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	182153	10.0000	1.0456
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	350857	20.0000	1.0301
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	877862	50.0000	1.0172
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	3070363	200.0000	0.9587



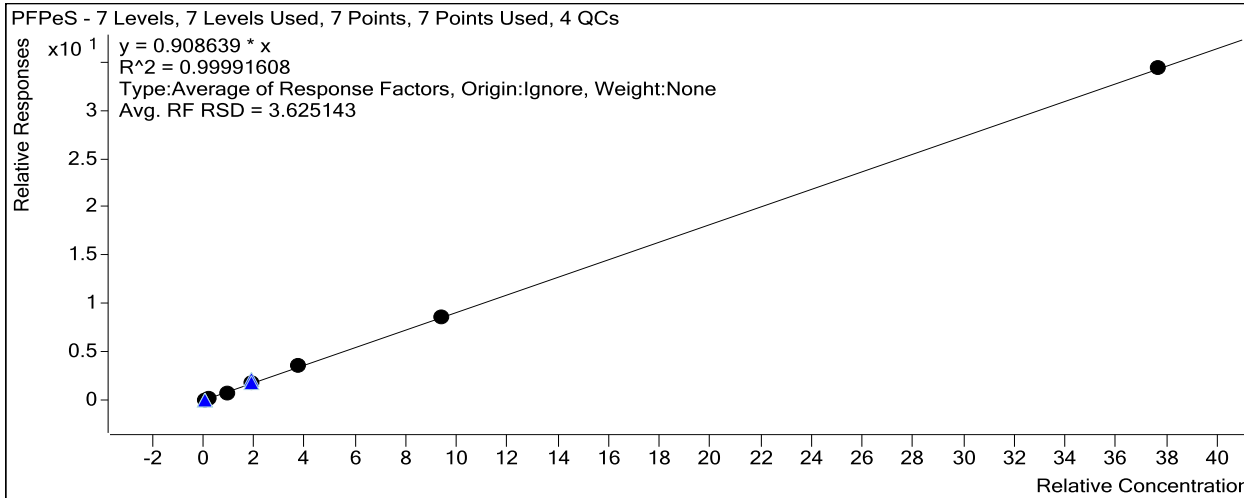
Target Compound

PFPeS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1974	0.4705	0.8805
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4874	1.1763	0.8749
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	20021	4.7050	0.8767

Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	41262	9.4100	0.9359
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	79534	18.8200	0.9604
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	196922	47.0500	0.9192
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	705890	188.2000	0.9129



Extracted ISTD

M3HFPODA

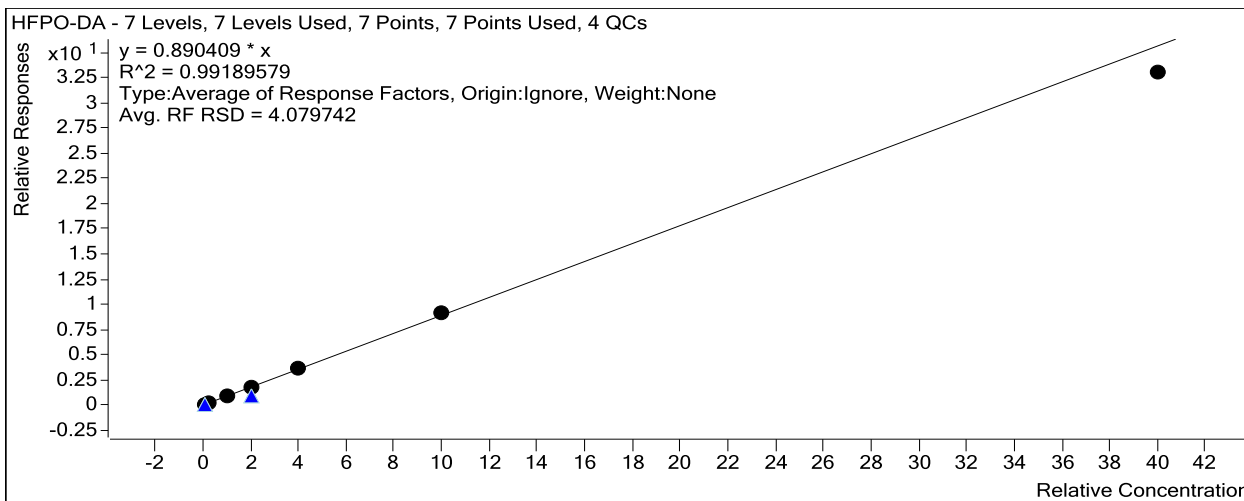
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	34764	10.0000	3476.3593
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	36504	10.0000	3650.4432
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	36469	10.0000	3646.8805
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	35735	10.0000	3573.4682
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	33863	10.0000	3386.3364
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	35108	10.0000	3510.8165
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	33911	10.0000	3391.1288

Target Compound

HFPO-DA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3126	1.0000	0.8991
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	8171	2.5000	0.8954
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	31296	10.0000	0.8582
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	65543	20.0000	0.9171
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	125728	40.0000	0.9282
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	319403	100.0000	0.9098
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1119233	400.0000	0.8251

Quantitative Analysis Calibration Report



Extracted ISTD

M4PFHpA

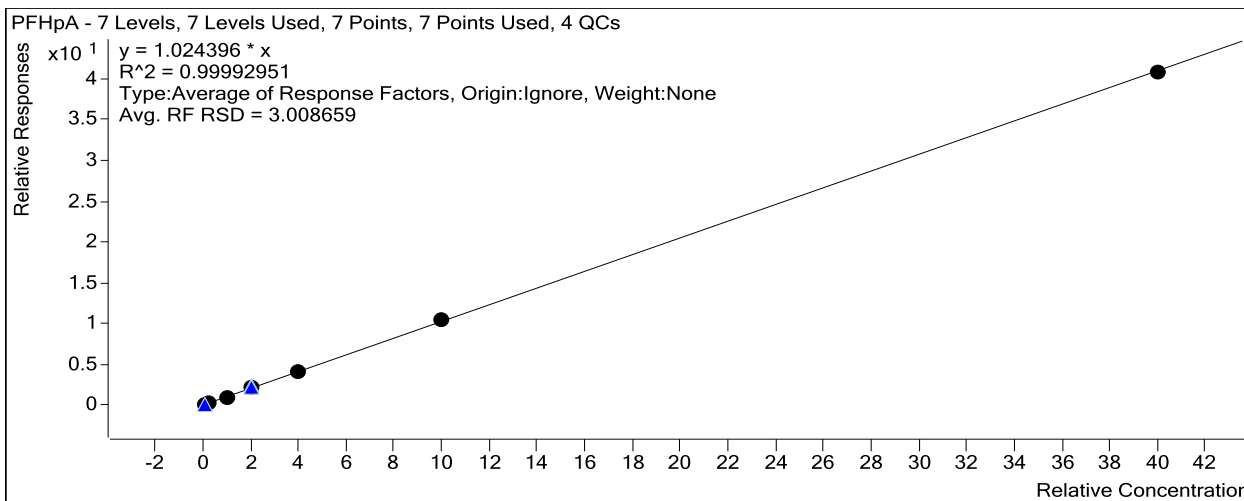
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	128339	5.0000	25667.8675
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	129024	5.0000	25804.7662
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	133637	5.0000	26727.3555
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	129023	5.0000	25804.6490
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	124364	5.0000	24872.7868
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	128831	5.0000	25766.2608
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	118997	5.0000	23799.3880

Target Compound

PFHpA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	13258	0.5000	1.0330
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	31483	1.2500	0.9760
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	132454	5.0000	0.9911
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	273482	10.0000	1.0598
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	520775	20.0000	1.0469
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1345427	50.0000	1.0443
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	4852941	200.0000	1.0196

Quantitative Analysis Calibration Report



Extracted ISTD

M3PFHxS

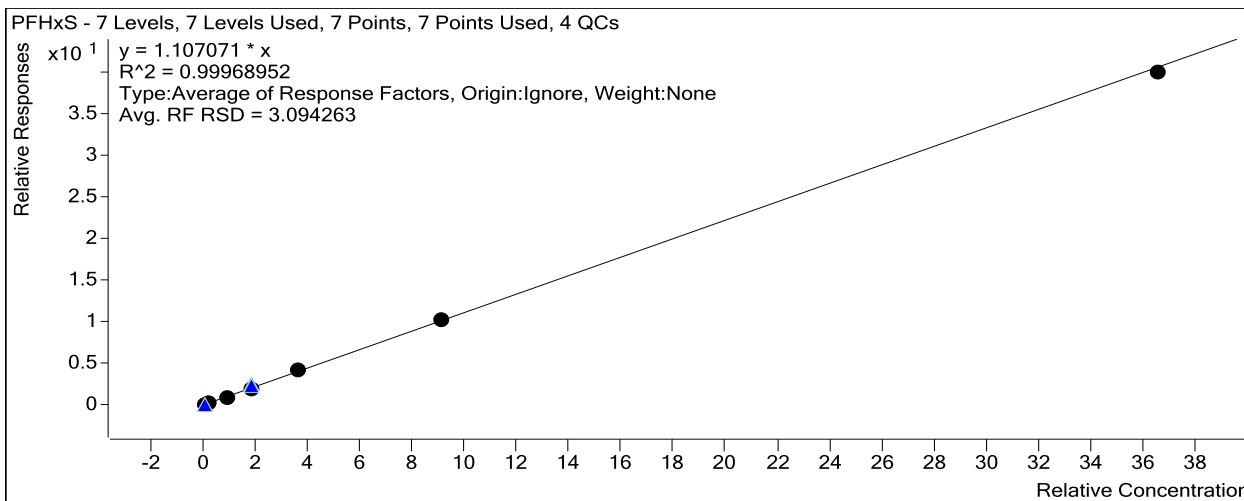
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	17518	5.0000	3503.5564
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	18124	5.0000	3624.7268
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	18299	5.0000	3659.7750
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	18083	5.0000	3616.6897
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	17171	5.0000	3434.2942
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	17937	5.0000	3587.4248
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	16351	5.0000	3270.2564

Target Compound

PFHxS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1852	0.4570	1.1567
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4488	1.1425	1.0838
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	17647	4.5700	1.0551
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	36860	9.1400	1.1151
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	71480	18.2800	1.1386
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	181950	45.7000	1.1098
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	651875	182.8000	1.0905

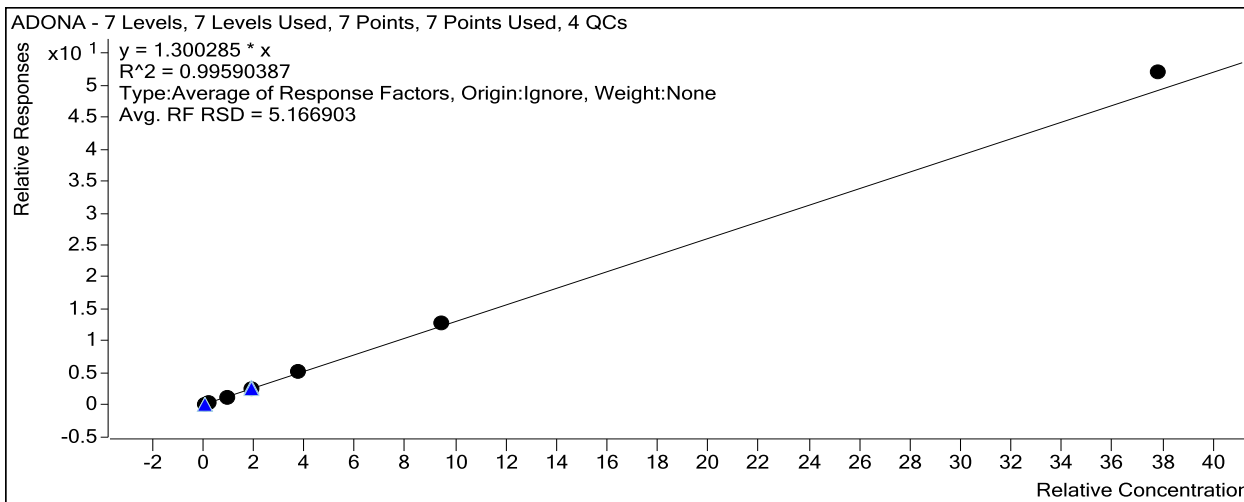
Quantitative Analysis Calibration Report



Target Compound

ADONA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	15224	0.4725	1.2463
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	37843	1.1813	1.2132
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	157379	4.7250	1.2343
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	325456	9.4500	1.3221
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	639915	18.9000	1.3530
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1642229	47.2500	1.3562
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	6097326	189.0000	1.3768



Extracted ISTD

M2 6:2 FTS

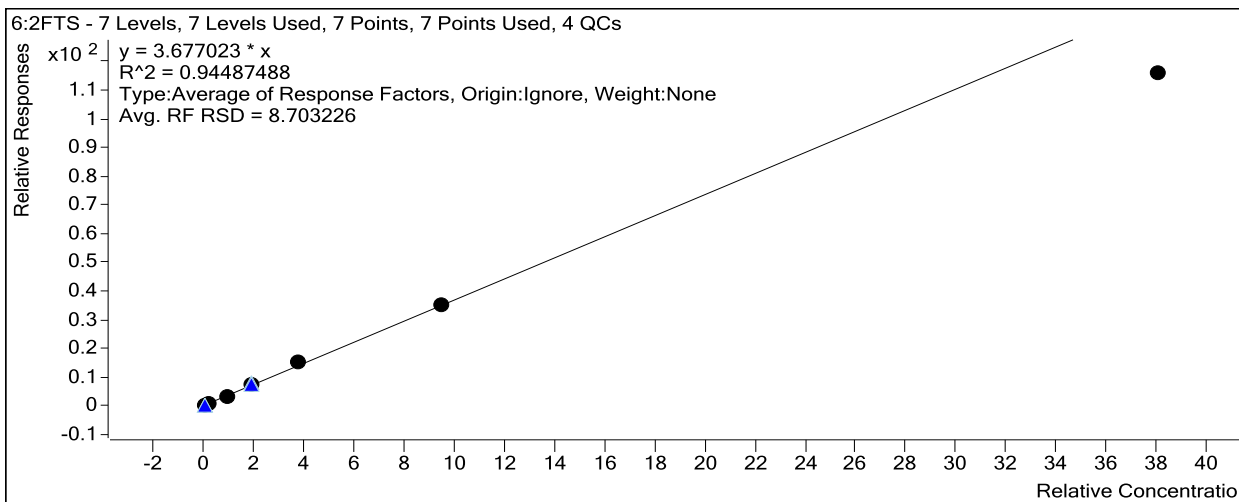
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	5979	5.0000	1195.7484
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	5929	5.0000	1185.8229
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	5958	5.0000	1191.5907
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	5812	5.0000	1162.4080
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	5425	5.0000	1084.9664

Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	5447	5.0000	1089.4714
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5138	5.0000	1027.6865

Target Compound 6:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	2199	0.4755	3.8678
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	5102	1.1888	3.6193
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	20362	4.7550	3.5938
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	43643	9.5100	3.9480
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	82354	19.0200	3.9908
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	190214	47.5500	3.6718
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	595739	190.2000	3.0478



Extracted ISTD M8PFOA

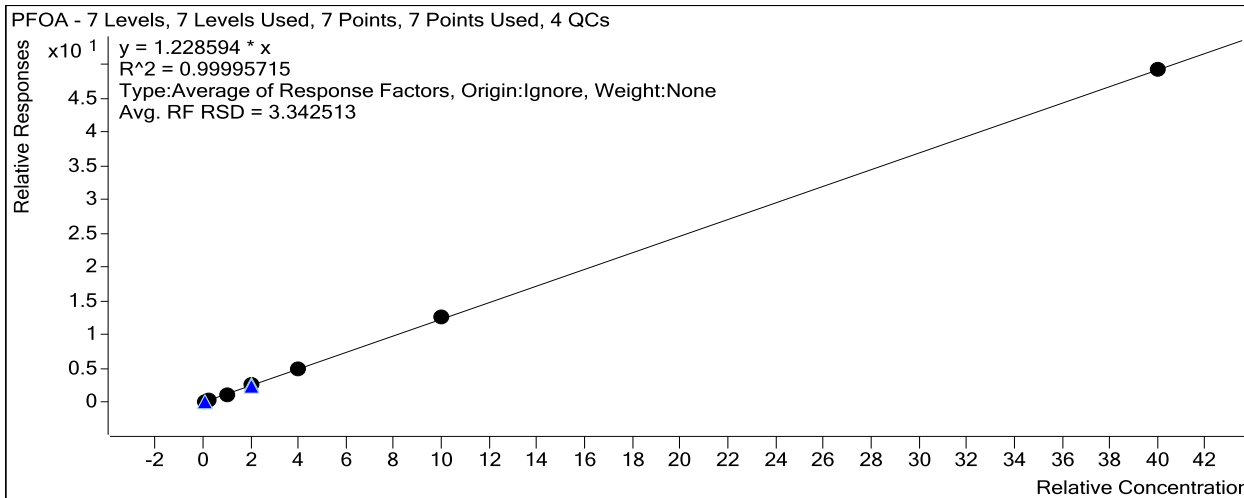
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	129262	5.0000	25852.4681
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	132024	5.0000	26404.7026
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	134924	5.0000	26984.8634
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	130247	5.0000	26049.4024
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	125126	5.0000	25025.2033
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	128135	5.0000	25626.9464
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	117156	5.0000	23431.2639

Instrument ISTD MPFOA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	827837	25.0000	33113.4642
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	823972	25.0000	32958.8985
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	800743	25.0000	32029.7360
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	825655	25.0000	33026.1903
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	784559	25.0000	31382.3498
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	812374	25.0000	32494.9748
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	753613	25.0000	30144.5093

Quantitative Analysis Calibration Report

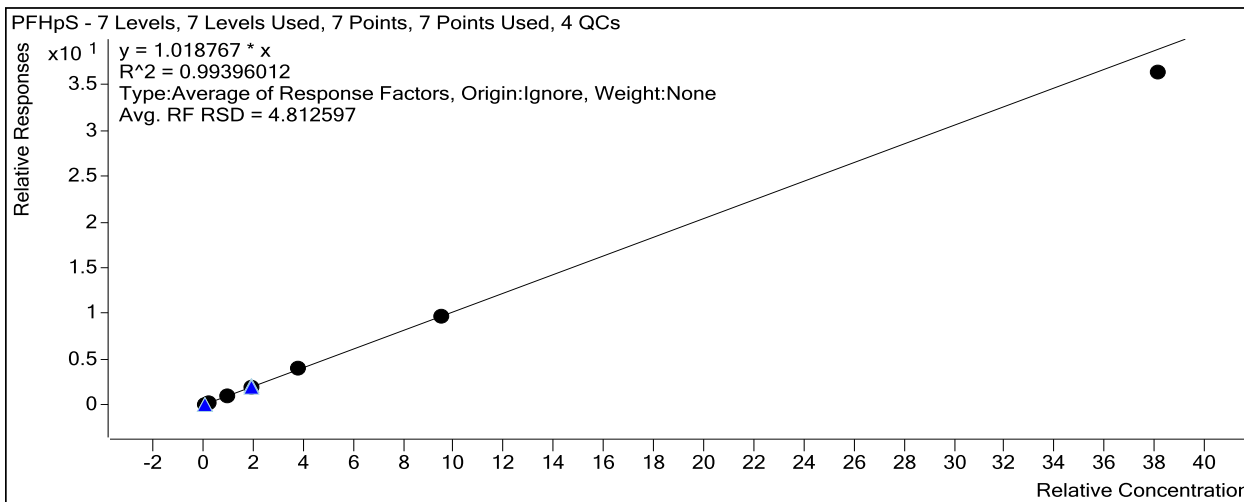
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1601626	50.0000	1.2500
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5765341	200.0000	1.2303



Target Compound

PFHpS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1842	0.4765	1.1035
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4328	1.1913	1.0024
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	17049	4.7650	0.9776
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	35531	9.5300	1.0309
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	68596	19.0600	1.0479
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	173608	47.6500	1.0156
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	594273	190.6000	0.9534



Extracted ISTD

M9PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	166062	5.0000	33212.4067
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	172670	5.0000	34533.9296
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	176077	5.0000	35215.3447

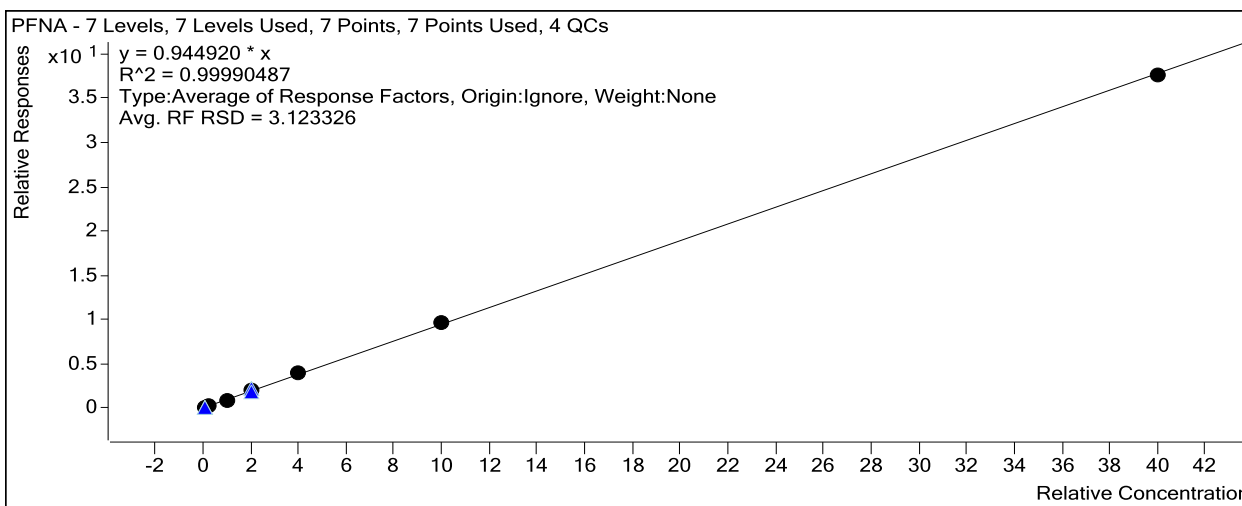
Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	168628	5.0000	33725.6739
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	161165	5.0000	32232.9171
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	165162	5.0000	33032.4380
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	147488	5.0000	29497.5528

Target Compound

PFNA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	15672	0.5000	0.9437
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	39552	1.2500	0.9163
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	158342	5.0000	0.8993
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	327151	10.0000	0.9700
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	632154	20.0000	0.9806
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1593277	50.0000	0.9647
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5544684	200.0000	0.9399



Extracted ISTD

M8PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	14851	5.0000	2970.1313
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	15652	5.0000	3130.4308
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	15823	5.0000	3164.5214
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	15689	5.0000	3137.8064
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	14982	5.0000	2996.4696
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	15068	5.0000	3013.5583
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	13680	5.0000	2736.0674

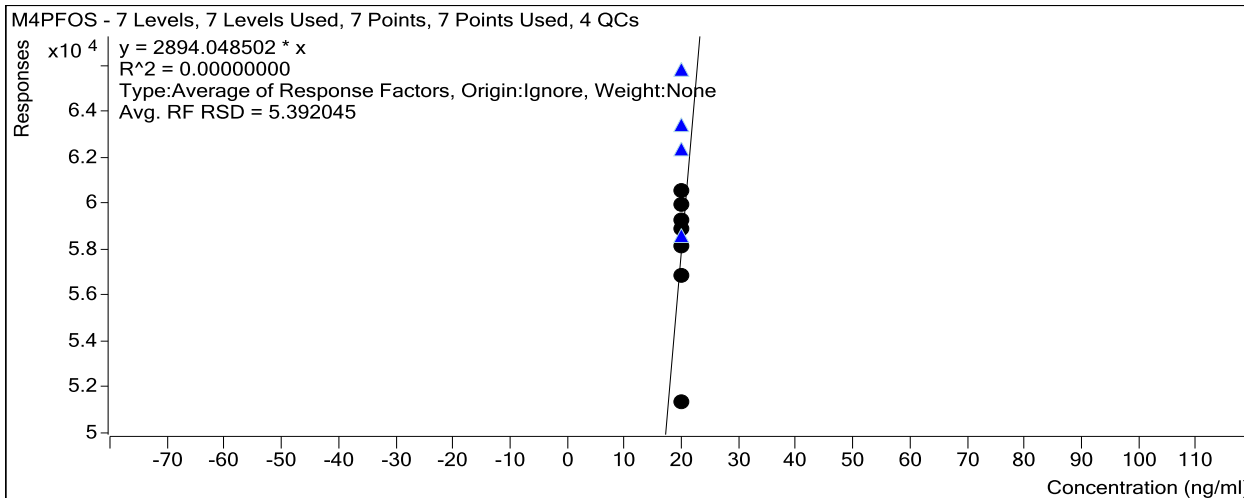
Instrument ISTD

M4PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	60585	20.0000	3029.2351
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	59974	20.0000	2998.7149
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	58171	20.0000	2908.5469
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	58915	20.0000	2945.7525
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	56859	20.0000	2842.9497

Quantitative Analysis Calibration Report

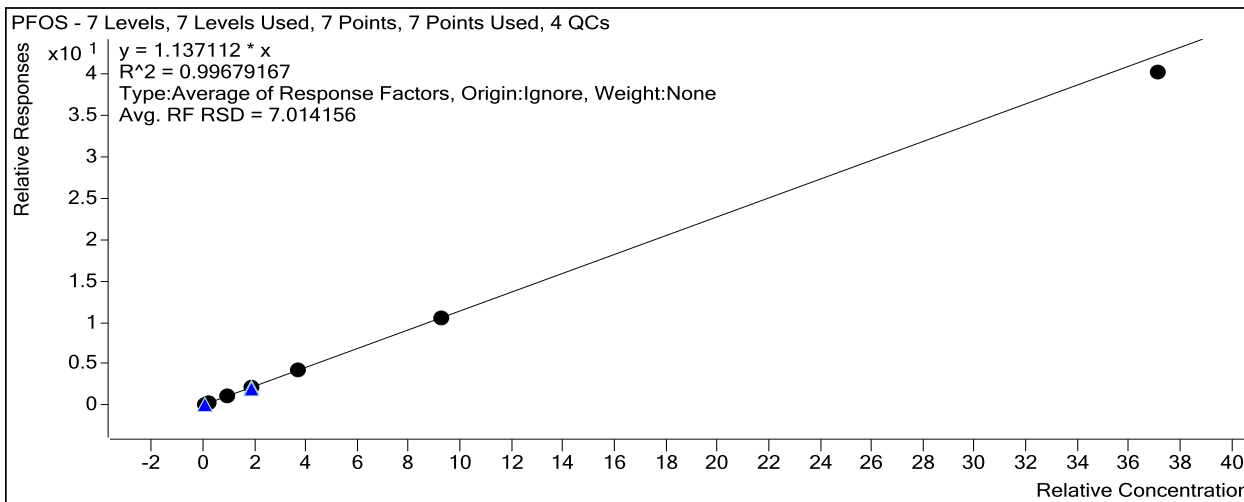
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	59303	20.0000	2965.1654
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	51359	20.0000	2567.9750



Target Compound

PFOS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1807	0.4640	1.3111
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	3942	1.1600	1.0856
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	16017	4.6400	1.0908
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	32912	9.2800	1.1303
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	62819	18.5600	1.1295
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	157931	46.4000	1.1295
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	549937	185.6000	1.0830



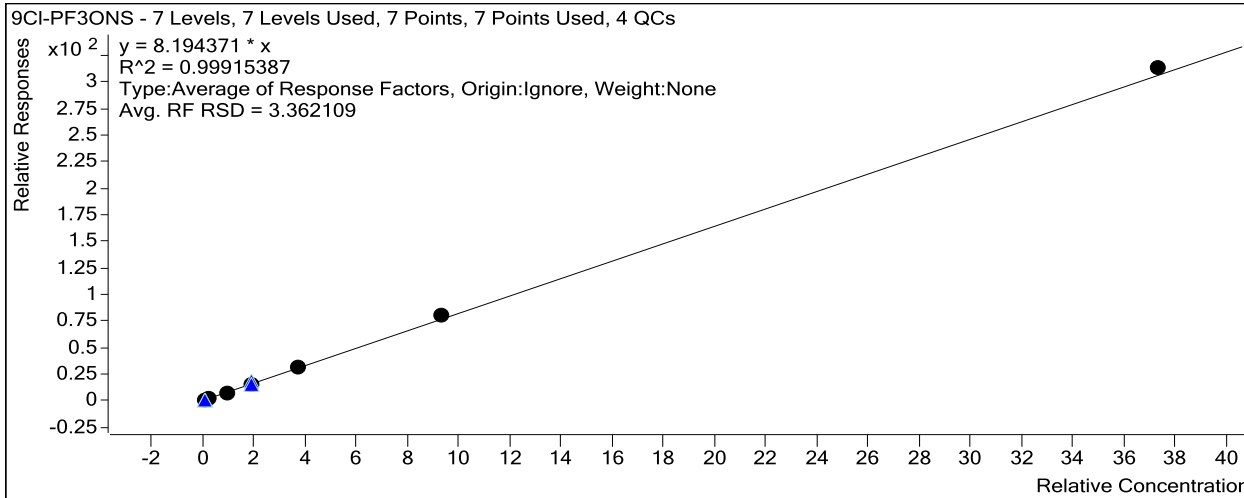
Target Compound

9CI-PF3ONS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	11281	0.4665	8.1418
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	28314	1.1663	7.7550
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	117037	4.6650	7.9280

Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	241883	9.3300	8.2622
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	465944	18.6600	8.3332
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1199349	46.5500	8.5496
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	4283899	186.6000	8.3907



Extracted ISTD

M2 8:2 FTS

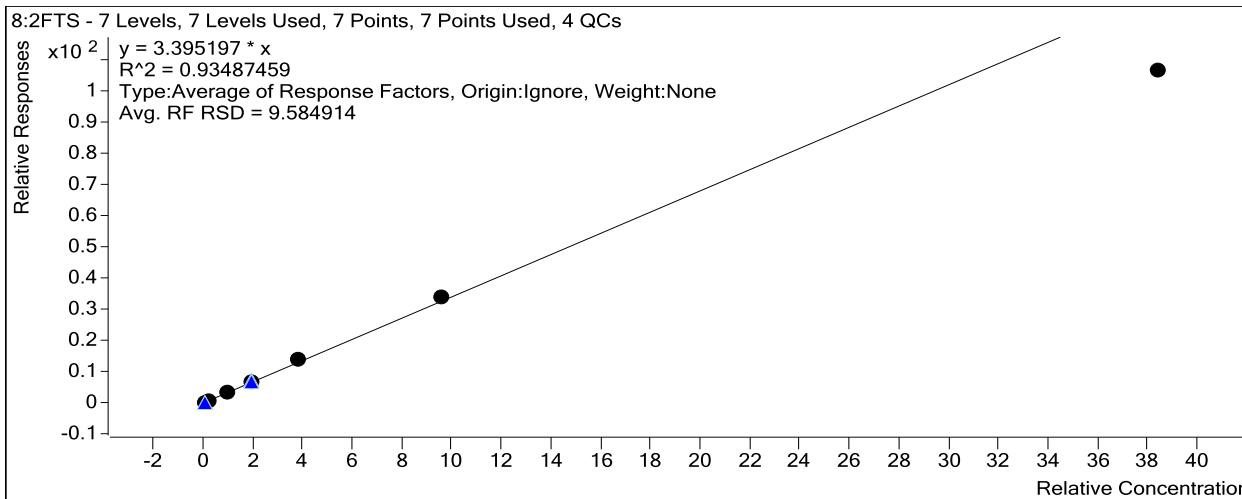
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	5561	5.0000	1112.1534
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	5248	5.0000	1049.6707
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	5065	5.0000	1012.9363
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	5137	5.0000	1027.4586
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	4625	5.0000	925.0280
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	4446	5.0000	889.2484
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	3905	5.0000	781.0888

Target Compound

8:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1687	0.4800	3.1608
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	4337	1.2000	3.4433
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	17046	4.8000	3.5058
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	36494	9.6000	3.6998
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	64966	19.2000	3.6579
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	150492	48.0000	3.5257
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	415872	192.0000	2.7731

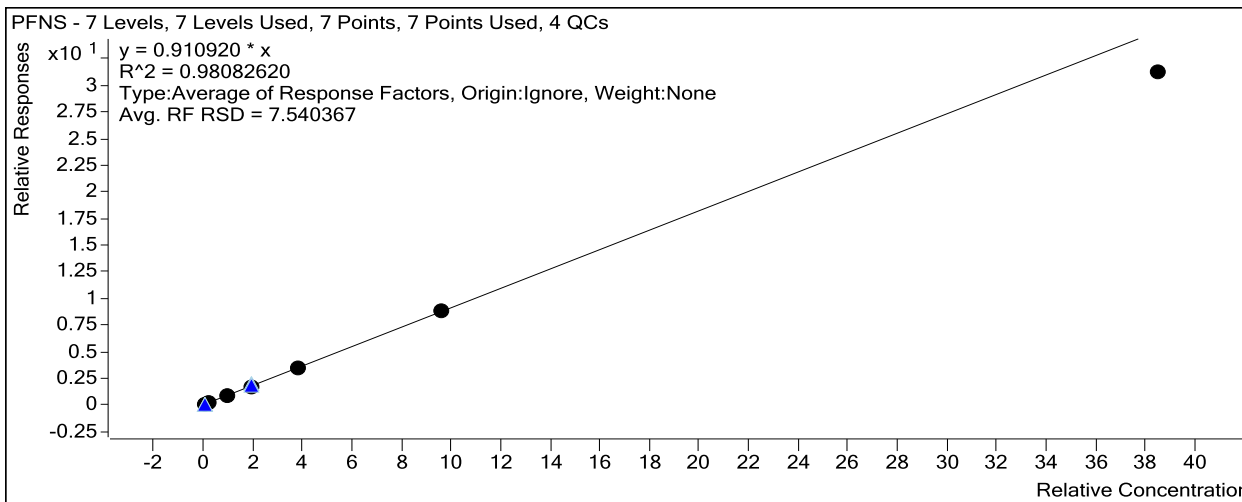
Quantitative Analysis Calibration Report



Target Compound

PFNS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1483	0.4810	1.0383
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	3497	1.2025	0.9289
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	13216	4.8100	0.8683
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	27608	9.6200	0.9146
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	52049	19.2400	0.9028
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	132165	48.1000	0.9118
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	427280	192.4000	0.8117

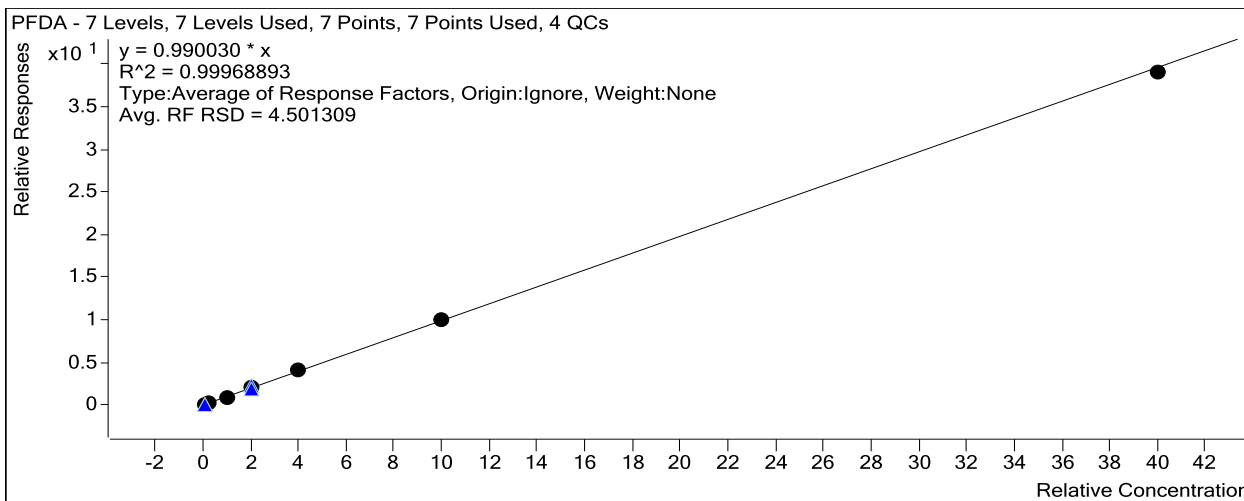


Extracted ISTD

M6PFDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	149874	5.0000	29974.7309
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	154649	5.0000	30929.8648
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	158057	5.0000	31611.3093
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	150418	5.0000	30083.5776
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	141706	5.0000	28341.2469

Quantitative Analysis Calibration Report



Extracted ISTD

d3-NMeFOSAA

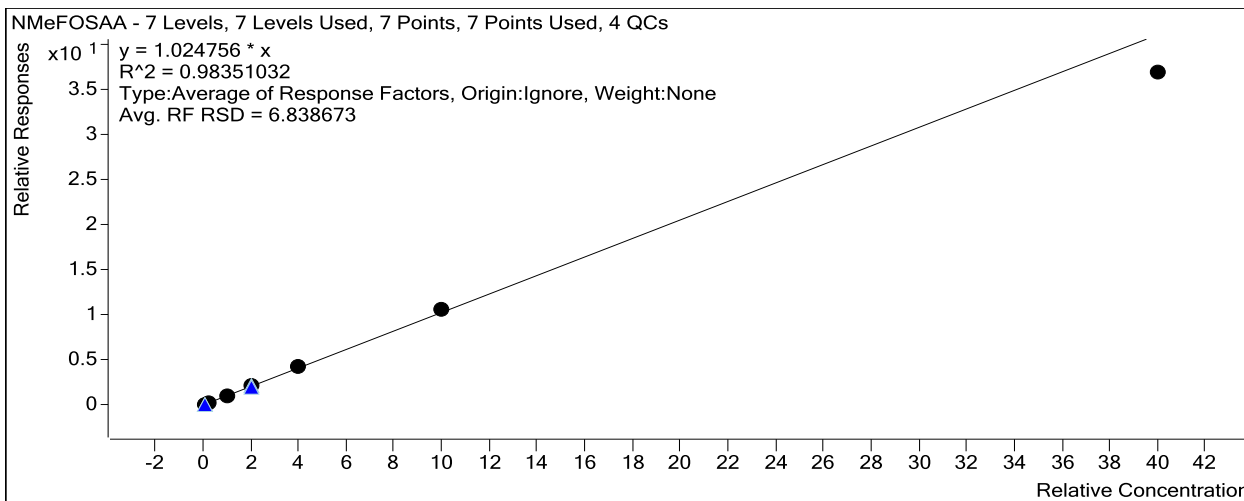
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	13041	5.0000	2608.2898
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	13302	5.0000	2660.4911
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	13884	5.0000	2776.7682
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	13179	5.0000	2635.8542
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	12607	5.0000	2521.4630
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	13431	5.0000	2686.2224
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	13317	5.0000	2663.3479

Target Compound

NMeFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1383	0.5000	1.0607
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	3185	1.2500	0.9578
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	13658	5.0000	0.9837
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	29196	10.0000	1.1076
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	54341	20.0000	1.0776
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	143003	50.0000	1.0647
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	490617	200.0000	0.9211

Quantitative Analysis Calibration Report



Extracted ISTD

M8FOSA

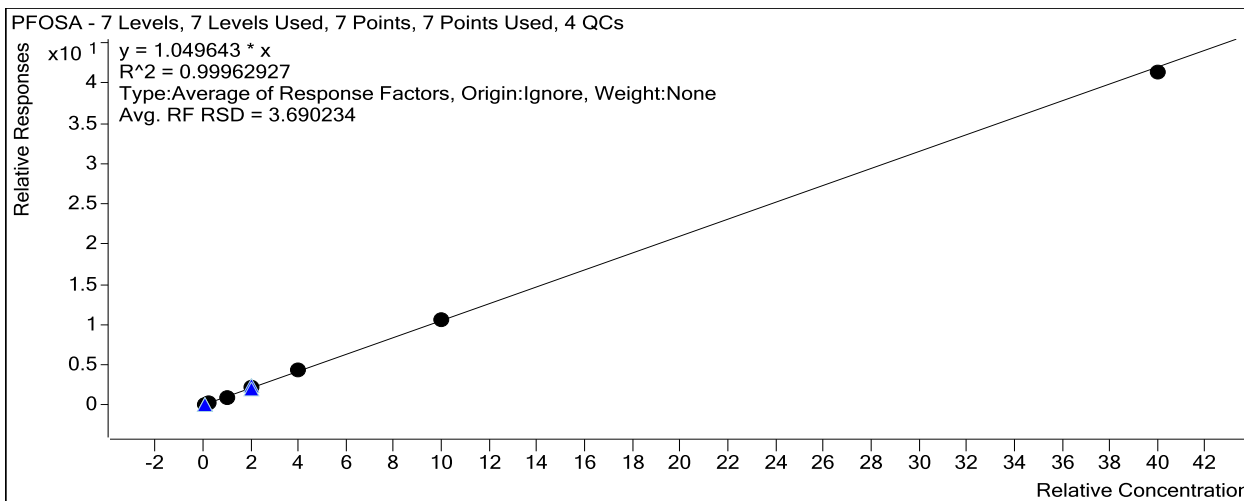
Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	40688	5.0000	8137.6003
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	41324	5.0000	8264.7884
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	43060	5.0000	8612.0468
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	42313	5.0000	8462.5747
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	39250	5.0000	7849.9981
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	40916	5.0000	8183.2488
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	38479	5.0000	7695.7996

Target Compound

PFOSA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	4361	0.5000	1.0718
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	10380	1.2500	1.0047
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	42870	5.0000	0.9956
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	91722	10.0000	1.0838
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	171612	20.0000	1.0931
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	435856	50.0000	1.0652
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	1590265	200.0000	1.0332

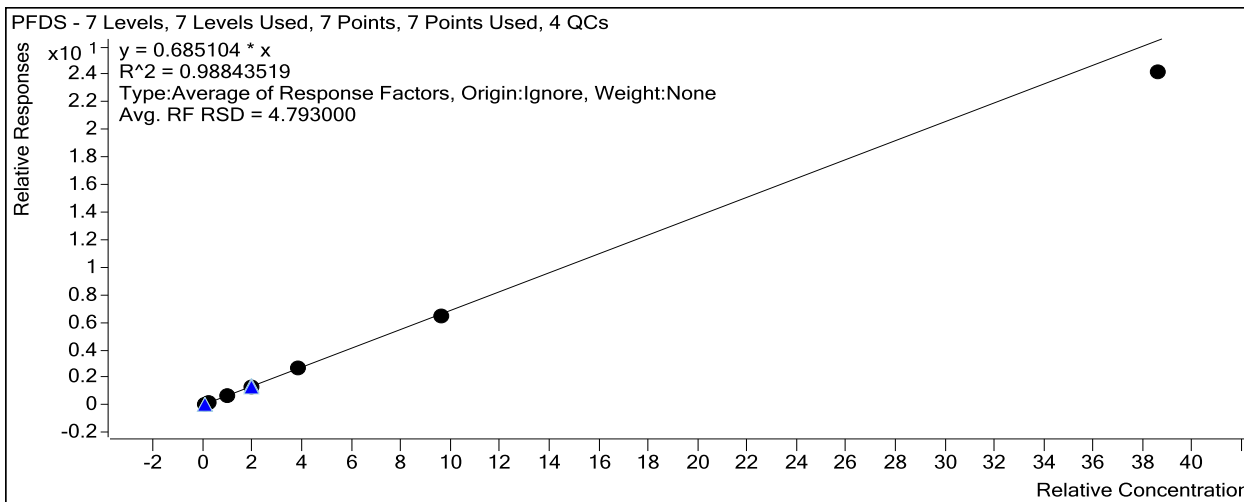
Quantitative Analysis Calibration Report



Target Compound

PFDS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1040	0.4825	0.7254
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	2654	1.2063	0.7029
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	10254	4.8250	0.6716
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	21309	9.6500	0.7037
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	40408	19.3000	0.6987
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	97057	48.2500	0.6675
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	330519	193.0000	0.6259



Extracted ISTD

d5-NEtFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	26700	5.0000	5340.0963
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	26453	5.0000	5290.6643
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	26350	5.0000	5270.0308
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	26231	5.0000	5246.2915
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	24117	5.0000	4823.4560

Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	24154	5.0000	4830.7090
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	19461	5.0000	3892.1748

Extracted ISTD

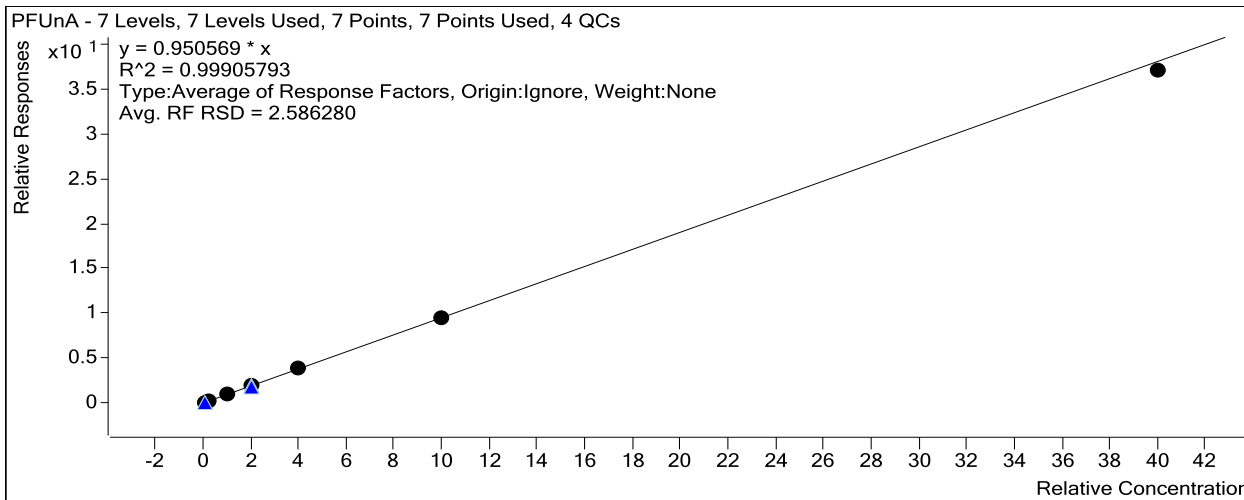
M7PFUnA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	153850	5.0000	30770.0023
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	155219	5.0000	31043.8850
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	154252	5.0000	30850.4405
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	151719	5.0000	30343.8398
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	143748	5.0000	28749.6093
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	146907	5.0000	29381.4548
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	124362	5.0000	24872.3585

Target Compound

PFUnA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	14717	0.5000	0.9566
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	36184	1.2500	0.9325
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	142893	5.0000	0.9264
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	297345	10.0000	0.9799
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	566425	20.0000	0.9851
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1392379	50.0000	0.9478
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	4605209	200.0000	0.9258

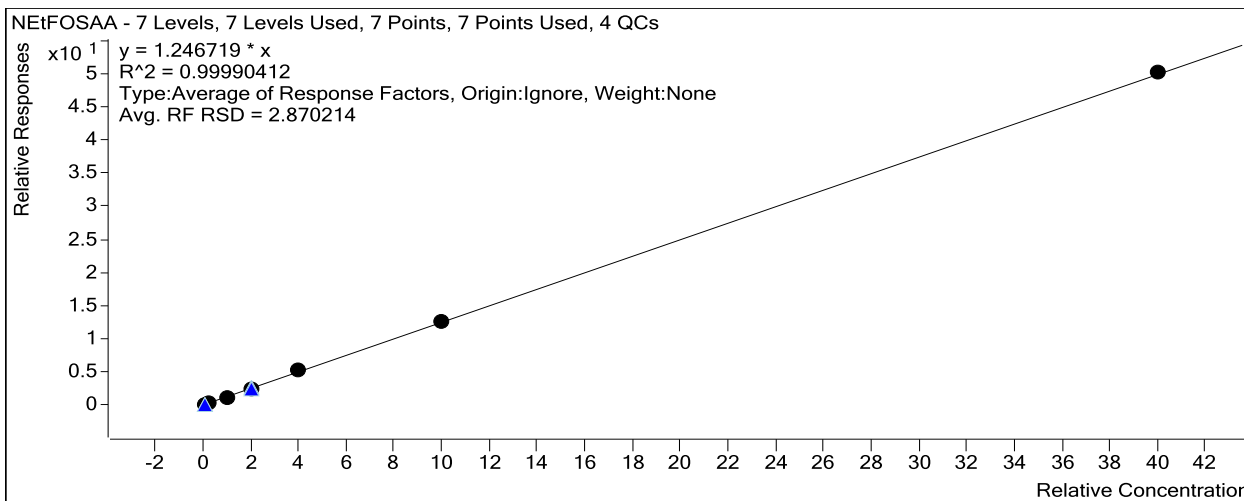


Target Compound

NETFOSAA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	3308	0.5000	1.2389
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	8051	1.2500	1.2174
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	31371	5.0000	1.1905
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	66191	10.0000	1.2617
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	125651	20.0000	1.3025
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	304533	50.0000	1.2608
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	977095	200.0000	1.2552

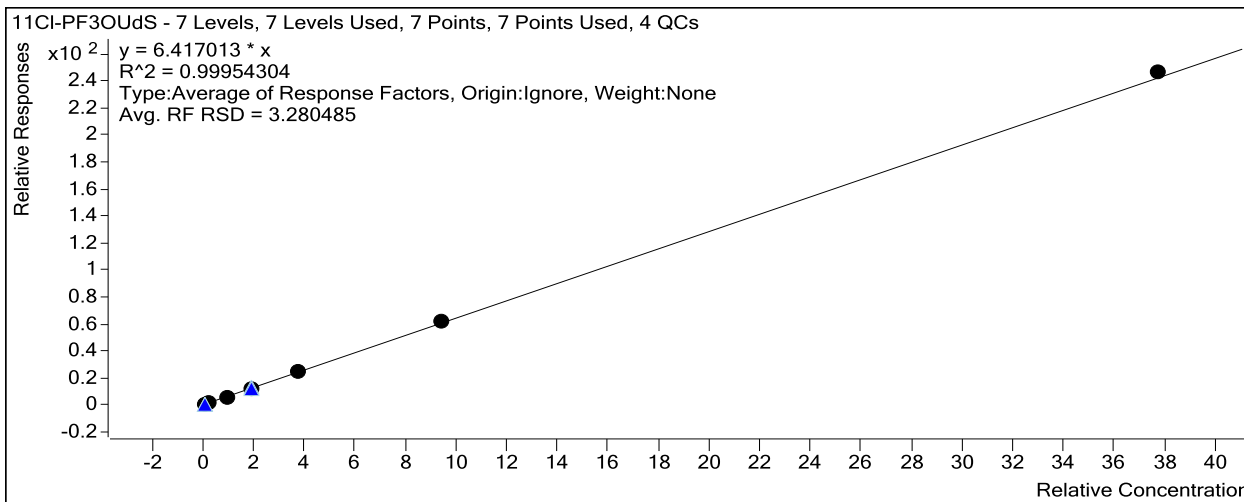
Quantitative Analysis Calibration Report



Target Compound

11CI-PF3OUdS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	8982	0.4715	6.4141
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	22302	1.1788	6.0437
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	92769	4.7150	6.2175
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	195159	9.4300	6.5955
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	372283	18.8600	6.5875
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	927103	47.1500	6.5248
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	3372692	188.6000	6.5359



Extracted ISTD

MPFD_oA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	156724	5.0000	31344.7704
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	157347	5.0000	31469.3055
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	159665	5.0000	31932.9080
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	153773	5.0000	30754.5654
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	148914	5.0000	29782.7263

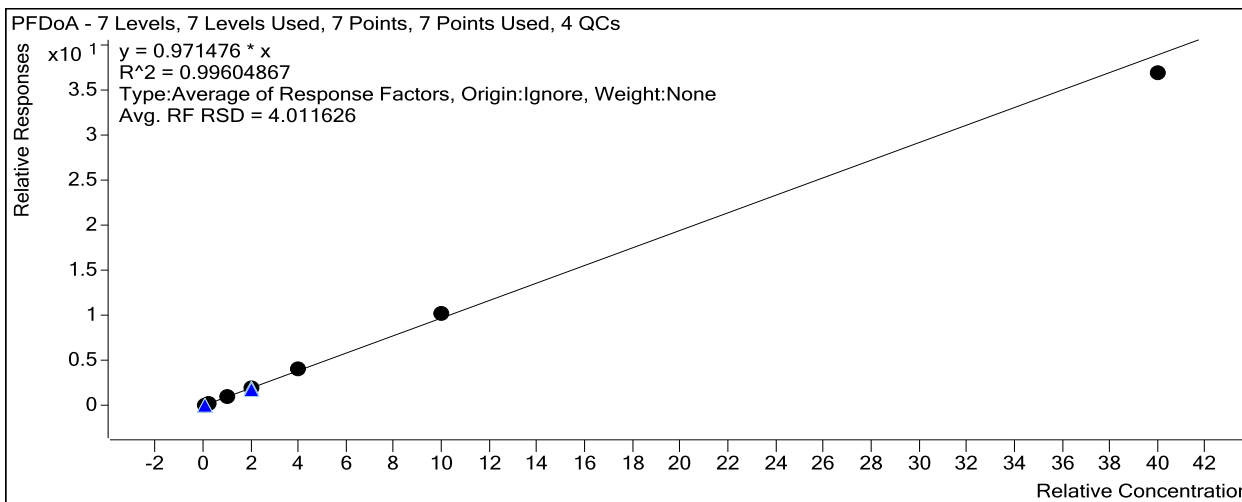
Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	149455	5.0000	29891.0278
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	143603	5.0000	28720.5850

Target Compound

PFD_oA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	15234	0.5000	0.9720
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	36778	1.2500	0.9350
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	150465	5.0000	0.9424
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	309101	10.0000	1.0051
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	601670	20.0000	1.0101
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1515764	50.0000	1.0142
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5293702	200.0000	0.9216

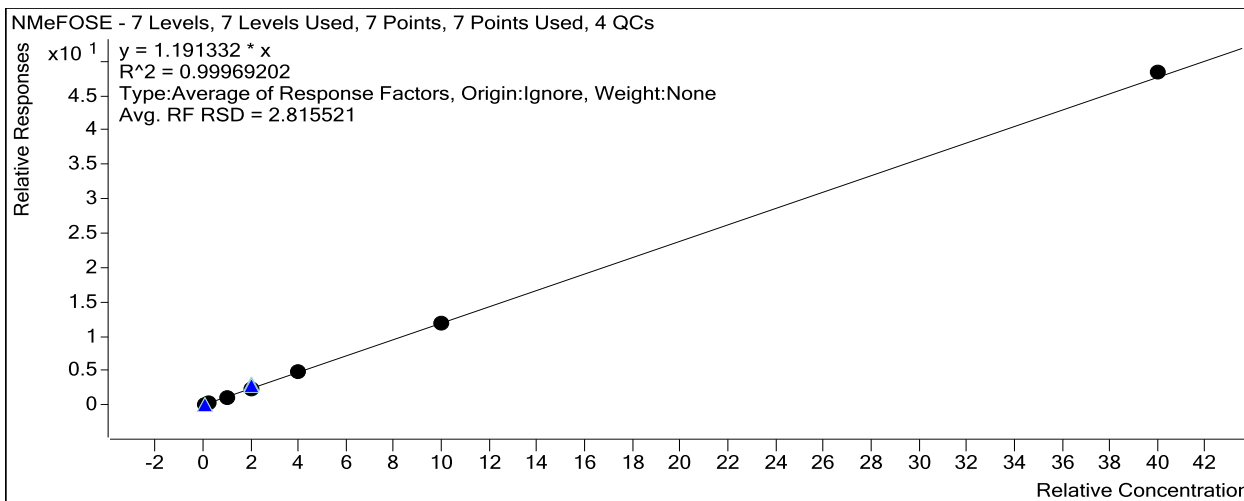


Target Compound

10:2FTS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1692	0.4820	3.1558
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	3826	1.2050	3.0249
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	15730	4.8200	3.2219
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	32984	9.6400	3.3301
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	61526	19.2800	3.4498
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	147098	48.2000	3.4319
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	463756	192.8000	3.0795

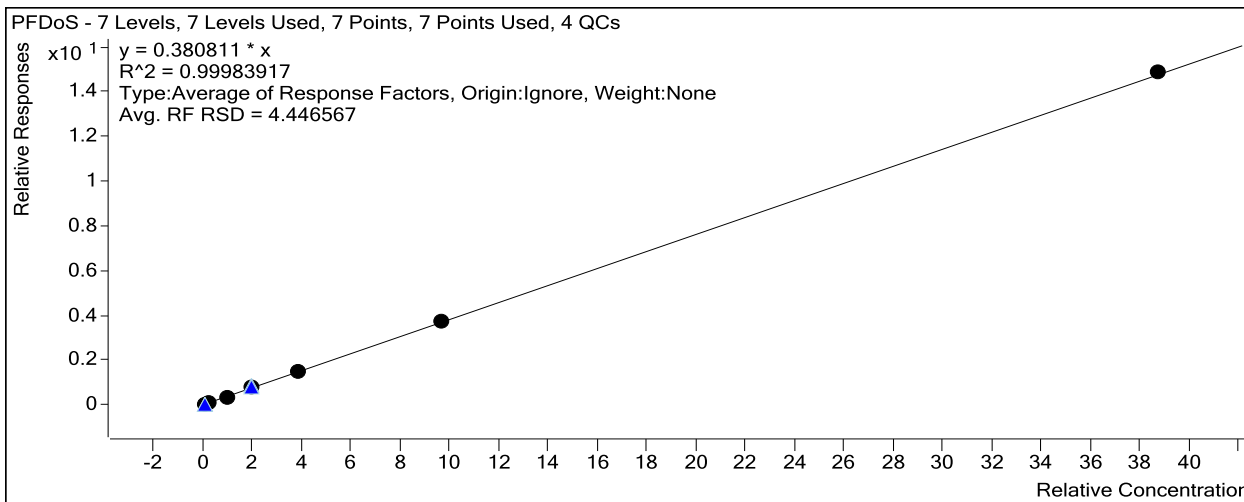
Quantitative Analysis Calibration Report



Target Compound

PFDoS

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	530	0.4840	0.3688
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	1487	1.2100	0.3925
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	5324	4.8400	0.3476
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	11985	9.6800	0.3946
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	22506	19.3600	0.3880
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	56891	48.4000	0.3901
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	203518	193.6000	0.3842



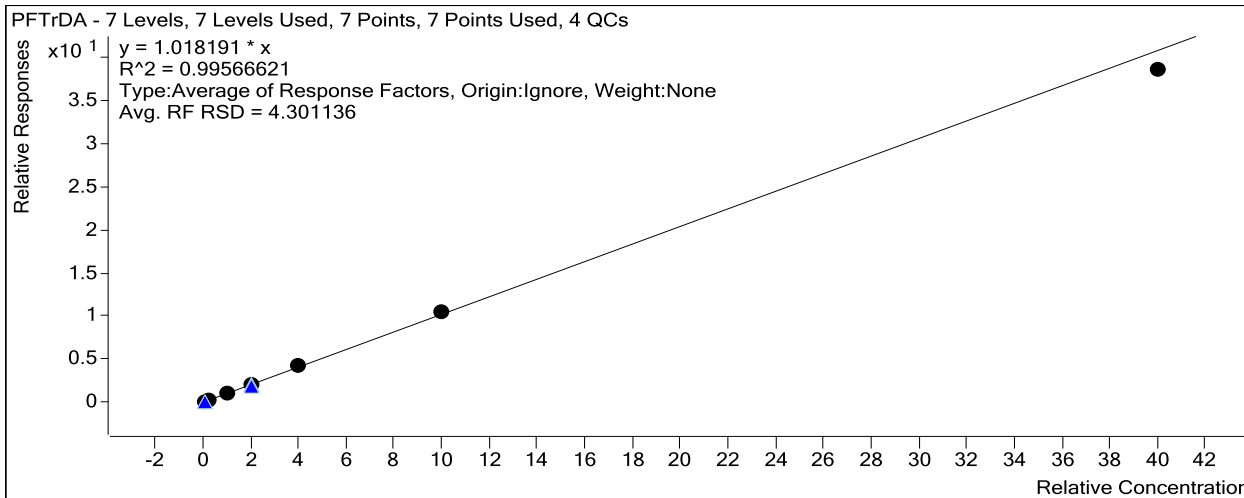
Target Compound

PFTrDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	15799	0.5000	1.0081
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	38701	1.2500	0.9838
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	157604	5.0000	0.9871
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	332038	10.0000	1.0796
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	623329	20.0000	1.0465

Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1582720	50.0000	1.0590
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5533077	200.0000	0.9633



Extracted ISTD

d9-NEtFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	13728	5.0000	2745.5992
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	14248	5.0000	2849.5144
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	14256	5.0000	2851.1991
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	14623	5.0000	2924.6668
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	13875	5.0000	2775.0384
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	14366	5.0000	2873.1792
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	13637	5.0000	2727.3961

Extracted ISTD

d-NEtFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	9962	5.0000	1992.4811
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	9959	5.0000	1991.7119
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	10295	5.0000	2059.0063
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	9882	5.0000	1976.3111
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	9695	5.0000	1938.9820
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	9421	5.0000	1884.2854
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	9491	5.0000	1898.2272

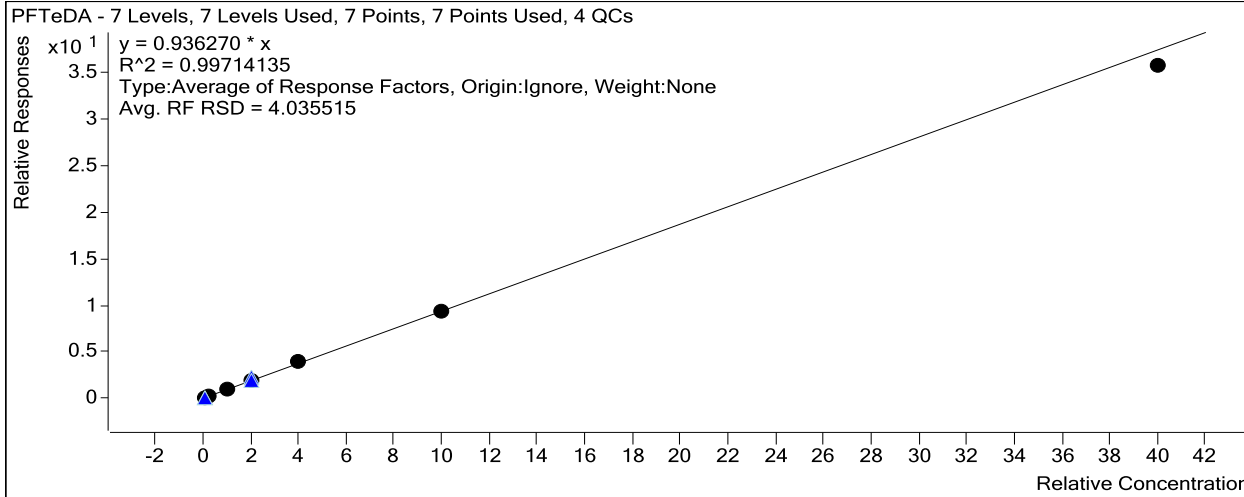
Target Compound

NEtFOSE

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	1658	0.5000	1.2078
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	3962	1.2500	1.1124
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	15711	5.0000	1.1020
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	34193	10.0000	1.1691
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	64473	20.0000	1.1617
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	161566	50.0000	1.1246
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	616665	200.0000	1.1305

Quantitative Analysis Calibration Report

J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	1629083	50.0000	0.9419
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	5927071	200.0000	0.8945



Extracted ISTD

M2PFTA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	172278	5.0000	34455.6938
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	175362	5.0000	35072.3643
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	176233	5.0000	35246.6884
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	174416	5.0000	34883.1622
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	165507	5.0000	33101.4350
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	172951	5.0000	34590.2444
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	165659	5.0000	33131.8645

Extracted ISTD

M2PFHxDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	17612	5.0000	3522.4571
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	17560	5.0000	3512.0466
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	18317	5.0000	3663.4736
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	17983	5.0000	3596.5973
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	16992	5.0000	3398.3713
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	17584	5.0000	3516.7099
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	17525	5.0000	3505.0116

Target Compound

PFHxDA

Calibration STD	Cal Type	Level	Enabled	Response	Exp Conc (ng/mL)	RF
J:\MassHunter\Data\2220506BCAL\2220506B_2.d	Calibration	1	<input checked="" type="checkbox"/>	21257	0.5000	12.0697
J:\MassHunter\Data\2220506BCAL\2220506B_3.d	Calibration	2	<input checked="" type="checkbox"/>	49031	1.2500	11.1686
J:\MassHunter\Data\2220506BCAL\2220506B_4.d	Calibration	3	<input checked="" type="checkbox"/>	194441	5.0000	10.6151
J:\MassHunter\Data\2220506BCAL\2220506B_5.d	Calibration	4	<input checked="" type="checkbox"/>	414263	10.0000	11.5182
J:\MassHunter\Data\2220506BCAL\2220506B_6.d	Calibration	5	<input checked="" type="checkbox"/>	787046	20.0000	11.5797
J:\MassHunter\Data\2220506BCAL\2220506B_7.d	Calibration	6	<input checked="" type="checkbox"/>	2036893	50.0000	11.5841
J:\MassHunter\Data\2220506BCAL\2220506B_8.d	Calibration	7	<input checked="" type="checkbox"/>	7942572	200.0000	11.3303

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/18/2022 22:03</u>	Lab File ID:	<u>2220418B_16.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738768</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	9430	10000	106	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	9370	9950	106	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	9510	10300	109	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10400	108	70	130	
9Cl-PF3ONS	ng/L	9330	9630	103	70	130	
ADONA	ng/L	9450	9670	102	70	130	
HFPO-DA	ng/L	20000	21800	109	70	130	
NEtFOSAA	ng/L	10000	10400	104	70	130	
NMeFOSAA	ng/L	10000	10800	108	70	130	
Perfluorobutanoic acid	ng/L	10000	10600	106	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9330	105	70	130	
Perfluorodecanoic acid	ng/L	10000	10600	106	70	130	
Perfluorodecane sulfonic acid	ng/L	9650	10300	107	70	130	
Perfluorododecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroheptanoic acid	ng/L	10000	10400	104	70	130	
Perfluoroheptanesulfonic acid	ng/L	9530	9880	104	70	130	
Perfluorohexanoic acid	ng/L	10000	10400	104	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9270	101	70	130	
Perfluorononanoic acid	ng/L	10000	10500	105	70	130	
Perfluorononanesulfonic acid	ng/L	9620	10300	107	70	130	
Perfluorooctanoic acid	ng/L	10000	10600	106	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9220	99	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	10500	105	70	130	
Perfluoropentanoic acid	ng/L	10000	10400	104	70	130	
Perfluoropentanesulfonic acid	ng/L	9410	10100	107	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10200	102	70	130	
Perfluorotridecanoic acid	ng/L	10000	12200	122	70	130	
Perfluoroundecanoic acid	ng/L	10000	10600	106	70	130	

FORM 7E - ORG

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/19/2022 00:46</u>	Lab File ID:	<u>2220418B_27.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738768</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	9430	9910	105	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	9370	10100	107	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	9510	10100	107	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	11300	118	70	130	
9Cl-PF3ONS	ng/L	9330	9700	104	70	130	
ADONA	ng/L	9450	9660	102	70	130	
HFPO-DA	ng/L	20000	21200	106	70	130	
NEFOSAA	ng/L	10000	10800	108	70	130	
NMeFOSAA	ng/L	10000	11000	110	70	130	
Perfluorobutanoic acid	ng/L	10000	10500	105	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9420	106	70	130	
Perfluorodecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorodecane sulfonic acid	ng/L	9650	10300	107	70	130	
Perfluorododecanoic acid	ng/L	10000	10400	104	70	130	
Perfluoroheptanoic acid	ng/L	10000	10400	104	70	130	
Perfluoroheptanesulfonic acid	ng/L	9530	9800	103	70	130	
Perfluorohexanoic acid	ng/L	10000	10400	104	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9230	101	70	130	
Perfluorononanoic acid	ng/L	10000	10500	105	70	130	
Perfluorononanesulfonic acid	ng/L	9620	10200	106	70	130	
Perfluorooctanoic acid	ng/L	10000	10500	105	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9320	100	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	10400	104	70	130	
Perfluoropentanoic acid	ng/L	10000	10600	106	70	130	
Perfluoropentanesulfonic acid	ng/L	9410	10100	107	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10300	103	70	130	
Perfluorotridecanoic acid	ng/L	10000	11800	118	70	130	
Perfluoroundecanoic acid	ng/L	10000	10500	105	70	130	

FORM 7E - ORG

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/19/2022 08:31</u>	Lab File ID:	<u>2220419A_7.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>738977</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	9430	9870	105	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	9370	9820	105	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	9510	10400	110	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10400	109	70	130	
9Cl-PF3ONS	ng/L	9330	9710	104	70	130	
ADONA	ng/L	9450	9750	103	70	130	
HFPO-DA	ng/L	20000	21400	107	70	130	
NEFOSAA	ng/L	10000	10600	106	70	130	
NMeFOSAA	ng/L	10000	10200	102	70	130	
Perfluorobutanoic acid	ng/L	10000	10700	107	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9320	105	70	130	
Perfluorodecanoic acid	ng/L	10000	10600	106	70	130	
Perfluorodecane sulfonic acid	ng/L	9650	10300	107	70	130	
Perfluorododecanoic acid	ng/L	10000	10600	106	70	130	
Perfluoroheptanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroheptanesulfonic acid	ng/L	9530	9900	104	70	130	
Perfluorohexanoic acid	ng/L	10000	10500	105	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9270	101	70	130	
Perfluorononanoic acid	ng/L	10000	10500	105	70	130	
Perfluorononanesulfonic acid	ng/L	9620	10200	106	70	130	
Perfluorooctanoic acid	ng/L	10000	10500	105	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9290	100	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	10400	104	70	130	
Perfluoropentanoic acid	ng/L	10000	10500	105	70	130	
Perfluoropentanesulfonic acid	ng/L	9410	10000	107	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10400	104	70	130	
Perfluorotridecanoic acid	ng/L	10000	12000	120	70	130	
Perfluoroundecanoic acid	ng/L	10000	10500	105	70	130	

FORM 7E - ORG

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/21/2022 13:05</u>	Lab File ID:	<u>2220421A_19.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739037</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	9430	10300	110	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	9370	10500	112	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	9510	10400	110	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10600	110	70	130	
9Cl-PF3ONS	ng/L	9330	10000	108	70	130	
ADONA	ng/L	9450	9690	102	70	130	
HFPO-DA	ng/L	20000	20300	101	70	130	
NEFOSAA	ng/L	10000	10200	102	70	130	
NMeFOSAA	ng/L	10000	10800	108	70	130	
Perfluorobutanoic acid	ng/L	10000	10400	104	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9390	106	70	130	
Perfluorodecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorodecane sulfonic acid	ng/L	9650	10300	107	70	130	
Perfluorododecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroheptanoic acid	ng/L	10000	10400	104	70	130	
Perfluoroheptanesulfonic acid	ng/L	9530	10000	105	70	130	
Perfluorohexanoic acid	ng/L	10000	10700	107	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9450	103	70	130	
Perfluorononanoic acid	ng/L	10000	10300	103	70	130	
Perfluorononanesulfonic acid	ng/L	9620	10200	106	70	130	
Perfluorooctanoic acid	ng/L	10000	10200	102	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9300	100	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	10500	105	70	130	
Perfluoropentanoic acid	ng/L	10000	10400	104	70	130	
Perfluoropentanesulfonic acid	ng/L	9410	9820	104	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10300	103	70	130	
Perfluorotridecanoic acid	ng/L	10000	10300	103	70	130	
Perfluoroundecanoic acid	ng/L	10000	10400	104	70	130	

FORM 7E - ORG

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/21/2022 16:06</u>	Lab File ID:	<u>2220421A_31.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739037</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	9430	10400	111	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	9370	10500	112	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	9510	10300	109	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10100	105	70	130	
9Cl-PF3ONS	ng/L	9330	10200	110	70	130	
ADONA	ng/L	9450	9780	104	70	130	
HFPO-DA	ng/L	20000	21200	106	70	130	
NEFOSAA	ng/L	10000	10400	104	70	130	
NMeFOSAA	ng/L	10000	10200	102	70	130	
Perfluorobutanoic acid	ng/L	10000	10500	105	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9280	105	70	130	
Perfluorodecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorodecane sulfonic acid	ng/L	9650	10500	109	70	130	
Perfluorododecanoic acid	ng/L	10000	10300	103	70	130	
Perfluoroheptanoic acid	ng/L	10000	10400	104	70	130	
Perfluoroheptanesulfonic acid	ng/L	9530	9970	105	70	130	
Perfluorohexanoic acid	ng/L	10000	10500	105	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9370	102	70	130	
Perfluorononanoic acid	ng/L	10000	10200	102	70	130	
Perfluorononanesulfonic acid	ng/L	9620	10100	105	70	130	
Perfluorooctanoic acid	ng/L	10000	10400	104	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9340	101	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	10500	105	70	130	
Perfluoropentanoic acid	ng/L	10000	10400	104	70	130	
Perfluoropentanesulfonic acid	ng/L	9410	9660	103	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10400	104	70	130	
Perfluorotridecanoic acid	ng/L	10000	10300	103	70	130	
Perfluoroundecanoic acid	ng/L	10000	10400	104	70	130	

FORM 7E - ORG

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ4</u>
Analysis Date:	<u>04/21/2022 19:04</u>	Lab File ID:	<u>2220421A_43.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>739037</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	9430	10500	111	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	9370	9820	105	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	9510	10900	114	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	11000	114	70	130	
9Cl-PF3ONS	ng/L	9330	10200	109	70	130	
ADONA	ng/L	9450	9710	103	70	130	
HFPO-DA	ng/L	20000	20100	100	70	130	
NEFOSAA	ng/L	10000	10400	104	70	130	
NMeFOSAA	ng/L	10000	10600	106	70	130	
Perfluorobutanoic acid	ng/L	10000	10500	105	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9300	105	70	130	
Perfluorodecanoic acid	ng/L	10000	10600	106	70	130	
Perfluorodecane sulfonic acid	ng/L	9650	10500	108	70	130	
Perfluorododecanoic acid	ng/L	10000	10400	104	70	130	
Perfluoroheptanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroheptanesulfonic acid	ng/L	9530	9890	104	70	130	
Perfluorohexanoic acid	ng/L	10000	10500	105	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9320	102	70	130	
Perfluorononanoic acid	ng/L	10000	10300	103	70	130	
Perfluorononanesulfonic acid	ng/L	9620	10400	108	70	130	
Perfluorooctanoic acid	ng/L	10000	10300	103	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9290	100	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	10600	106	70	130	
Perfluoropentanoic acid	ng/L	10000	10400	104	70	130	
Perfluoropentanesulfonic acid	ng/L	9410	9740	104	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10100	101	70	130	
Perfluorotridecanoic acid	ng/L	10000	10200	102	70	130	
Perfluoroundecanoic acid	ng/L	10000	10500	105	70	130	

FORM 7E - ORG

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ5</u>
Analysis Date:	<u>05/08/2022 14:58</u>	Lab File ID:	<u>2220508A_17.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>740431</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	9430	9410	100	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	9370	9800	105	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	9510	9700	102	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10600	111	70	130	
9Cl-PF3ONS	ng/L	9330	9450	101	70	130	
ADONA	ng/L	9450	9710	103	70	130	
HFPO-DA	ng/L	20000	21500	107	70	130	
NEFOSAA	ng/L	10000	10000	100	70	130	
NMeFOSAA	ng/L	10000	10700	107	70	130	
Perfluorobutanoic acid	ng/L	10000	10500	105	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9200	104	70	130	
Perfluorodecanoic acid	ng/L	10000	10200	102	70	130	
Perfluorodecane sulfonic acid	ng/L	9650	9750	101	70	130	
Perfluorododecanoic acid	ng/L	10000	10300	103	70	130	
Perfluoroheptanoic acid	ng/L	10000	10400	104	70	130	
Perfluoroheptanesulfonic acid	ng/L	9530	9830	103	70	130	
Perfluorohexanoic acid	ng/L	10000	10200	102	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9480	104	70	130	
Perfluorononanoic acid	ng/L	10000	10400	104	70	130	
Perfluorononanesulfonic acid	ng/L	9620	10100	105	70	130	
Perfluorooctanoic acid	ng/L	10000	10300	103	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9310	100	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	10500	105	70	130	
Perfluoropentanoic acid	ng/L	10000	10400	104	70	130	
Perfluoropentanesulfonic acid	ng/L	9410	9770	104	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10400	104	70	130	
Perfluorotridecanoic acid	ng/L	10000	10400	104	70	130	
Perfluoroundecanoic acid	ng/L	10000	10100	101	70	130	

FORM 7E - ORG

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ5</u>
Analysis Date:	<u>05/08/2022 16:55</u>	Lab File ID:	<u>2220508A_25.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>740431</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	9430	9660	102	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	9370	9710	104	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	9510	9560	101	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10100	105	70	130	
9Cl-PF3ONS	ng/L	9330	9580	103	70	130	
ADONA	ng/L	9450	9800	104	70	130	
HFPO-DA	ng/L	20000	20600	103	70	130	
NEFOSAA	ng/L	10000	9810	98	70	130	
NMeFOSAA	ng/L	10000	10200	102	70	130	
Perfluorobutanoic acid	ng/L	10000	10500	105	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9240	104	70	130	
Perfluorodecanoic acid	ng/L	10000	10200	102	70	130	
Perfluorodecane sulfonic acid	ng/L	9650	9800	102	70	130	
Perfluorododecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroheptanoic acid	ng/L	10000	10300	103	70	130	
Perfluoroheptanesulfonic acid	ng/L	9530	9800	103	70	130	
Perfluorohexanoic acid	ng/L	10000	10400	104	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9390	103	70	130	
Perfluorononanoic acid	ng/L	10000	10400	104	70	130	
Perfluorononanesulfonic acid	ng/L	9620	10100	105	70	130	
Perfluorooctanoic acid	ng/L	10000	10200	102	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9580	103	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	10200	102	70	130	
Perfluoropentanoic acid	ng/L	10000	10600	106	70	130	
Perfluoropentanesulfonic acid	ng/L	9410	9890	105	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10500	105	70	130	
Perfluorotridecanoic acid	ng/L	10000	10600	106	70	130	
Perfluoroundecanoic acid	ng/L	10000	10400	104	70	130	

FORM 7E - ORG

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>05/13/2022 17:14</u>	Lab File ID:	<u>2220513A_17.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>740969</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	9430	9280	98	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	9370	9960	106	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	9510	10300	108	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10300	108	70	130	
9Cl-PF3ONS	ng/L	9330	9270	99	70	130	
ADONA	ng/L	9450	9670	102	70	130	
HFPO-DA	ng/L	20000	20700	104	70	130	
NEFOSAA	ng/L	10000	10400	104	70	130	
NMeFOSAA	ng/L	10000	9740	97	70	130	
Perfluorobutanoic acid	ng/L	10000	10300	103	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9160	103	70	130	
Perfluorodecanoic acid	ng/L	10000	10000	100	70	130	
Perfluorodecane sulfonic acid	ng/L	9650	10300	107	70	130	
Perfluorododecanoic acid	ng/L	10000	10100	101	70	130	
Perfluoroheptanoic acid	ng/L	10000	10100	101	70	130	
Perfluoroheptanesulfonic acid	ng/L	9530	10000	105	70	130	
Perfluorohexanoic acid	ng/L	10000	10300	103	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9420	103	70	130	
Perfluorononanoic acid	ng/L	10000	10000	100	70	130	
Perfluorononanesulfonic acid	ng/L	9620	10200	106	70	130	
Perfluorooctanoic acid	ng/L	10000	10000	100	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9660	104	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	10700	107	70	130	
Perfluoropentanoic acid	ng/L	10000	10300	103	70	130	
Perfluoropentanesulfonic acid	ng/L	9410	9840	105	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10200	102	70	130	
Perfluorotridecanoic acid	ng/L	10000	10500	105	70	130	
Perfluoroundecanoic acid	ng/L	10000	10100	101	70	130	

FORM 7E - ORG

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>05/13/2022 19:41</u>	Lab File ID:	<u>2220513A_27.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>740969</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	9430	9100	97	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	9370	9650	103	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	9510	10200	107	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10500	109	70	130	
9Cl-PF3ONS	ng/L	9330	9120	98	70	130	
ADONA	ng/L	9450	9480	100	70	130	
HFPO-DA	ng/L	20000	22200	111	70	130	
NEFOSAA	ng/L	10000	10000	100	70	130	
NMeFOSAA	ng/L	10000	10400	104	70	130	
Perfluorobutanoic acid	ng/L	10000	10500	105	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9280	105	70	130	
Perfluorodecanoic acid	ng/L	10000	10100	101	70	130	
Perfluorodecane sulfonic acid	ng/L	9650	9830	102	70	130	
Perfluorododecanoic acid	ng/L	10000	9990	100	70	130	
Perfluoroheptanoic acid	ng/L	10000	10300	103	70	130	
Perfluoroheptanesulfonic acid	ng/L	9530	10400	109	70	130	
Perfluorohexanoic acid	ng/L	10000	9830	98	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9410	103	70	130	
Perfluorononanoic acid	ng/L	10000	10200	102	70	130	
Perfluorononanesulfonic acid	ng/L	9620	10000	104	70	130	
Perfluorooctanoic acid	ng/L	10000	9980	100	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9670	104	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	11300	113	70	130	
Perfluoropentanoic acid	ng/L	10000	10300	103	70	130	
Perfluoropentanesulfonic acid	ng/L	9410	10000	107	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10300	103	70	130	
Perfluorotridecanoic acid	ng/L	10000	10400	104	70	130	
Perfluoroundecanoic acid	ng/L	10000	10000	100	70	130	

FORM 7E - ORG

ORGANICS CALIBRATION VERIFICATION

Report No:	<u>222040645</u>	Instrument ID:	<u>QQQ3</u>
Analysis Date:	<u>05/13/2022 21:09</u>	Lab File ID:	<u>2220513A_33.d</u>
Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch:	<u>740969</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
11Cl-PF3OUdS	ng/L	9430	8880	94	70	130	
4:2 Fluorotelomersulfonic acid	ng/L	9370	10000	107	70	130	
6:2 Fluorotelomersulfonic acid	ng/L	9510	10100	106	70	130	
8:2 Fluorotelomersulfonic acid	ng/L	9600	10800	113	70	130	
9Cl-PF3ONS	ng/L	9330	9180	98	70	130	
ADONA	ng/L	9450	9330	99	70	130	
HFPO-DA	ng/L	20000	21500	107	70	130	
NEtFOSAA	ng/L	10000	10200	102	70	130	
NMeFOSAA	ng/L	10000	10200	102	70	130	
Perfluorobutanoic acid	ng/L	10000	10500	105	70	130	
Perfluorobutanesulfonic acid	ng/L	8870	9540	108	70	130	
Perfluorodecanoic acid	ng/L	10000	10200	102	70	130	
Perfluorodecane sulfonic acid	ng/L	9650	10200	106	70	130	
Perfluorododecanoic acid	ng/L	10000	10300	103	70	130	
Perfluoroheptanoic acid	ng/L	10000	10200	102	70	130	
Perfluoroheptanesulfonic acid	ng/L	9530	10700	112	70	130	
Perfluorohexanoic acid	ng/L	10000	10100	101	70	130	
Perfluorohexanesulfonic acid	ng/L	9140	9480	104	70	130	
Perfluorononanoic acid	ng/L	10000	10300	103	70	130	
Perfluorononanesulfonic acid	ng/L	9620	9980	104	70	130	
Perfluorooctanoic acid	ng/L	10000	9930	99	70	130	
Perfluorooctanesulfonic acid	ng/L	9280	9750	105	70	130	
Perfluorooctane Sulfonamide	ng/L	10000	11100	111	70	130	
Perfluoropentanoic acid	ng/L	10000	10500	105	70	130	
Perfluoropentanesulfonic acid	ng/L	9410	10400	111	70	130	
Perfluorotetradecanoic acid	ng/L	10000	10300	103	70	130	
Perfluorotridecanoic acid	ng/L	10000	10900	109	70	130	
Perfluoroundecanoic acid	ng/L	10000	10300	103	70	130	

FORM 7E - ORG

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Report No:	<u>221081365</u>	Method Blank ID:	<u>2227758</u>
Matrix:	<u>Water</u>	Instrument ID:	<u>QQQ3</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2210816B_3.d</u>
Injection Vol.:	<u>1.0</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>ADA</u>
Prep Date:	<u>08/16/21</u>	Analysis Date:	<u>08/16/21</u> Time: <u>2333</u>
Prep Batch:	<u>718820</u>	Analytical Batch:	<u>718930</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

<i>CLIENT SAMPLE ID</i>	<i>GCAL SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1. LCS2227759	2227759	2210816B_4.d	08/16/21	2348
2. LCSD2227760	2227760	2210816B_5.d	08/17/21	0003
3. WU-DECON-01	22108136501	2210816B_9.d	08/17/21	0101
4. WU-DECON-02	22108136502	2210816B_10.d	08/17/21	0116

FORM IV SV

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>221081365</u>	Client Sample ID:	<u>MB2227758</u>
Collect Date:	<u>NA</u> Time: <u>NA</u>	GCAL Sample ID:	<u>2227758</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ3</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2210816B_3.d</u>
Injection Vol.:	<u>1.0</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>ADA</u>
Prep Date:	<u>08/16/21</u>	Analysis Date:	<u>08/16/21</u> Time: <u>2333</u>
Prep Batch:	<u>718820</u>	Analytical Batch:	<u>718930</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.00	U	1.50	3.00	4.00
39108-34-4	8:2 Fluorotelomersulfonic acid	3.00	U	1.06	3.00	4.00
2991-50-6	NEtFOSAA	4.00	U	1.58	4.00	8.00
2355-31-9	NMeFOSAA	4.00	U	0.900	4.00	8.00
375-73-5	Perfluorobutanesulfonic acid	2.00	U	0.620	2.00	4.00
375-22-4	Perfluorobutanoic acid	3.50	U	1.52	3.50	4.00
335-76-2	Perfluorodecanoic acid	3.00	U	1.44	3.00	4.00
307-55-1	Perfluorododecanoic acid	3.00	U	1.30	3.00	4.00
375-85-9	Perfluoroheptanoic acid	3.00	U	1.16	3.00	4.00
355-46-4	Perfluorohexanesulfonic acid	3.00	U	1.24	3.00	4.00
307-24-4	Perfluorohexanoic acid	2.00	U	0.940	2.00	4.00
375-95-1	Perfluorononanoic acid	2.00	U	0.980	2.00	4.00
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	0.760	2.00	4.00
335-67-1	Perfluorooctanoic acid	2.00	U	0.840	2.00	4.00
2706-90-3	Perfluoropentanoic acid	2.00	U	0.880	2.00	4.00
376-06-7	Perfluorotetradecanoic acid	3.00	U	1.14	3.00	4.00
72629-94-8	Perfluorotridecanoic acid	3.00	U	1.23	3.00	4.00
2058-94-8	Perfluoroundecanoic acid	3.00	U	1.24	3.00	4.00

WATER SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 221081365
 Prep Method: PFAS ID QSM B15 Prep Prep Batch: 718820
 Analytical Method: PFAS Isotope Dilution QSM B15 Analytical Batch: 718930

GCAL QC ID: **2227759**

ANALYTE	UNITS	SPIKE ADDED	SAMPLE RESULT	LCS RESULT	LCS % REC	#	QC LIMITS
6:2 Fluorotelomersulfonic acid	ng/L	76.1	0	98.3	129		64 - 140
8:2 Fluorotelomersulfonic acid	ng/L	76.8	0	97.6	127		67 - 138
NEtFOSAA	ng/L	80	0	97.3	122		61 - 135
NMeFOSAA	ng/L	80	0	102	128		65 - 136
Perfluorobutanesulfonic acid	ng/L	71	0	88.5	125		72 - 130
Perfluorobutanoic acid	ng/L	80	0	98.1	123		73 - 129
Perfluorodecanoic acid	ng/L	80	0	96.6	121		71 - 129
Perfluorododecanoic acid	ng/L	80	0	99.5	124		72 - 134
Perfluoroheptanoic acid	ng/L	80	0	97.7	122		72 - 130
Perfluorohexanesulfonic acid	ng/L	73.1	0	88.2	121		68 - 131
Perfluorohexanoic acid	ng/L	80	0	95.9	120		72 - 129
Perfluorononanoic acid	ng/L	80	0	97.5	122		69 - 130
Perfluorooctanesulfonic acid	ng/L	74.2	0	90.3	122		65 - 140
Perfluorooctanoic acid	ng/L	80	0	97.2	121		71 - 133
Perfluoropentanoic acid	ng/L	80	0	97.9	122		72 - 129
Perfluorotetradecanoic acid	ng/L	80	0	99.7	125		71 - 132
Perfluorotridecanoic acid	ng/L	80	0	97.4	122		65 - 144
Perfluoroundecanoic acid	ng/L	80	0	99.2	124		69 - 133

RPD: 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-1

3C
WATER SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 221081365
 Prep Method: PFAS ID QSM B15 Prep Prep Batch: 718820
 Analytical Method: PFAS Isotope Dilution QSM B15 Analytical Batch: 718930

GCAL QC ID: 2227760

ANALYTE	UNITS	SPIKE ADDED	LCSD RESULT	LCSD % REC	#	% RPD	#	QC LIMITS	
								REC	RPD
6:2 Fluorotelomersulfonic acid	ng/L	76.1	90	118		9		64 - 140	0 - 30
8:2 Fluorotelomersulfonic acid	ng/L	76.8	95.9	125		2		67 - 138	0 - 30
NEtFOSAA	ng/L	80	92.2	115		5		61 - 135	0 - 30
NMeFOSAA	ng/L	80	96.4	120		6		65 - 136	0 - 30
Perfluorobutanesulfonic acid	ng/L	71	83.3	117		6		72 - 130	0 - 30
Perfluorobutanoic acid	ng/L	80	94	117		4		73 - 129	0 - 30
Perfluorodecanoic acid	ng/L	80	94.7	118		2		71 - 129	0 - 30
Perfluorododecanoic acid	ng/L	80	95.4	119		4		72 - 134	0 - 30
Perfluoroheptanoic acid	ng/L	80	93.1	116		5		72 - 130	0 - 30
Perfluorohexanesulfonic acid	ng/L	73.1	83.7	114		5		68 - 131	0 - 30
Perfluorohexanoic acid	ng/L	80	94.1	118		2		72 - 129	0 - 30
Perfluorononanoic acid	ng/L	80	92.8	116		5		69 - 130	0 - 30
Perfluorooctanesulfonic acid	ng/L	74.2	84.8	114		6		65 - 140	0 - 30
Perfluorooctanoic acid	ng/L	80	92.6	116		5		71 - 133	0 - 30
Perfluoropentanoic acid	ng/L	80	96.4	121		2		72 - 129	0 - 30
Perfluorotetradecanoic acid	ng/L	80	94.4	118		5		71 - 132	0 - 30
Perfluorotridecanoic acid	ng/L	80	93.7	117		4		65 - 144	0 - 30
Perfluoroundecanoic acid	ng/L	80	94.2	118		5		69 - 133	0 - 30

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-1

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Report No:	<u>222040903</u>	Method Blank ID:	<u>2336115</u>
Matrix:	<u>Water</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2220423A_11.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/22/22</u>	Analysis Date:	<u>04/23/22</u> Time: <u>1846</u>
Prep Batch:	<u>739042</u>	Analytical Batch:	<u>739271</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

<i>CLIENT SAMPLE ID</i>	<i>GCAL SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>	
1.	LCS2336116	2336116	2220423A_12.d	04/23/22	1901
2.	LCSD2336117	2336117	2220423A_13.d	04/23/22	1916
3.	AOI02-01-GW-MS	22204090304	2220423A_14.d	04/23/22	1931
4.	AOI02-01-GW-MSD	22204090305	2220423A_15.d	04/23/22	1946
5.	AOI01-01-GW	22204090301	2220423A_18.d	04/23/22	2030
6.	AOI01-02-GW	22204090302	2220423A_19.d	04/23/22	2045
7.	AOI02-01-GW	22204090303	2220423A_20.d	04/23/22	2100
8.	AOI02-02-GW	22204090307	2220423A_21.d	04/23/22	2115
9.	AOI02-03-GW	22204090308	2220423A_22.d	04/23/22	2129
10.	AOI02-04-GW	22204090309	2220423A_23.d	04/23/22	2144
11.	WU-ERB-08	22204090311	2220423A_25.d	04/23/22	2214

FORM IV SV

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Report No:	<u>222040903</u>	Method Blank ID:	<u>2337443</u>
Matrix:	<u>Water</u>	Instrument ID:	<u>QQQ3</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2220425B_13.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/25/22</u>	Analysis Date:	<u>04/25/22</u> Time: <u>2310</u>
Prep Batch:	<u>739295</u>	Analytical Batch:	<u>739406</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

<i>CLIENT SAMPLE ID</i>	<i>GCAL SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1. LCS2337444	2337444	2220425B_14.d	04/25/22	2325
2. LCSD2337445	2337445	2220425B_15.d	04/25/22	2340
3. AOI02-01-GW-D	22204090306	2220425B_16.d	04/25/22	2354
4. WU-ERB-07	22204090310	2220425B_17.d	04/26/22	0009

FORM IV SV

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040903</u>	Client Sample ID:	<u>MB2336115</u>
Collect Date:	<u>NA</u> Time: <u>NA</u>	GCAL Sample ID:	<u>2336115</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2220423A_11.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/22/22</u>	Analysis Date:	<u>04/23/22</u> Time: <u>1846</u>
Prep Batch:	<u>739042</u>	Analytical Batch:	<u>739271</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.00	U	1.50	3.00	4.00
39108-34-4	8:2 Fluorotelomersulfonic acid	3.00	U	1.06	3.00	4.00
2991-50-6	NEtFOSAA	4.00	U	1.58	4.00	8.00
2355-31-9	NMeFOSAA	4.00	U	0.900	4.00	8.00
375-73-5	Perfluorobutanesulfonic acid	2.00	U	0.620	2.00	4.00
375-22-4	Perfluorobutanoic acid	3.50	U	1.52	3.50	4.00
335-76-2	Perfluorodecanoic acid	3.00	U	1.44	3.00	4.00
307-55-1	Perfluorododecanoic acid	3.00	U	1.30	3.00	4.00
375-85-9	Perfluoroheptanoic acid	3.00	U	1.16	3.00	4.00
355-46-4	Perfluorohexanesulfonic acid	3.00	U	1.24	3.00	4.00
307-24-4	Perfluorohexanoic acid	2.00	U	0.940	2.00	4.00
375-95-1	Perfluorononanoic acid	2.00	U	0.980	2.00	4.00
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	0.760	2.00	4.00
335-67-1	Perfluorooctanoic acid	2.00	U	0.840	2.00	4.00
2706-90-3	Perfluoropentanoic acid	2.00	U	0.880	2.00	4.00
376-06-7	Perfluorotetradecanoic acid	3.00	U	1.14	3.00	4.00
72629-94-8	Perfluorotridecanoic acid	3.00	U	1.23	3.00	4.00
2058-94-8	Perfluoroundecanoic acid	3.00	U	1.24	3.00	4.00

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040903</u>	Client Sample ID:	<u>MB2337443</u>
Collect Date:	<u>NA</u> Time: <u>NA</u>	GCAL Sample ID:	<u>2337443</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ3</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2220425B_13.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/25/22</u>	Analysis Date:	<u>04/25/22</u> Time: <u>2310</u>
Prep Batch:	<u>739295</u>	Analytical Batch:	<u>739406</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.00	U	1.50	3.00	4.00
39108-34-4	8:2 Fluorotelomersulfonic acid	3.00	U	1.06	3.00	4.00
2991-50-6	NEtFOSAA	4.00	U	1.58	4.00	8.00
2355-31-9	NMeFOSAA	4.00	U	0.900	4.00	8.00
375-73-5	Perfluorobutanesulfonic acid	2.00	U	0.620	2.00	4.00
375-22-4	Perfluorobutanoic acid	3.50	U	1.52	3.50	4.00
335-76-2	Perfluorodecanoic acid	3.00	U	1.44	3.00	4.00
307-55-1	Perfluorododecanoic acid	3.00	U	1.30	3.00	4.00
375-85-9	Perfluoroheptanoic acid	3.00	U	1.16	3.00	4.00
355-46-4	Perfluorohexanesulfonic acid	3.00	U	1.24	3.00	4.00
307-24-4	Perfluorohexanoic acid	2.00	U	0.940	2.00	4.00
375-95-1	Perfluorononanoic acid	2.00	U	0.980	2.00	4.00
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	0.760	2.00	4.00
335-67-1	Perfluorooctanoic acid	2.00	U	0.840	2.00	4.00
2706-90-3	Perfluoropentanoic acid	2.00	U	0.880	2.00	4.00
376-06-7	Perfluorotetradecanoic acid	3.00	U	1.14	3.00	4.00
72629-94-8	Perfluorotridecanoic acid	3.00	U	1.23	3.00	4.00
2058-94-8	Perfluoroundecanoic acid	3.00	U	1.24	3.00	4.00

3C
WATER SEMIVOLATILE MS/MSD RECOVERY

Report No: 222040903
 Prep Method: PFAS ID QSM B15 Prep
 Analytical Method: PFAS Isotope Dilution QSM B15

Parent Sample ID: AOI02-01-GW
 Prep Batch: 739042
 Analytical Batch: 739271

GCAL QC ID: 22204090304

ANALYTE	UNITS	SPIKE ADDED	SAMPLE RESULT	MS RESULT	MS % REC	#	QC LIMITS
6:2 Fluorotelomersulfonic acid	ng/L	77.3	.551	90.4	116		64 - 140
8:2 Fluorotelomersulfonic acid	ng/L	78	.048	93.7	120		67 - 138
NEtFOSAA	ng/L	81.3	.049	96.6	119		61 - 135
NMeFOSAA	ng/L	81.3	.18	94.6	116		65 - 136
Perfluorobutanesulfonic acid	ng/L	72.1	8	93.1	118		72 - 130
Perfluorobutanoic acid	ng/L	81.3	22.5	116	115		73 - 129
Perfluorodecanoic acid	ng/L	81.3	.352	94.7	116		71 - 129
Perfluorododecanoic acid	ng/L	81.3	.049	95.2	117		72 - 134
Perfluoroheptanoic acid	ng/L	81.3	13.3	106	114		72 - 130
Perfluorohexanesulfonic acid	ng/L	74.3	39.7	122	111		68 - 131
Perfluorohexanoic acid	ng/L	81.3	27.2	122	116		72 - 129
Perfluorononanoic acid	ng/L	81.3	2.71	95.2	114		69 - 130
Perfluorooctanesulfonic acid	ng/L	75.4	31.4	114	110		65 - 140
Perfluorooctanoic acid	ng/L	81.3	13.3	106	114		71 - 133
Perfluoropentanoic acid	ng/L	81.3	35.5	129	115		72 - 129
Perfluorotetradecanoic acid	ng/L	81.3	.053	96	118		71 - 132
Perfluorotridecanoic acid	ng/L	81.3	.06	94.7	116		65 - 144
Perfluoroundecanoic acid	ng/L	81.3	.053	93.3	115		69 - 133

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-1

3C
WATER SEMIVOLATILE MS/MSD RECOVERY

Report No: 222040903
 Prep Method: PFAS ID QSM B15 Prep
 Analytical Method: PFAS Isotope Dilution QSM B15

Parent Sample ID: AOI02-01-GW
 Prep Batch: 739042
 Analytical Batch: 739271

GCAL QC ID: 22204090305

ANALYTE	UNITS	SPIKE ADDED	MSD RESULT	MSD % REC	#	% RPD	#	QC LIMITS	
								REC	RPD
6:2 Fluorotelomersulfonic acid	ng/L	76.1	72.8	95		22		64 - 140	0 - 30
8:2 Fluorotelomersulfonic acid	ng/L	76.8	74.9	97		22		67 - 138	0 - 30
NEtFOSAA	ng/L	80	75.5	94		24		61 - 135	0 - 30
NMeFOSAA	ng/L	80	75.4	94		23		65 - 136	0 - 30
Perfluorobutanesulfonic acid	ng/L	71	76.5	97		20		72 - 130	0 - 30
Perfluorobutanoic acid	ng/L	80	98.3	95		16		73 - 129	0 - 30
Perfluorodecanoic acid	ng/L	80	76.2	95		22		71 - 129	0 - 30
Perfluorododecanoic acid	ng/L	80	75.4	94		23		72 - 134	0 - 30
Perfluoroheptanoic acid	ng/L	80	88.7	94		18		72 - 130	0 - 30
Perfluorohexanesulfonic acid	ng/L	73.1	106	90		15		68 - 131	0 - 30
Perfluorohexanoic acid	ng/L	80	101	92		19		72 - 129	0 - 30
Perfluorononanoic acid	ng/L	80	77.4	93		21		69 - 130	0 - 30
Perfluorooctanesulfonic acid	ng/L	74.2	97.9	89		15		65 - 140	0 - 30
Perfluorooctanoic acid	ng/L	80	88.7	94		18		71 - 133	0 - 30
Perfluoropentanoic acid	ng/L	80	110	93		16		72 - 129	0 - 30
Perfluorotetradecanoic acid	ng/L	80	77.4	97		21		71 - 132	0 - 30
Perfluorotridecanoic acid	ng/L	80	74.6	93		24		65 - 144	0 - 30
Perfluoroundecanoic acid	ng/L	80	76.6	96		20		69 - 133	0 - 30

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-1

WATER SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040903
 Prep Method: PFAS ID QSM B15 Prep Prep Batch: 739042
 Analytical Method: PFAS Isotope Dilution QSM B15 Analytical Batch: 739271

GCAL QC ID: 2336116

ANALYTE	UNITS	SPIKE ADDED	SAMPLE RESULT	LCS RESULT	LCS % REC	#	QC LIMITS
6:2 Fluorotelomersulfonic acid	ng/L	76.1	0	89	117		64 - 140
8:2 Fluorotelomersulfonic acid	ng/L	76.8	0	86.8	113		67 - 138
NEtFOSAA	ng/L	80	0	92.7	116		61 - 135
NMeFOSAA	ng/L	80	0	88.4	110		65 - 136
Perfluorobutanesulfonic acid	ng/L	71	0	80.8	114		72 - 130
Perfluorobutanoic acid	ng/L	80	0	90.9	114		73 - 129
Perfluorodecanoic acid	ng/L	80	0	89.4	112		71 - 129
Perfluorododecanoic acid	ng/L	80	0	90.8	114		72 - 134
Perfluoroheptanoic acid	ng/L	80	0	90.6	113		72 - 130
Perfluorohexanesulfonic acid	ng/L	73.1	0	81.8	112		68 - 131
Perfluorohexanoic acid	ng/L	80	0	91.6	114		72 - 129
Perfluorononanoic acid	ng/L	80	0	91.2	114		69 - 130
Perfluorooctanesulfonic acid	ng/L	74.2	0	84.5	114		65 - 140
Perfluorooctanoic acid	ng/L	80	0	89.8	112		71 - 133
Perfluoropentanoic acid	ng/L	80	0	93.2	116		72 - 129
Perfluorotetradecanoic acid	ng/L	80	0	91.1	114		71 - 132
Perfluorotridecanoic acid	ng/L	80	0	89.8	112		65 - 144
Perfluoroundecanoic acid	ng/L	80	0	91.7	115		69 - 133

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-1

WATER SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040903
 Prep Method: PFAS ID QSM B15 Prep Prep Batch: 739042
 Analytical Method: PFAS Isotope Dilution QSM B15 Analytical Batch: 739271

GCAL QC ID: 2336117

ANALYTE	UNITS	SPIKE ADDED	LCSD RESULT	LCSD % REC	#	% RPD	#	QC LIMITS	
								REC	RPD
6:2 Fluorotelomersulfonic acid	ng/L	76.1	85.7	113		4		64 - 140	0 - 30
8:2 Fluorotelomersulfonic acid	ng/L	76.8	93.3	121		7		67 - 138	0 - 30
NEtFOSAA	ng/L	80	91.6	115		1		61 - 135	0 - 30
NMeFOSAA	ng/L	80	94.5	118		7		65 - 136	0 - 30
Perfluorobutanesulfonic acid	ng/L	71	81.6	115		.9		72 - 130	0 - 30
Perfluorobutanoic acid	ng/L	80	91.1	114		.2		73 - 129	0 - 30
Perfluorodecanoic acid	ng/L	80	90.6	113		1		71 - 129	0 - 30
Perfluorododecanoic acid	ng/L	80	89.6	112		1		72 - 134	0 - 30
Perfluoroheptanoic acid	ng/L	80	89.8	112		.9		72 - 130	0 - 30
Perfluorohexanesulfonic acid	ng/L	73.1	81.4	111		.4		68 - 131	0 - 30
Perfluorohexanoic acid	ng/L	80	91.4	114		.2		72 - 129	0 - 30
Perfluorononanoic acid	ng/L	80	91	114		.1		69 - 130	0 - 30
Perfluorooctanesulfonic acid	ng/L	74.2	83.1	112		2		65 - 140	0 - 30
Perfluorooctanoic acid	ng/L	80	90.7	113		1		71 - 133	0 - 30
Perfluoropentanoic acid	ng/L	80	92	115		1		72 - 129	0 - 30
Perfluorotetradecanoic acid	ng/L	80	90.2	113		1		71 - 132	0 - 30
Perfluorotridecanoic acid	ng/L	80	91.9	115		2		65 - 144	0 - 30
Perfluoroundecanoic acid	ng/L	80	90.9	114		.8		69 - 133	0 - 30

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-1

WATER SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040903
 Prep Method: PFAS ID QSM B15 Prep Prep Batch: 739295
 Analytical Method: PFAS Isotope Dilution QSM B15 Analytical Batch: 739406

GCAL QC ID: 2337444

ANALYTE	UNITS	SPIKE ADDED	SAMPLE RESULT	LCS RESULT	LCS % REC	#	QC LIMITS
6:2 Fluorotelomersulfonic acid	ng/L	76.1	0	82.2	108		64 - 140
8:2 Fluorotelomersulfonic acid	ng/L	76.8	0	83.6	109		67 - 138
NEtFOSAA	ng/L	80	0	81.5	102		61 - 135
NMeFOSAA	ng/L	80	0	84.5	106		65 - 136
Perfluorobutanesulfonic acid	ng/L	71	0	72.6	102		72 - 130
Perfluorobutanoic acid	ng/L	80	0	83.2	104		73 - 129
Perfluorodecanoic acid	ng/L	80	0	82.6	103		71 - 129
Perfluorododecanoic acid	ng/L	80	0	81.4	102		72 - 134
Perfluoroheptanoic acid	ng/L	80	0	81.5	102		72 - 130
Perfluorohexanesulfonic acid	ng/L	73.1	0	75.6	103		68 - 131
Perfluorohexanoic acid	ng/L	80	0	82.4	103		72 - 129
Perfluorononanoic acid	ng/L	80	0	81.7	102		69 - 130
Perfluorooctanesulfonic acid	ng/L	74.2	0	76.5	103		65 - 140
Perfluorooctanoic acid	ng/L	80	0	83.4	104		71 - 133
Perfluoropentanoic acid	ng/L	80	0	82.4	103		72 - 129
Perfluorotetradecanoic acid	ng/L	80	0	81.9	102		71 - 132
Perfluorotridecanoic acid	ng/L	80	0	80.6	101		65 - 144
Perfluoroundecanoic acid	ng/L	80	0	82.2	103		69 - 133

RPD: 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-1

3C
WATER SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040903
 Prep Method: PFAS ID QSM B15 Prep
 Analytical Method: PFAS Isotope Dilution QSM B15

Prep Batch: 739295
 Analytical Batch: 739406

GCAL QC ID: 2337445

ANALYTE	UNITS	SPIKE ADDED	LCSD RESULT	LCSD % REC	#	% RPD	#	QC LIMITS	
								REC	RPD
6:2 Fluorotelomersulfonic acid	ng/L	76.1	82.5	109		.4		64 - 140	0 - 30
8:2 Fluorotelomersulfonic acid	ng/L	76.8	84.7	110		1		67 - 138	0 - 30
NEtFOSAA	ng/L	80	83.4	104		2		61 - 135	0 - 30
NMeFOSAA	ng/L	80	85	106		.6		65 - 136	0 - 30
Perfluorobutanesulfonic acid	ng/L	71	74.7	105		3		72 - 130	0 - 30
Perfluorobutanoic acid	ng/L	80	84.8	106		2		73 - 129	0 - 30
Perfluorodecanoic acid	ng/L	80	82	102		.7		71 - 129	0 - 30
Perfluorododecanoic acid	ng/L	80	82.8	104		2		72 - 134	0 - 30
Perfluoroheptanoic acid	ng/L	80	82.1	103		.6		72 - 130	0 - 30
Perfluorohexanesulfonic acid	ng/L	73.1	75.5	103		.1		68 - 131	0 - 30
Perfluorohexanoic acid	ng/L	80	82.7	103		.4		72 - 129	0 - 30
Perfluorononanoic acid	ng/L	80	83.1	104		2		69 - 130	0 - 30
Perfluorooctanesulfonic acid	ng/L	74.2	76.7	103		.3		65 - 140	0 - 30
Perfluorooctanoic acid	ng/L	80	83.3	104		.2		71 - 133	0 - 30
Perfluoropentanoic acid	ng/L	80	82.8	103		.4		72 - 129	0 - 30
Perfluorotetradecanoic acid	ng/L	80	82.7	103		.9		71 - 132	0 - 30
Perfluorotridecanoic acid	ng/L	80	83.7	105		4		65 - 144	0 - 30
Perfluoroundecanoic acid	ng/L	80	83.3	104		1		69 - 133	0 - 30

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-1

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Report No:	<u>222040507</u>	Method Blank ID:	<u>2331063</u>
Matrix:	<u>Solid</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5</u> g	Lab File ID:	<u>2220413B_3.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/12/22</u>	Analysis Date:	<u>04/13/22</u> Time: <u>2046</u>
Prep Batch:	<u>738250</u>	Analytical Batch:	<u>738448</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

<i>CLIENT SAMPLE ID</i>	<i>GCAL SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1. LCS2331064	2331064	2220413B_4.d	04/13/22	2101
2. LCSD2331065	2331065	2220413B_5.d	04/13/22	2115
3. AOI01-01-SB-0.0-2.0	22204050701	2220415B_3.d	04/15/22	2138
4. AOI01-01-SB-0.0-2.0-MS	22204050708	2220415B_4.d	04/15/22	2153
5. AOI01-01-SB-0.0-2.0-MSD	22204050709	2220415B_5.d	04/15/22	2208

FORM IV SV

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Report No:	<u>222040507</u>	Method Blank ID:	<u>2332013</u>
Matrix:	<u>Solid</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5</u> g	Lab File ID:	<u>2220415C_3.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/13/22</u>	Analysis Date:	<u>04/16/22</u> Time: <u>0549</u>
Prep Batch:	<u>738397</u>	Analytical Batch:	<u>738661</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

<i>CLIENT SAMPLE ID</i>	<i>GCAL SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1. LCS2332014	2332014	2220415C_4.d	04/16/22	0604
2. LCSD2332015	2332015	2220415C_5.d	04/16/22	0619
3. AOI02-02-SB-0.0-2.0	22204050710	2220415C_7.d	04/16/22	0648
4. AOI01-01-SB-37.0-39.0	22204050711	2220415C_8.d	04/16/22	0703
5. AOI01-01-SB-0.0-2.0-D	22204050712	2220415C_9.d	04/16/22	0718
6. AOI02-02-SB-14.0-16.0	22204050713	2220415C_10.d	04/16/22	0733
7. WU-FRB-01	22204050714	2220415C_11.d	04/16/22	0748
8. AOI02-04-SB-0.0-2.0	22204050715	2220415C_12.d	04/16/22	0803
9. AOI02-04-SB-14.0-16.0	22204050716	2220415C_13.d	04/16/22	0817

FORM IV SV

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Report No:	<u>222040507</u>	Method Blank ID:	<u>2334174</u>
Matrix:	<u>Water</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2220421A_4.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/18/22</u>	Analysis Date:	<u>04/21/22</u> Time: <u>0918</u>
Prep Batch:	<u>738671</u>	Analytical Batch:	<u>739037</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

<i>CLIENT SAMPLE ID</i>	<i>GCAL SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1. LCS2334175	2334175	2220421A_5.d	04/21/22	0933
2. LCSD2334176	2334176	2220421A_6.d	04/21/22	0948
3. WU-ERB-01	22204050702	2220421A_15.d	04/21/22	1205
4. WU-ERB-03	22204050703	2220421A_16.d	04/21/22	1220
5. WU-ERB-05	22204050705	2220421A_18.d	04/21/22	1250
6. WU-ERB-06	22204050706	2220421A_20.d	04/21/22	1320
7. WU-DECON-03	22204050707	2220421A_21.d	04/21/22	1335

FORM IV SV

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Report No:	<u>222040507</u>	Method Blank ID:	<u>2337269</u>
Matrix:	<u>Water</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2220424B_3.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/23/22</u>	Analysis Date:	<u>04/24/22</u> Time: <u>2152</u>
Prep Batch:	<u>739244</u>	Analytical Batch:	<u>739285</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

<i>CLIENT SAMPLE ID</i>	<i>GCAL SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1. LCS2337270	2337270	2220424B_4.d	04/24/22	2207
2. LCSD2337271	2337271	2220424B_5.d	04/24/22	2222
3. WU-ERB-04	22204050704	2220424B_8.d	04/24/22	2306

FORM IV SV

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040507</u>	Client Sample ID:	<u>MB2331063</u>
Collect Date:	<u>NA</u> Time: <u>NA</u>	GCAL Sample ID:	<u>2331063</u>
Matrix:	<u>Solid</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5</u> g	Lab File ID:	<u>2220413B_3.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/12/22</u>	Analysis Date:	<u>04/13/22</u> Time: <u>2046</u>
Prep Batch:	<u>738250</u>	Analytical Batch:	<u>738448</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.200	U	0.060	0.200	1.00
39108-34-4	8:2 Fluorotelomersulfonic acid	0.100	U	0.030	0.100	1.00
2991-50-6	NEtFOSAA	0.100	U	0.030	0.100	1.00
2355-31-9	NMeFOSAA	0.050	U	0.020	0.050	1.00
375-73-5	Perfluorobutanesulfonic acid	0.050	U	0.020	0.050	1.00
375-22-4	Perfluorobutanoic acid	0.100	U	0.040	0.100	1.00
335-76-2	Perfluorodecanoic acid	0.100	U	0.040	0.100	1.00
307-55-1	Perfluorododecanoic acid	0.050	U	0.020	0.050	1.00
375-85-9	Perfluoroheptanoic acid	0.050	U	0.020	0.050	1.00
355-46-4	Perfluorohexanesulfonic acid	0.100	U	0.030	0.100	1.00
307-24-4	Perfluorohexanoic acid	0.050	U	0.020	0.050	1.00
375-95-1	Perfluorononanoic acid	0.050	U	0.020	0.050	1.00
1763-23-1	Perfluorooctanesulfonic acid	0.200	U	0.050	0.200	1.00
335-67-1	Perfluorooctanoic acid	0.200	U	0.080	0.200	1.00
2706-90-3	Perfluoropentanoic acid	0.050	U	0.020	0.050	1.00
376-06-7	Perfluorotetradecanoic acid	0.050	U	0.020	0.050	1.00
72629-94-8	Perfluorotridecanoic acid	0.100	U	0.030	0.100	1.00
2058-94-8	Perfluoroundecanoic acid	0.050	U	0.020	0.050	1.00

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040507</u>	Client Sample ID:	<u>MB2332013</u>
Collect Date:	<u>NA</u> Time: <u>NA</u>	GCAL Sample ID:	<u>2332013</u>
Matrix:	<u>Solid</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5</u> g	Lab File ID:	<u>2220415C_3.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/13/22</u>	Analysis Date:	<u>04/16/22</u> Time: <u>0549</u>
Prep Batch:	<u>738397</u>	Analytical Batch:	<u>738661</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.200	U	0.060	0.200	1.00
39108-34-4	8:2 Fluorotelomersulfonic acid	0.100	U	0.030	0.100	1.00
2991-50-6	NEtFOSAA	0.100	U	0.030	0.100	1.00
2355-31-9	NMeFOSAA	0.050	U	0.020	0.050	1.00
375-73-5	Perfluorobutanesulfonic acid	0.050	U	0.020	0.050	1.00
375-22-4	Perfluorobutanoic acid	0.100	U	0.040	0.100	1.00
335-76-2	Perfluorodecanoic acid	0.100	U	0.040	0.100	1.00
307-55-1	Perfluorododecanoic acid	0.050	U	0.020	0.050	1.00
375-85-9	Perfluoroheptanoic acid	0.050	U	0.020	0.050	1.00
355-46-4	Perfluorohexanesulfonic acid	0.100	U	0.030	0.100	1.00
307-24-4	Perfluorohexanoic acid	0.050	U	0.020	0.050	1.00
375-95-1	Perfluorononanoic acid	0.050	U	0.020	0.050	1.00
1763-23-1	Perfluorooctanesulfonic acid	0.200	U	0.050	0.200	1.00
335-67-1	Perfluorooctanoic acid	0.200	U	0.080	0.200	1.00
2706-90-3	Perfluoropentanoic acid	0.050	U	0.020	0.050	1.00
376-06-7	Perfluorotetradecanoic acid	0.050	U	0.020	0.050	1.00
72629-94-8	Perfluorotridecanoic acid	0.100	U	0.030	0.100	1.00
2058-94-8	Perfluoroundecanoic acid	0.050	U	0.020	0.050	1.00

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No: <u>222040507</u>	Client Sample ID: <u>MB2334174</u>
Collect Date: <u>NA</u> Time: <u>NA</u>	GCAL Sample ID: <u>2334174</u>
Matrix: <u>Water</u> % Moisture: <u>NA</u>	Instrument ID: <u>QQQ4</u>
Sample Amt: <u>125</u> mL	Lab File ID: <u>2220421A_4.d</u>
Injection Vol.: <u>2</u> (µL)	GC Column: <u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>SXA</u>
Prep Date: <u>04/18/22</u>	Analysis Date: <u>04/21/22</u> Time: <u>0918</u>
Prep Batch: <u>738671</u>	Analytical Batch: <u>739037</u>
Prep Method: <u>PFAS ID QSM B15 Prep</u>	Analytical Method: <u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.00	U	1.50	3.00	4.00
39108-34-4	8:2 Fluorotelomersulfonic acid	3.00	U	1.06	3.00	4.00
2991-50-6	NEtFOSAA	4.00	U	1.58	4.00	8.00
2355-31-9	NMeFOSAA	4.00	U	0.900	4.00	8.00
375-73-5	Perfluorobutanesulfonic acid	2.00	U	0.620	2.00	4.00
375-22-4	Perfluorobutanoic acid	3.50	U	1.52	3.50	4.00
335-76-2	Perfluorodecanoic acid	3.00	U	1.44	3.00	4.00
307-55-1	Perfluorododecanoic acid	3.00	U	1.30	3.00	4.00
375-85-9	Perfluoroheptanoic acid	3.00	U	1.16	3.00	4.00
355-46-4	Perfluorohexanesulfonic acid	3.00	U	1.24	3.00	4.00
307-24-4	Perfluorohexanoic acid	2.00	U	0.940	2.00	4.00
375-95-1	Perfluorononanoic acid	2.00	U	0.980	2.00	4.00
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	0.760	2.00	4.00
335-67-1	Perfluorooctanoic acid	2.00	U	0.840	2.00	4.00
2706-90-3	Perfluoropentanoic acid	2.00	U	0.880	2.00	4.00
376-06-7	Perfluorotetradecanoic acid	3.00	U	1.14	3.00	4.00
72629-94-8	Perfluorotridecanoic acid	3.00	U	1.23	3.00	4.00
2058-94-8	Perfluoroundecanoic acid	3.00	U	1.24	3.00	4.00

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040507</u>	Client Sample ID:	<u>MB2337269</u>
Collect Date:	<u>NA</u> Time: <u>NA</u>	GCAL Sample ID:	<u>2337269</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2220424B_3.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/23/22</u>	Analysis Date:	<u>04/24/22</u> Time: <u>2152</u>
Prep Batch:	<u>739244</u>	Analytical Batch:	<u>739285</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.00	U	1.50	3.00	4.00
39108-34-4	8:2 Fluorotelomersulfonic acid	3.00	U	1.06	3.00	4.00
2991-50-6	NEtFOSAA	4.00	U	1.58	4.00	8.00
2355-31-9	NMeFOSAA	4.00	U	0.900	4.00	8.00
375-73-5	Perfluorobutanesulfonic acid	2.00	U	0.620	2.00	4.00
375-22-4	Perfluorobutanoic acid	3.50	U	1.52	3.50	4.00
335-76-2	Perfluorodecanoic acid	3.00	U	1.44	3.00	4.00
307-55-1	Perfluorododecanoic acid	3.00	U	1.30	3.00	4.00
375-85-9	Perfluoroheptanoic acid	3.00	U	1.16	3.00	4.00
355-46-4	Perfluorohexanesulfonic acid	3.00	U	1.24	3.00	4.00
307-24-4	Perfluorohexanoic acid	2.00	U	0.940	2.00	4.00
375-95-1	Perfluorononanoic acid	2.00	U	0.980	2.00	4.00
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	0.760	2.00	4.00
335-67-1	Perfluorooctanoic acid	2.00	U	0.840	2.00	4.00
2706-90-3	Perfluoropentanoic acid	2.00	U	0.880	2.00	4.00
376-06-7	Perfluorotetradecanoic acid	3.00	U	1.14	3.00	4.00
72629-94-8	Perfluorotridecanoic acid	3.00	U	1.23	3.00	4.00
2058-94-8	Perfluoroundecanoic acid	3.00	U	1.24	3.00	4.00

WATER SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040507
 Prep Method: PFAS ID QSM B15 Prep Prep Batch: 738671
 Analytical Method: PFAS Isotope Dilution QSM B15 Analytical Batch: 739037

GCAL QC ID: 2334175

ANALYTE	UNITS	SPIKE ADDED	SAMPLE RESULT	LCS RESULT	LCS % REC	#	QC LIMITS
6:2 Fluorotelomersulfonic acid	ng/L	76.1	0	66.8	88		64 - 140
8:2 Fluorotelomersulfonic acid	ng/L	76.8	0	67.6	88		67 - 138
NEtFOSAA	ng/L	80	0	65.9	82		61 - 135
NMeFOSAA	ng/L	80	0	69.3	87		65 - 136
Perfluorobutanesulfonic acid	ng/L	71	0	60.1	85		72 - 130
Perfluorobutanoic acid	ng/L	80	0	67	84		73 - 129
Perfluorodecanoic acid	ng/L	80	0	68	85		71 - 129
Perfluorododecanoic acid	ng/L	80	0	67.6	84		72 - 134
Perfluoroheptanoic acid	ng/L	80	0	66.8	83		72 - 130
Perfluorohexanesulfonic acid	ng/L	73.1	0	59.4	81		68 - 131
Perfluorohexanoic acid	ng/L	80	0	67.7	85		72 - 129
Perfluorononanoic acid	ng/L	80	0	66.5	83		69 - 130
Perfluorooctanesulfonic acid	ng/L	74.2	0	60.6	82		65 - 140
Perfluorooctanoic acid	ng/L	80	0	66.6	83		71 - 133
Perfluoropentanoic acid	ng/L	80	0	67	84		72 - 129
Perfluorotetradecanoic acid	ng/L	80	0	66.6	83		71 - 132
Perfluorotridecanoic acid	ng/L	80	0	66.4	83		65 - 144
Perfluoroundecanoic acid	ng/L	80	0	68.1	85		69 - 133

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-1

WATER SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040507Prep Method: PFAS ID QSM B15 PrepPrep Batch: 738671Analytical Method: PFAS Isotope Dilution QSM B15Analytical Batch: 739037GCAL QC ID: **2334176**

ANALYTE	UNITS	SPIKE ADDED	LCSD RESULT	LCSD % REC	#	% RPD	#	QC LIMITS	
								REC	RPD
6:2 Fluorotelomersulfonic acid	ng/L	76.1	64.9	85		3		64 - 140	0 - 30
8:2 Fluorotelomersulfonic acid	ng/L	76.8	73.6	96		8		67 - 138	0 - 30
NEtFOSAA	ng/L	80	70.5	88		7		61 - 135	0 - 30
NMeFOSAA	ng/L	80	72.6	91		5		65 - 136	0 - 30
Perfluorobutanesulfonic acid	ng/L	71	61.8	87		3		72 - 130	0 - 30
Perfluorobutanoic acid	ng/L	80	68.8	86		3		73 - 129	0 - 30
Perfluorodecanoic acid	ng/L	80	68.4	85		.6		71 - 129	0 - 30
Perfluorododecanoic acid	ng/L	80	70.5	88		4		72 - 134	0 - 30
Perfluoroheptanoic acid	ng/L	80	69.9	87		5		72 - 130	0 - 30
Perfluorohexanesulfonic acid	ng/L	73.1	61.6	84		4		68 - 131	0 - 30
Perfluorohexanoic acid	ng/L	80	70.1	88		3		72 - 129	0 - 30
Perfluorononanoic acid	ng/L	80	69	86		4		69 - 130	0 - 30
Perfluorooctanesulfonic acid	ng/L	74.2	60.4	81		.4		65 - 140	0 - 30
Perfluorooctanoic acid	ng/L	80	67.3	84		1		71 - 133	0 - 30
Perfluoropentanoic acid	ng/L	80	69	86		3		72 - 129	0 - 30
Perfluorotetradecanoic acid	ng/L	80	69.3	87		4		71 - 132	0 - 30
Perfluorotridecanoic acid	ng/L	80	68.3	85		3		65 - 144	0 - 30
Perfluoroundecanoic acid	ng/L	80	69	86		1		69 - 133	0 - 30

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-1

WATER SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040507
 Prep Method: PFAS ID QSM B15 Prep Prep Batch: 739244
 Analytical Method: PFAS Isotope Dilution QSM B15 Analytical Batch: 739285

GCAL QC ID: 2337270

ANALYTE	UNITS	SPIKE ADDED	SAMPLE RESULT	LCS RESULT	LCS % REC	#	QC LIMITS
6:2 Fluorotelomersulfonic acid	ng/L	76.1	0	70.4	93		64 - 140
8:2 Fluorotelomersulfonic acid	ng/L	76.8	0	72	94		67 - 138
NEtFOSAA	ng/L	80	0	79.1	99		61 - 135
NMeFOSAA	ng/L	80	0	78.6	98		65 - 136
Perfluorobutanesulfonic acid	ng/L	71	0	67.5	95		72 - 130
Perfluorobutanoic acid	ng/L	80	0	77.4	97		73 - 129
Perfluorodecanoic acid	ng/L	80	0	75.4	94		71 - 129
Perfluorododecanoic acid	ng/L	80	0	79	99		72 - 134
Perfluoroheptanoic acid	ng/L	80	0	74.8	94		72 - 130
Perfluorohexanesulfonic acid	ng/L	73.1	0	67.4	92		68 - 131
Perfluorohexanoic acid	ng/L	80	0	76.9	96		72 - 129
Perfluorononanoic acid	ng/L	80	0	74.8	93		69 - 130
Perfluorooctanesulfonic acid	ng/L	74.2	0	69.7	94		65 - 140
Perfluorooctanoic acid	ng/L	80	0	74.9	94		71 - 133
Perfluoropentanoic acid	ng/L	80	0	76.6	96		72 - 129
Perfluorotetradecanoic acid	ng/L	80	0	77.7	97		71 - 132
Perfluorotridecanoic acid	ng/L	80	0	72.6	91		65 - 144
Perfluoroundecanoic acid	ng/L	80	0	76.8	96		69 - 133

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-1

WATER SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040507
 Prep Method: PFAS ID QSM B15 Prep Prep Batch: 739244
 Analytical Method: PFAS Isotope Dilution QSM B15 Analytical Batch: 739285

GCAL QC ID: **2337271**

ANALYTE	UNITS	SPIKE ADDED	LCSD RESULT	LCSD % REC	#	% RPD	#	QC LIMITS	
								REC	RPD
6:2 Fluorotelomersulfonic acid	ng/L	76.1	73.2	96		4		64 - 140	0 - 30
8:2 Fluorotelomersulfonic acid	ng/L	76.8	74.4	97		3		67 - 138	0 - 30
NEtFOSAA	ng/L	80	80.1	100		1		61 - 135	0 - 30
NMeFOSAA	ng/L	80	79.3	99		.9		65 - 136	0 - 30
Perfluorobutanesulfonic acid	ng/L	71	68.6	97		2		72 - 130	0 - 30
Perfluorobutanoic acid	ng/L	80	76.5	96		1		73 - 129	0 - 30
Perfluorodecanoic acid	ng/L	80	75	94		.5		71 - 129	0 - 30
Perfluorododecanoic acid	ng/L	80	75.2	94		5		72 - 134	0 - 30
Perfluoroheptanoic acid	ng/L	80	75.9	95		2		72 - 130	0 - 30
Perfluorohexanesulfonic acid	ng/L	73.1	68.5	94		2		68 - 131	0 - 30
Perfluorohexanoic acid	ng/L	80	76.4	95		.6		72 - 129	0 - 30
Perfluorononanoic acid	ng/L	80	75.5	94		.9		69 - 130	0 - 30
Perfluorooctanesulfonic acid	ng/L	74.2	69.4	93		.5		65 - 140	0 - 30
Perfluorooctanoic acid	ng/L	80	74.9	94		.01		71 - 133	0 - 30
Perfluoropentanoic acid	ng/L	80	76.4	95		.2		72 - 129	0 - 30
Perfluorotetradecanoic acid	ng/L	80	76.4	96		2		71 - 132	0 - 30
Perfluorotridecanoic acid	ng/L	80	75.8	95		4		65 - 144	0 - 30
Perfluoroundecanoic acid	ng/L	80	75.1	94		2		69 - 133	0 - 30

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-1

3D
SOIL SEMIVOLATILE MS/MSD RECOVERY

Report No: <u>222040507</u>	Parent Sample ID: <u>AOI01-01-SB-0.0-2.0</u>
Prep Method: <u>PFAS ID QSM B15 Prep</u>	Prep Batch: <u>738250</u>
Analytical Method: <u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch: <u>738621</u>

GCAL QC ID: 22204050708

ANALYTE	UNITS	SPIKE ADDED	SAMPLE RESULT	MS RESULT	MS % REC	#	QC LIMITS
6:2 Fluorotelomersulfonic acid	ug/kg	2.13	.015	2.05	95		64 - 140
8:2 Fluorotelomersulfonic acid	ug/kg	2.16	.00881	2.08	96		65 - 137
NEtFOSAA	ug/kg	2.25	.012	2.04	90		61 - 139
NMeFOSAA	ug/kg	2.25	.01	1.88	83		63 - 144
Perfluorobutanesulfonic acid	ug/kg	1.99	.013	1.98	99		72 - 128
Perfluorobutanoic acid	ug/kg	2.25	.031	2.18	96		71 - 135
Perfluorodecanoic acid	ug/kg	2.25	.198	2.51	103		69 - 133
Perfluorododecanoic acid	ug/kg	2.25	.058	2.36	102		69 - 135
Perfluoroheptanoic acid	ug/kg	2.25	.019	2.25	99		71 - 131
Perfluorohexanesulfonic acid	ug/kg	2.05	.05	2.08	99		67 - 130
Perfluorohexanoic acid	ug/kg	2.25	.022	2.22	98		70 - 132
Perfluorononanoic acid	ug/kg	2.25	.053	2.3	100		72 - 129
Perfluorooctanesulfonic acid	ug/kg	2.09	1.72	4.06	112		68 - 136
Perfluorooctanoic acid	ug/kg	2.25	.051	2.29	100		69 - 133
Perfluoropentanoic acid	ug/kg	2.25	.027	2.18	96		69 - 132
Perfluorotetradecanoic acid	ug/kg	2.25	.022	2.31	102		69 - 133
Perfluorotridecanoic acid	ug/kg	2.25	.017	2.36	104		66 - 139
Perfluoroundecanoic acid	ug/kg	2.25	.047	2.36	103		64 - 136

RPD : 3 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-2

3D
SOIL SEMIVOLATILE MS/MSD RECOVERY

Report No: <u>222040507</u>	Parent Sample ID: <u>AOI01-01-SB-0.0-2.0</u>
Prep Method: <u>PFAS ID QSM B15 Prep</u>	Prep Batch: <u>738250</u>
Analytical Method: <u>PFAS Isotope Dilution QSM B15</u>	Analytical Batch: <u>738621</u>

GCAL QC ID: 22204050709

ANALYTE	UNITS	SPIKE ADDED	MSD RESULT	MSD % REC	#	% RPD	#	QC LIMITS	
								REC	RPD
6:2 Fluorotelomersulfonic acid	ug/kg	2.09	1.44	68		35	*	64 - 140	0 - 30
8:2 Fluorotelomersulfonic acid	ug/kg	2.11	1.55	73		30		65 - 137	0 - 30
NEtFOSAA	ug/kg	2.21	1.45	65		34	*	61 - 139	0 - 30
NMeFOSAA	ug/kg	2.21	1.46	66		24		63 - 144	0 - 30
Perfluorobutanesulfonic acid	ug/kg	1.95	1.52	77		27		72 - 128	0 - 30
Perfluorobutanoic acid	ug/kg	2.21	1.65	73		28		71 - 135	0 - 30
Perfluorodecanoic acid	ug/kg	2.21	2.01	82		23		69 - 133	0 - 30
Perfluorododecanoic acid	ug/kg	2.21	1.82	80		26		69 - 135	0 - 30
Perfluoroheptanoic acid	ug/kg	2.21	1.65	74		31	*	71 - 131	0 - 30
Perfluorohexanesulfonic acid	ug/kg	2.02	1.59	77		26		67 - 130	0 - 30
Perfluorohexanoic acid	ug/kg	2.21	1.64	74		30		70 - 132	0 - 30
Perfluorononanoic acid	ug/kg	2.21	1.78	79		25		72 - 129	0 - 30
Perfluorooctanesulfonic acid	ug/kg	2.04	3.96	110		2		68 - 136	0 - 30
Perfluorooctanoic acid	ug/kg	2.21	1.72	76		28		69 - 133	0 - 30
Perfluoropentanoic acid	ug/kg	2.21	1.62	72		30		69 - 132	0 - 30
Perfluorotetradecanoic acid	ug/kg	2.21	1.78	80		26		69 - 133	0 - 30
Perfluorotridecanoic acid	ug/kg	2.21	1.84	83		25		66 - 139	0 - 30
Perfluoroundecanoic acid	ug/kg	2.21	1.76	78		29		64 - 136	0 - 30

RPD : 3 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-2

3D
SOIL SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040507
 Prep Method: PFAS ID QSM B15 Prep Prep Batch: 738250
 Analytical Method: PFAS Isotope Dilution QSM B15 Analytical Batch: 738448

GCAL QC ID: 2331064

ANALYTE	UNITS	SPIKE ADDED	SAMPLE RESULT	LCS RESULT	LCS % REC	#	QC LIMITS
6:2 Fluorotelomersulfonic acid	ug/kg	1.9	0	2.25	118		64 - 140
8:2 Fluorotelomersulfonic acid	ug/kg	1.92	0	2.42	126		65 - 137
NEtFOSAA	ug/kg	2	0	2.35	118		61 - 139
NMeFOSAA	ug/kg	2	0	2.47	123		63 - 144
Perfluorobutanesulfonic acid	ug/kg	1.77	0	2.11	119		72 - 128
Perfluorobutanoic acid	ug/kg	2	0	2.41	120		71 - 135
Perfluorodecanoic acid	ug/kg	2	0	2.41	120		69 - 133
Perfluorododecanoic acid	ug/kg	2	0	2.37	118		69 - 135
Perfluoroheptanoic acid	ug/kg	2	0	2.36	118		71 - 131
Perfluorohexanesulfonic acid	ug/kg	1.83	0	2.08	114		67 - 130
Perfluorohexanoic acid	ug/kg	2	0	2.36	118		70 - 132
Perfluorononanoic acid	ug/kg	2	0	2.38	119		72 - 129
Perfluorooctanesulfonic acid	ug/kg	1.86	0	2.11	114		68 - 136
Perfluorooctanoic acid	ug/kg	2	0	2.38	119		69 - 133
Perfluoropentanoic acid	ug/kg	2	0	2.39	119		69 - 132
Perfluorotetradecanoic acid	ug/kg	2	0	2.34	117		69 - 133
Perfluorotridecanoic acid	ug/kg	2	0	2.44	122		66 - 139
Perfluoroundecanoic acid	ug/kg	2	0	2.37	119		64 - 136

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-2

3D
SOIL SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040507
 Prep Method: PFAS ID QSM B15 Prep
 Analytical Method: PFAS Isotope Dilution QSM B15

Prep Batch: 738250
 Analytical Batch: 738448

GCAL QC ID: 2331065

ANALYTE	UNITS	SPIKE ADDED	LCSD RESULT	LCSD % REC	#	% RPD	#	QC LIMITS	
								REC	RPD
6:2 Fluorotelomersulfonic acid	ug/kg	1.9	2.19	115		2		64 - 140	0 - 30
8:2 Fluorotelomersulfonic acid	ug/kg	1.92	2.21	115		9		65 - 137	0 - 30
NEtFOSAA	ug/kg	2	2.22	111		6		61 - 139	0 - 30
NMeFOSAA	ug/kg	2	2.27	113		8		63 - 144	0 - 30
Perfluorobutanesulfonic acid	ug/kg	1.77	2.02	114		4		72 - 128	0 - 30
Perfluorobutanoic acid	ug/kg	2	2.26	113		6		71 - 135	0 - 30
Perfluorodecanoic acid	ug/kg	2	2.25	112		7		69 - 133	0 - 30
Perfluorododecanoic acid	ug/kg	2	2.29	114		3		69 - 135	0 - 30
Perfluoroheptanoic acid	ug/kg	2	2.24	112		5		71 - 131	0 - 30
Perfluorohexanesulfonic acid	ug/kg	1.83	1.99	109		4		67 - 130	0 - 30
Perfluorohexanoic acid	ug/kg	2	2.24	112		5		70 - 132	0 - 30
Perfluorononanoic acid	ug/kg	2	2.25	112		6		72 - 129	0 - 30
Perfluorooctanesulfonic acid	ug/kg	1.86	2.01	108		5		68 - 136	0 - 30
Perfluorooctanoic acid	ug/kg	2	2.26	113		5		69 - 133	0 - 30
Perfluoropentanoic acid	ug/kg	2	2.26	113		6		69 - 132	0 - 30
Perfluorotetradecanoic acid	ug/kg	2	2.17	109		8		69 - 133	0 - 30
Perfluorotridecanoic acid	ug/kg	2	2.35	117		4		66 - 139	0 - 30
Perfluoroundecanoic acid	ug/kg	2	2.27	113		4		64 - 136	0 - 30

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-2

3D
SOIL SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040507
 Prep Method: PFAS ID QSM B15 Prep
 Analytical Method: PFAS Isotope Dilution QSM B15

Prep Batch: 738397
 Analytical Batch: 738661

GCAL QC ID: 2332014

ANALYTE	UNITS	SPIKE ADDED	SAMPLE RESULT	LCS RESULT	LCS % REC	#	QC LIMITS
6:2 Fluorotelomersulfonic acid	ug/kg	1.9	0	1.79	94		64 - 140
8:2 Fluorotelomersulfonic acid	ug/kg	1.92	0	1.76	92		65 - 137
NEtFOSAA	ug/kg	2	0	1.79	90		61 - 139
NMeFOSAA	ug/kg	2	0	1.83	92		63 - 144
Perfluorobutanesulfonic acid	ug/kg	1.77	0	1.58	89		72 - 128
Perfluorobutanoic acid	ug/kg	2	0	1.84	92		71 - 135
Perfluorodecanoic acid	ug/kg	2	0	1.81	91		69 - 133
Perfluorododecanoic acid	ug/kg	2	0	1.79	90		69 - 135
Perfluoroheptanoic acid	ug/kg	2	0	1.8	90		71 - 131
Perfluorohexanesulfonic acid	ug/kg	1.83	0	1.61	88		67 - 130
Perfluorohexanoic acid	ug/kg	2	0	1.83	91		70 - 132
Perfluorononanoic acid	ug/kg	2	0	1.79	90		72 - 129
Perfluorooctanesulfonic acid	ug/kg	1.86	0	1.58	85		68 - 136
Perfluorooctanoic acid	ug/kg	2	0	1.78	89		69 - 133
Perfluoropentanoic acid	ug/kg	2	0	1.8	90		69 - 132
Perfluorotetradecanoic acid	ug/kg	2	0	1.73	86		69 - 133
Perfluorotridecanoic acid	ug/kg	2	0	1.81	91		66 - 139
Perfluoroundecanoic acid	ug/kg	2	0	1.83	91		64 - 136

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-2

3D
SOIL SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040507

Prep Method: PFAS ID QSM B15 Prep

Prep Batch: 738397

Analytical Method: PFAS Isotope Dilution QSM B15

Analytical Batch: 738661

GCAL QC ID: 2332015

ANALYTE	UNITS	SPIKE ADDED	LCSD RESULT	LCSD % REC	#	% RPD	#	QC LIMITS	
								REC	RPD
6:2 Fluorotelomersulfonic acid	ug/kg	1.9	1.89	99		5		64 - 140	0 - 30
8:2 Fluorotelomersulfonic acid	ug/kg	1.92	1.88	98		7		65 - 137	0 - 30
NETFOSAA	ug/kg	2	1.9	95		6		61 - 139	0 - 30
NMeFOSAA	ug/kg	2	1.96	98		7		63 - 144	0 - 30
Perfluorobutanesulfonic acid	ug/kg	1.77	1.69	95		7		72 - 128	0 - 30
Perfluorobutanoic acid	ug/kg	2	1.93	96		5		71 - 135	0 - 30
Perfluorodecanoic acid	ug/kg	2	1.88	94		4		69 - 133	0 - 30
Perfluorododecanoic acid	ug/kg	2	1.91	95		6		69 - 135	0 - 30
Perfluoroheptanoic acid	ug/kg	2	1.88	94		4		71 - 131	0 - 30
Perfluorohexanesulfonic acid	ug/kg	1.83	1.66	91		3		67 - 130	0 - 30
Perfluorohexanoic acid	ug/kg	2	1.92	96		5		70 - 132	0 - 30
Perfluorononanoic acid	ug/kg	2	1.89	95		5		72 - 129	0 - 30
Perfluorooctanesulfonic acid	ug/kg	1.86	1.68	91		6		68 - 136	0 - 30
Perfluorooctanoic acid	ug/kg	2	1.89	94		6		69 - 133	0 - 30
Perfluoropentanoic acid	ug/kg	2	1.9	95		5		69 - 132	0 - 30
Perfluorotetradecanoic acid	ug/kg	2	1.93	97		11		69 - 133	0 - 30
Perfluorotridecanoic acid	ug/kg	2	1.99	100		9		66 - 139	0 - 30
Perfluoroundecanoic acid	ug/kg	2	1.94	97		6		64 - 136	0 - 30

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-2

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Report No:	<u>222040645</u>	Method Blank ID:	<u>2343356</u>
Matrix:	<u>Solid</u>	Instrument ID:	<u>QQQ5</u>
Sample Amt:	<u>5</u> g	Lab File ID:	<u>2220508A_4.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>05/06/22</u>	Analysis Date:	<u>05/08/22</u> Time: <u>1148</u>
Prep Batch:	<u>740299</u>	Analytical Batch:	<u>740431</u>
Prep Method:	<u>DOD QSM Table B-15 Prep</u>	Analytical Method:	<u>DOD QSM Table B-15</u>

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

<i>CLIENT SAMPLE ID</i>	<i>GCAL SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1. LCS2343357	2343357	2220508A_5.d	05/08/22	1203
2. LCSD2343358	2343358	2220508A_6.d	05/08/22	1217
3. AOI02-07-SB-0.0-2.0	22204064507	2220508A_7.d	05/08/22	1232
4. AOI02-03-SB-0.0-2.0	22204064508	2220508A_8.d	05/08/22	1246
5. AOI01-02-SB-0.0-1.0-D	22204064509	2220508A_9.d	05/08/22	1301
6. AOI01-02-SB-0.0-1.0	22204064510	2220508A_10.d	05/08/22	1316
7. AOI02-01-SB-0.0-2.0	22204064511	2220508A_11.d	05/08/22	1330
8. AOI01-02-SB-25.5-27.5	22204064513	2220508A_13.d	05/08/22	1400
9. AOI02-06-SB-0.0-0.5	22204064515	2220508A_15.d	05/08/22	1429

FORM IV SV

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Report No:	<u>222040645</u>	Method Blank ID:	<u>2345193</u>
Matrix:	<u>Solid</u>	Instrument ID:	<u>QQQ3</u>
Sample Amt:	<u>5</u> g	Lab File ID:	<u>2220513A_4.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>RXJ</u>
Prep Date:	<u>05/11/22</u>	Analysis Date:	<u>05/13/22</u> Time: <u>1403</u>
Prep Batch:	<u>740685</u>	Analytical Batch:	<u>740969</u>
Prep Method:	<u>DOD QSM Table B-15 Prep</u>	Analytical Method:	<u>DOD QSM Table B-15</u>

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

<i>CLIENT SAMPLE ID</i>	<i>GCAL SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1. LCS2345194	2345194	2220513A_5.d	05/13/22	1418
2. LCSD2345195	2345195	2220513A_6.d	05/13/22	1433
3. AOI01-02-SB-0.0-1.0-DRE	22204064509RE	2220513A_8.d	05/13/22	1502
4. AOI02-01-SB-14.5-16.5	22204064512	2220513A_11.d	05/13/22	1546
5. AOI02-03-SB-16.5-18.5	22204064514	2220513A_13.d	05/13/22	1616
6. AOI02-05-SB-0.0-0.5	22204064516	2220513A_15.d	05/13/22	1645

FORM IV SV

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>MB2343356</u>
Collect Date:	<u>NA</u> Time: <u>NA</u>	GCAL Sample ID:	<u>2343356</u>
Matrix:	<u>Solid</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ5</u>
Sample Amt:	<u>5</u> g	Lab File ID:	<u>2220508A_4.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>05/06/22</u>	Analysis Date:	<u>05/08/22</u> Time: <u>1148</u>
Prep Batch:	<u>740299</u>	Analytical Batch:	<u>740431</u>
Prep Method:	<u>DOD QSM Table B-15 Prep</u>	Analytical Method:	<u>DOD QSM Table B-15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
763051-92-9	11CI-PF3OUdS	0.050	U	0.020	0.050	1.00
757124-72-4	4:2 Fluorotelomersulfonic acid	0.200	U	0.050	0.200	1.00
27619-97-2	6:2 Fluorotelomersulfonic acid	0.200	U	0.060	0.200	1.00
39108-34-4	8:2 Fluorotelomersulfonic acid	0.100	U	0.030	0.100	1.00
756426-58-1	9CI-PF3ONS	0.100	U	0.030	0.100	1.00
919005-14-4	ADONA	0.050	U	0.010	0.050	1.00
13252-13-6	HFPO-DA	0.500	U	0.140	0.500	2.00
2991-50-6	NETFOSAA	0.100	U	0.030	0.100	1.00
2355-31-9	NMeFOSAA	0.050	U	0.020	0.050	1.00
375-73-5	Perfluorobutanesulfonic acid	0.050	U	0.020	0.050	1.00
375-22-4	Perfluorobutanoic acid	0.100	U	0.040	0.100	1.00
335-77-3	Perfluorodecane sulfonic acid	0.100	U	0.030	0.100	1.00
335-76-2	Perfluorodecanoic acid	0.100	U	0.040	0.100	1.00
307-55-1	Perfluorododecanoic acid	0.050	U	0.020	0.050	1.00
375-92-8	Perfluoroheptanesulfonic acid	0.050	U	0.020	0.050	1.00
375-85-9	Perfluoroheptanoic acid	0.050	U	0.020	0.050	1.00
355-46-4	Perfluorohexanesulfonic acid	0.100	U	0.030	0.100	1.00
307-24-4	Perfluorohexanoic acid	0.050	U	0.020	0.050	1.00
68259-12-1	Perfluorononanesulfonic acid	0.100	U	0.030	0.100	1.00
375-95-1	Perfluorononanoic acid	0.050	U	0.020	0.050	1.00
754-91-6	Perfluorooctane Sulfonyl fluoride	0.050	U	0.020	0.050	1.00
1763-23-1	Perfluorooctanesulfonic acid	0.200	U	0.050	0.200	1.00
335-67-1	Perfluorooctanoic acid	0.200	U	0.080	0.200	1.00
2706-91-4	Perfluoropentanesulfonic acid	0.050	U	0.020	0.050	1.00
2706-90-3	Perfluoropentanoic acid	0.050	U	0.020	0.050	1.00
376-06-7	Perfluorotetradecanoic acid	0.050	U	0.020	0.050	1.00
72629-94-8	Perfluorotridecanoic acid	0.100	U	0.030	0.100	1.00
2058-94-8	Perfluoroundecanoic acid	0.050	U	0.020	0.050	1.00

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>MB2345193</u>
Collect Date:	<u>NA</u> Time: <u>NA</u>	GCAL Sample ID:	<u>2345193</u>
Matrix:	<u>Solid</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ3</u>
Sample Amt:	<u>5</u> g	Lab File ID:	<u>2220513A_4.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>RXJ</u>
Prep Date:	<u>05/11/22</u>	Analysis Date:	<u>05/13/22</u> Time: <u>1403</u>
Prep Batch:	<u>740685</u>	Analytical Batch:	<u>740969</u>
Prep Method:	<u>DOD QSM Table B-15 Prep</u>	Analytical Method:	<u>DOD QSM Table B-15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
763051-92-9	11CI-PF3OUdS	0.050	U	0.020	0.050	1.00
757124-72-4	4:2 Fluorotelomersulfonic acid	0.200	U	0.050	0.200	1.00
27619-97-2	6:2 Fluorotelomersulfonic acid	0.200	U	0.060	0.200	1.00
39108-34-4	8:2 Fluorotelomersulfonic acid	0.100	U	0.030	0.100	1.00
756426-58-1	9CI-PF3ONS	0.100	U	0.030	0.100	1.00
919005-14-4	ADONA	0.050	U	0.010	0.050	1.00
13252-13-6	HFPO-DA	0.500	U	0.140	0.500	2.00
2991-50-6	NETFOSAA	0.100	U	0.030	0.100	1.00
2355-31-9	NMeFOSAA	0.050	U	0.020	0.050	1.00
375-73-5	Perfluorobutanesulfonic acid	0.050	U	0.020	0.050	1.00
375-22-4	Perfluorobutanoic acid	0.100	U	0.040	0.100	1.00
335-77-3	Perfluorodecane sulfonic acid	0.100	U	0.030	0.100	1.00
335-76-2	Perfluorodecanoic acid	0.100	U	0.040	0.100	1.00
307-55-1	Perfluorododecanoic acid	0.050	U	0.020	0.050	1.00
375-92-8	Perfluoroheptanesulfonic acid	0.050	U	0.020	0.050	1.00
375-85-9	Perfluoroheptanoic acid	0.050	U	0.020	0.050	1.00
355-46-4	Perfluorohexanesulfonic acid	0.100	U	0.030	0.100	1.00
307-24-4	Perfluorohexanoic acid	0.050	U	0.020	0.050	1.00
68259-12-1	Perfluorononanesulfonic acid	0.100	U	0.030	0.100	1.00
375-95-1	Perfluorononanoic acid	0.050	U	0.020	0.050	1.00
754-91-6	Perfluorooctane Sulfonylamide	0.050	U	0.020	0.050	1.00
1763-23-1	Perfluorooctanesulfonic acid	0.200	U	0.050	0.200	1.00
335-67-1	Perfluorooctanoic acid	0.200	U	0.080	0.200	1.00
2706-91-4	Perfluoropentanesulfonic acid	0.050	U	0.020	0.050	1.00
2706-90-3	Perfluoropentanoic acid	0.050	U	0.020	0.050	1.00
376-06-7	Perfluorotetradecanoic acid	0.050	U	0.020	0.050	1.00
72629-94-8	Perfluorotridecanoic acid	0.100	U	0.030	0.100	1.00
2058-94-8	Perfluoroundecanoic acid	0.050	U	0.020	0.050	1.00

3D
SOIL SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040645
 Prep Method: DOD QSM Table B-15 Prep Prep Batch: 740299
 Analytical Method: DOD QSM Table B-15 Analytical Batch: 740431

GCAL QC ID: 2343357

ANALYTE	UNITS	SPIKE ADDED	SAMPLE RESULT	LCS RESULT	LCS % REC	#	QC LIMITS
11Cl-PF3OUdS	ug/kg	1.89	0	1.69	90		70 - 130
4:2 Fluorotelomersulfonic acid	ug/kg	1.87	0	1.8	96		70 - 130
6:2 Fluorotelomersulfonic acid	ug/kg	1.9	0	1.7	89		70 - 130
8:2 Fluorotelomersulfonic acid	ug/kg	1.92	0	1.82	95		70 - 130
9Cl-PF3ONS	ug/kg	1.87	0	1.71	91		70 - 130
ADONA	ug/kg	1.89	0	1.71	91		70 - 130
HFPO-DA	ug/kg	4	0	3.76	94		70 - 130
NEtFOSAA	ug/kg	2	0	1.77	88		70 - 130
NMeFOSAA	ug/kg	2	0	1.87	94		70 - 130
Perfluorobutanesulfonic acid	ug/kg	1.77	0	1.71	96		70 - 130
Perfluorobutanoic acid	ug/kg	2	0	1.9	95		70 - 130
Perfluorodecane sulfonic acid	ug/kg	1.93	0	1.75	91		70 - 130
Perfluorodecanoic acid	ug/kg	2	0	1.83	91		70 - 130
Perfluorododecanoic acid	ug/kg	2	0	1.86	93		70 - 130
Perfluoroheptanesulfonic acid	ug/kg	1.91	0	1.76	92		70 - 130
Perfluoroheptanoic acid	ug/kg	2	0	1.86	93		70 - 130
Perfluorohexanesulfonic acid	ug/kg	1.83	0	1.69	93		70 - 130
Perfluorohexanoic acid	ug/kg	2	0	1.84	92		70 - 130
Perfluorononanesulfonic acid	ug/kg	1.92	0	1.78	92		70 - 130
Perfluorononanoic acid	ug/kg	2	0	1.87	94		70 - 130
Perfluorooctane Sulfonamide	ug/kg	2	0	1.91	95		70 - 130
Perfluorooctanesulfonic acid	ug/kg	1.86	0	1.69	91		70 - 130
Perfluorooctanoic acid	ug/kg	2	0	1.86	93		70 - 130
Perfluoropentanesulfonic acid	ug/kg	1.88	0	1.75	93		70 - 130
Perfluoropentanoic acid	ug/kg	2	0	1.87	94		70 - 130
Perfluorotetradecanoic acid	ug/kg	2	0	1.85	93		70 - 130
Perfluorotridecanoic acid	ug/kg	2	0	1.88	94		70 - 130
Perfluoroundecanoic acid	ug/kg	2	0	1.86	93		70 - 130

RPD : 0 out of 28 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 56 outside limits

* Values outside of QC limits

FORM III SV-2

3D
SOIL SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040645

Prep Method: DOD QSM Table B-15 Prep

Prep Batch: 740299

Analytical Method: DOD QSM Table B-15

Analytical Batch: 740431

GCAL QC ID: 2343358

ANALYTE	UNITS	SPIKE ADDED	LCSD RESULT	LCSD % REC	#	% RPD	#	QC LIMITS	
								REC	RPD
11CI-PF3OUdS	ug/kg	1.89	1.78	94		5		70 - 130	0 - 30
4:2 Fluorotelomersulfonic acid	ug/kg	1.87	1.91	102		6		70 - 130	0 - 30
6:2 Fluorotelomersulfonic acid	ug/kg	1.9	1.9	100		11		70 - 130	0 - 30
8:2 Fluorotelomersulfonic acid	ug/kg	1.92	1.9	99		5		70 - 130	0 - 30
9CI-PF3ONS	ug/kg	1.87	1.81	97		6		70 - 130	0 - 30
ADONA	ug/kg	1.89	1.86	98		8		70 - 130	0 - 30
HFPO-DA	ug/kg	4	4.08	102		8		70 - 130	0 - 30
NEtFOSAA	ug/kg	2	1.9	95		7		70 - 130	0 - 30
NMeFOSAA	ug/kg	2	1.95	97		4		70 - 130	0 - 30
Perfluorobutanesulfonic acid	ug/kg	1.77	1.79	101		5		70 - 130	0 - 30
Perfluorobutanoic acid	ug/kg	2	2.04	102		7		70 - 130	0 - 30
Perfluorodecane sulfonic acid	ug/kg	1.93	1.84	96		5		70 - 130	0 - 30
Perfluorodecanoic acid	ug/kg	2	1.98	99		8		70 - 130	0 - 30
Perfluorododecanoic acid	ug/kg	2	2	100		7		70 - 130	0 - 30
Perfluoroheptanesulfonic acid	ug/kg	1.91	1.91	100		8		70 - 130	0 - 30
Perfluoroheptanoic acid	ug/kg	2	2	100		7		70 - 130	0 - 30
Perfluorohexanesulfonic acid	ug/kg	1.83	1.83	100		8		70 - 130	0 - 30
Perfluorohexanoic acid	ug/kg	2	2	100		8		70 - 130	0 - 30
Perfluoronanesulfonic acid	ug/kg	1.92	1.89	98		6		70 - 130	0 - 30
Perfluoronanoic acid	ug/kg	2	2.01	101		7		70 - 130	0 - 30
Perfluorooctane Sulfonamide	ug/kg	2	2.03	101		6		70 - 130	0 - 30
Perfluorooctanesulfonic acid	ug/kg	1.86	1.8	97		6		70 - 130	0 - 30
Perfluorooctanoic acid	ug/kg	2	2.01	100		8		70 - 130	0 - 30
Perfluoropentanesulfonic acid	ug/kg	1.88	1.94	103		10		70 - 130	0 - 30
Perfluoropentanoic acid	ug/kg	2	2.04	102		8		70 - 130	0 - 30
Perfluorotetradecanoic acid	ug/kg	2	2.02	101		8		70 - 130	0 - 30
Perfluorotridecanoic acid	ug/kg	2	2.02	101		7		70 - 130	0 - 30
Perfluoroundecanoic acid	ug/kg	2	1.95	98		5		70 - 130	0 - 30

RPD : 0 out of 28 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 56 outside limits

* Values outside of QC limits

FORM III SV-2

3D
SOIL SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040645
 Prep Method: DOD QSM Table B-15 Prep Prep Batch: 740685
 Analytical Method: DOD QSM Table B-15 Analytical Batch: 740969

GCAL QC ID: 2345194

ANALYTE	UNITS	SPIKE ADDED	SAMPLE RESULT	LCS RESULT	LCS % REC	#	QC LIMITS
11Cl-PF3OUdS	ug/kg	1.89	0	1.79	95		70 - 130
4:2 Fluorotelomersulfonic acid	ug/kg	1.87	0	1.88	100		70 - 130
6:2 Fluorotelomersulfonic acid	ug/kg	1.9	0	1.97	104		70 - 130
8:2 Fluorotelomersulfonic acid	ug/kg	1.92	0	2.04	106		70 - 130
9Cl-PF3ONS	ug/kg	1.87	0	1.76	94		70 - 130
ADONA	ug/kg	1.89	0	1.81	96		70 - 130
HFPO-DA	ug/kg	4	0	4.53	113		70 - 130
NEtFOSAA	ug/kg	2	0	1.9	95		70 - 130
NMeFOSAA	ug/kg	2	0	2	100		70 - 130
Perfluorobutanesulfonic acid	ug/kg	1.77	0	1.79	101		70 - 130
Perfluorobutanoic acid	ug/kg	2	0	1.99	100		70 - 130
Perfluorodecane sulfonic acid	ug/kg	1.93	0	2	104		70 - 130
Perfluorodecanoic acid	ug/kg	2	0	1.8	90		70 - 130
Perfluorododecanoic acid	ug/kg	2	0	1.99	100		70 - 130
Perfluoroheptanesulfonic acid	ug/kg	1.91	0	1.89	99		70 - 130
Perfluoroheptanoic acid	ug/kg	2	0	1.96	98		70 - 130
Perfluorohexanesulfonic acid	ug/kg	1.83	0	1.79	98		70 - 130
Perfluorohexanoic acid	ug/kg	2	0	1.99	100		70 - 130
Perfluorononanesulfonic acid	ug/kg	1.92	0	1.88	98		70 - 130
Perfluorononanoic acid	ug/kg	2	0	1.94	97		70 - 130
Perfluorooctane Sulfonamide	ug/kg	2	0	2.05	102		70 - 130
Perfluorooctanesulfonic acid	ug/kg	1.86	0	1.81	98		70 - 130
Perfluorooctanoic acid	ug/kg	2	0	1.96	98		70 - 130
Perfluoropentanesulfonic acid	ug/kg	1.88	0	1.92	102		70 - 130
Perfluoropentanoic acid	ug/kg	2	0	2	100		70 - 130
Perfluorotetradecanoic acid	ug/kg	2	0	1.99	99		70 - 130
Perfluorotridecanoic acid	ug/kg	2	0	1.98	99		70 - 130
Perfluoroundecanoic acid	ug/kg	2	0	1.97	98		70 - 130

RPD : 0 out of 28 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 56 outside limits

* Values outside of QC limits

FORM III SV-2

3D
SOIL SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040645
 Prep Method: DOD QSM Table B-15 Prep
 Analytical Method: DOD QSM Table B-15

Prep Batch: 740685
 Analytical Batch: 740969

GCAL QC ID: 2345195

ANALYTE	UNITS	SPIKE ADDED	LCSD RESULT	LCSD % REC	#	% RPD	#	QC LIMITS	
								REC	RPD
11CI-PF3OUdS	ug/kg	1.89	1.8	96		.8		70 - 130	0 - 30
4:2 Fluorotelomersulfonic acid	ug/kg	1.87	1.92	103		2		70 - 130	0 - 30
6:2 Fluorotelomersulfonic acid	ug/kg	1.9	1.93	101		2		70 - 130	0 - 30
8:2 Fluorotelomersulfonic acid	ug/kg	1.92	2	104		2		70 - 130	0 - 30
9CI-PF3ONS	ug/kg	1.87	1.76	94		.07		70 - 130	0 - 30
ADONA	ug/kg	1.89	1.83	97		1		70 - 130	0 - 30
HFPO-DA	ug/kg	4	4.55	114		.5		70 - 130	0 - 30
NEtFOSAA	ug/kg	2	1.94	97		2		70 - 130	0 - 30
NMeFOSAA	ug/kg	2	2.02	101		1		70 - 130	0 - 30
Perfluorobutanesulfonic acid	ug/kg	1.77	1.8	101		.6		70 - 130	0 - 30
Perfluorobutanoic acid	ug/kg	2	1.99	100		.06		70 - 130	0 - 30
Perfluorodecane sulfonic acid	ug/kg	1.93	1.97	102		2		70 - 130	0 - 30
Perfluorodecanoic acid	ug/kg	2	1.82	91		.9		70 - 130	0 - 30
Perfluorododecanoic acid	ug/kg	2	1.99	99		.5		70 - 130	0 - 30
Perfluoroheptanesulfonic acid	ug/kg	1.91	1.86	98		1		70 - 130	0 - 30
Perfluoroheptanoic acid	ug/kg	2	1.98	99		1		70 - 130	0 - 30
Perfluorohexanesulfonic acid	ug/kg	1.83	1.78	98		.4		70 - 130	0 - 30
Perfluorohexanoic acid	ug/kg	2	1.94	97		3		70 - 130	0 - 30
Perfluoronanesulfonic acid	ug/kg	1.92	1.93	100		2		70 - 130	0 - 30
Perfluoronanoic acid	ug/kg	2	1.93	97		.4		70 - 130	0 - 30
Perfluorooctane Sulfonamide	ug/kg	2	2.08	104		2		70 - 130	0 - 30
Perfluorooctanesulfonic acid	ug/kg	1.86	1.81	97		.2		70 - 130	0 - 30
Perfluorooctanoic acid	ug/kg	2	1.95	98		.09		70 - 130	0 - 30
Perfluoropentanesulfonic acid	ug/kg	1.88	1.89	100		2		70 - 130	0 - 30
Perfluoropentanoic acid	ug/kg	2	1.99	99		.7		70 - 130	0 - 30
Perfluorotetradecanoic acid	ug/kg	2	1.98	99		.3		70 - 130	0 - 30
Perfluorotridecanoic acid	ug/kg	2	1.99	99		.2		70 - 130	0 - 30
Perfluoroundecanoic acid	ug/kg	2	1.96	98		.3		70 - 130	0 - 30

RPD : 0 out of 28 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 56 outside limits

* Values outside of QC limits

FORM III SV-2

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Report No:	<u>222040645</u>	Method Blank ID:	<u>2332459</u>
Matrix:	<u>Solid</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>5</u> g	Lab File ID:	<u>2220418B_3.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/15/22</u>	Analysis Date:	<u>04/18/22</u> Time: <u>1919</u>
Prep Batch:	<u>738457</u>	Analytical Batch:	<u>738768</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

<i>CLIENT SAMPLE ID</i>	<i>GCAL SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>	
1.	LCS2332460	2332460	2220418B_4.d	04/18/22	1934
2.	LCSD2332461	2332461	2220418B_5.d	04/18/22	1949
3.	AOI02-07-SB-0.0-2.0	22204064507	2220418B_9.d	04/18/22	2049
4.	AOI02-03-SB-0.0-2.0	22204064508	2220418B_10.d	04/18/22	2103
5.	AOI01-02-SB-0.0-1.0-D	22204064509	2220418B_11.d	04/18/22	2118
6.	AOI02-01-SB-14.5-16.5	22204064512	2220418B_14.d	04/18/22	2133
7.	AOI01-02-SB-25.5-27.5	22204064513	2220418B_15.d	04/18/22	2148
8.	AOI02-03-SB-16.5-18.5	22204064514	2220418B_17.d	04/18/22	2218
9.	AOI02-06-SB-0.0-0.5	22204064515	2220418B_18.d	04/18/22	2233
10.	AOI02-05-SB-0.0-0.5	22204064516	2220418B_19.d	04/18/22	2248
11.	AOI01-02-SB-0.0-1.0	22204064510	2220419A_5.d	04/19/22	0801
12.	AOI02-01-SB-0.0-2.0	22204064511	2220419A_6.d	04/19/22	0816

FORM IV SV

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Report No:	<u>222040645</u>	Method Blank ID:	<u>2334174</u>
Matrix:	<u>Water</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2220421A_4.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/18/22</u>	Analysis Date:	<u>04/21/22</u> Time: <u>0918</u>
Prep Batch:	<u>738671</u>	Analytical Batch:	<u>739037</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

<i>CLIENT SAMPLE ID</i>	<i>GCAL SAMPLE ID</i>	<i>LAB FILE ID</i>	<i>DATE ANALYZED</i>	<i>TIME ANALYZED</i>
1. LCS2334175	2334175	2220421A_5.d	04/21/22	0933
2. LCSD2334176	2334176	2220421A_6.d	04/21/22	0948
3. WV-FRB-02	22204064506	2220421A_22.d	04/21/22	1350

FORM IV SV

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No: <u>222040645</u>	Client Sample ID: <u>MB2332459</u>
Collect Date: <u>NA</u> Time: <u>NA</u>	GCAL Sample ID: <u>2332459</u>
Matrix: <u>Solid</u> % Moisture: <u>NA</u>	Instrument ID: <u>QQQ4</u>
Sample Amt: <u>5</u> g	Lab File ID: <u>2220418B_3.d</u>
Injection Vol.: <u>2</u> (µL)	GC Column: <u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.: <u>1000</u> (µL)	Dilution Factor: <u>1</u> Analyst: <u>SXA</u>
Prep Date: <u>04/15/22</u>	Analysis Date: <u>04/18/22</u> Time: <u>1919</u>
Prep Batch: <u>738457</u>	Analytical Batch: <u>738768</u>
Prep Method: <u>PFAS ID QSM B15 Prep</u>	Analytical Method: <u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ug/kg

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	0.200	U	0.060	0.200	1.00
39108-34-4	8:2 Fluorotelomersulfonic acid	0.100	U	0.030	0.100	1.00
2991-50-6	NEtFOSAA	0.100	U	0.030	0.100	1.00
2355-31-9	NMeFOSAA	0.050	U	0.020	0.050	1.00
375-73-5	Perfluorobutanesulfonic acid	0.050	U	0.020	0.050	1.00
375-22-4	Perfluorobutanoic acid	0.100	U	0.040	0.100	1.00
335-76-2	Perfluorodecanoic acid	0.100	U	0.040	0.100	1.00
307-55-1	Perfluorododecanoic acid	0.050	U	0.020	0.050	1.00
375-85-9	Perfluoroheptanoic acid	0.050	U	0.020	0.050	1.00
355-46-4	Perfluorohexanesulfonic acid	0.100	U	0.030	0.100	1.00
307-24-4	Perfluorohexanoic acid	0.050	U	0.020	0.050	1.00
375-95-1	Perfluorononanoic acid	0.050	U	0.020	0.050	1.00
1763-23-1	Perfluorooctanesulfonic acid	0.200	U	0.050	0.200	1.00
335-67-1	Perfluorooctanoic acid	0.200	U	0.080	0.200	1.00
2706-90-3	Perfluoropentanoic acid	0.050	U	0.020	0.050	1.00
376-06-7	Perfluorotetradecanoic acid	0.050	U	0.020	0.050	1.00
72629-94-8	Perfluorotridecanoic acid	0.100	U	0.030	0.100	1.00
2058-94-8	Perfluoroundecanoic acid	0.050	U	0.020	0.050	1.00

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Report No:	<u>222040645</u>	Client Sample ID:	<u>MB2334174</u>
Collect Date:	<u>NA</u> Time: <u>NA</u>	GCAL Sample ID:	<u>2334174</u>
Matrix:	<u>Water</u> % Moisture: <u>NA</u>	Instrument ID:	<u>QQQ4</u>
Sample Amt:	<u>125</u> mL	Lab File ID:	<u>2220421A_4.d</u>
Injection Vol.:	<u>2</u> (µL)	GC Column:	<u>ECLIPSE+C18</u> ID: <u>2.1</u> (mm)
Prep Final Vol.:	<u>1000</u> (µL)	Dilution Factor:	<u>1</u> Analyst: <u>SXA</u>
Prep Date:	<u>04/18/22</u>	Analysis Date:	<u>04/21/22</u> Time: <u>0918</u>
Prep Batch:	<u>738671</u>	Analytical Batch:	<u>739037</u>
Prep Method:	<u>PFAS ID QSM B15 Prep</u>	Analytical Method:	<u>PFAS Isotope Dilution QSM B15</u>

CONCENTRATION UNITS: ng/L

CAS	ANALYTE	RESULT	Q	DL	LOD	LOQ
27619-97-2	6:2 Fluorotelomersulfonic acid	3.00	U	1.50	3.00	4.00
39108-34-4	8:2 Fluorotelomersulfonic acid	3.00	U	1.06	3.00	4.00
2991-50-6	NEtFOSAA	4.00	U	1.58	4.00	8.00
2355-31-9	NMeFOSAA	4.00	U	0.900	4.00	8.00
375-73-5	Perfluorobutanesulfonic acid	2.00	U	0.620	2.00	4.00
375-22-4	Perfluorobutanoic acid	3.50	U	1.52	3.50	4.00
335-76-2	Perfluorodecanoic acid	3.00	U	1.44	3.00	4.00
307-55-1	Perfluorododecanoic acid	3.00	U	1.30	3.00	4.00
375-85-9	Perfluoroheptanoic acid	3.00	U	1.16	3.00	4.00
355-46-4	Perfluorohexanesulfonic acid	3.00	U	1.24	3.00	4.00
307-24-4	Perfluorohexanoic acid	2.00	U	0.940	2.00	4.00
375-95-1	Perfluorononanoic acid	2.00	U	0.980	2.00	4.00
1763-23-1	Perfluorooctanesulfonic acid	2.00	U	0.760	2.00	4.00
335-67-1	Perfluorooctanoic acid	2.00	U	0.840	2.00	4.00
2706-90-3	Perfluoropentanoic acid	2.00	U	0.880	2.00	4.00
376-06-7	Perfluorotetradecanoic acid	3.00	U	1.14	3.00	4.00
72629-94-8	Perfluorotridecanoic acid	3.00	U	1.23	3.00	4.00
2058-94-8	Perfluoroundecanoic acid	3.00	U	1.24	3.00	4.00

3C
WATER SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040645
 Prep Method: PFAS ID QSM B15 Prep Prep Batch: 738671
 Analytical Method: PFAS Isotope Dilution QSM B15 Analytical Batch: 739037

GCAL QC ID: 2334175

ANALYTE	UNITS	SPIKE ADDED	SAMPLE RESULT	LCS RESULT	LCS % REC	#	QC LIMITS
6:2 Fluorotelomersulfonic acid	ng/L	76.1	0	66.8	88		64 - 140
8:2 Fluorotelomersulfonic acid	ng/L	76.8	0	67.6	88		67 - 138
NEtFOSAA	ng/L	80	0	65.9	82		61 - 135
NMeFOSAA	ng/L	80	0	69.3	87		65 - 136
Perfluorobutanesulfonic acid	ng/L	71	0	60.1	85		72 - 130
Perfluorobutanoic acid	ng/L	80	0	67	84		73 - 129
Perfluorodecanoic acid	ng/L	80	0	68	85		71 - 129
Perfluorododecanoic acid	ng/L	80	0	67.6	84		72 - 134
Perfluoroheptanoic acid	ng/L	80	0	66.8	83		72 - 130
Perfluorohexanesulfonic acid	ng/L	73.1	0	59.4	81		68 - 131
Perfluorohexanoic acid	ng/L	80	0	67.7	85		72 - 129
Perfluorononanoic acid	ng/L	80	0	66.5	83		69 - 130
Perfluorooctanesulfonic acid	ng/L	74.2	0	60.6	82		65 - 140
Perfluorooctanoic acid	ng/L	80	0	66.6	83		71 - 133
Perfluoropentanoic acid	ng/L	80	0	67	84		72 - 129
Perfluorotetradecanoic acid	ng/L	80	0	66.6	83		71 - 132
Perfluorotridecanoic acid	ng/L	80	0	66.4	83		65 - 144
Perfluoroundecanoic acid	ng/L	80	0	68.1	85		69 - 133

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-1

3C
WATER SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040645
 Prep Method: PFAS ID QSM B15 Prep
 Analytical Method: PFAS Isotope Dilution QSM B15

Prep Batch: 738671
 Analytical Batch: 739037

GCAL QC ID: 2334176

ANALYTE	UNITS	SPIKE ADDED	LCSD RESULT	LCSD % REC	#	% RPD	#	QC LIMITS	
								REC	RPD
6:2 Fluorotelomersulfonic acid	ng/L	76.1	64.9	85		3		64 - 140	0 - 30
8:2 Fluorotelomersulfonic acid	ng/L	76.8	73.6	96		8		67 - 138	0 - 30
NEtFOSAA	ng/L	80	70.5	88		7		61 - 135	0 - 30
NMeFOSAA	ng/L	80	72.6	91		5		65 - 136	0 - 30
Perfluorobutanesulfonic acid	ng/L	71	61.8	87		3		72 - 130	0 - 30
Perfluorobutanoic acid	ng/L	80	68.8	86		3		73 - 129	0 - 30
Perfluorodecanoic acid	ng/L	80	68.4	85		.6		71 - 129	0 - 30
Perfluorododecanoic acid	ng/L	80	70.5	88		4		72 - 134	0 - 30
Perfluoroheptanoic acid	ng/L	80	69.9	87		5		72 - 130	0 - 30
Perfluorohexanesulfonic acid	ng/L	73.1	61.6	84		4		68 - 131	0 - 30
Perfluorohexanoic acid	ng/L	80	70.1	88		3		72 - 129	0 - 30
Perfluorononanoic acid	ng/L	80	69	86		4		69 - 130	0 - 30
Perfluorooctanesulfonic acid	ng/L	74.2	60.4	81		.4		65 - 140	0 - 30
Perfluorooctanoic acid	ng/L	80	67.3	84		1		71 - 133	0 - 30
Perfluoropentanoic acid	ng/L	80	69	86		3		72 - 129	0 - 30
Perfluorotetradecanoic acid	ng/L	80	69.3	87		4		71 - 132	0 - 30
Perfluorotridecanoic acid	ng/L	80	68.3	85		3		65 - 144	0 - 30
Perfluoroundecanoic acid	ng/L	80	69	86		1		69 - 133	0 - 30

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-1

3D
SOIL SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040645
 Prep Method: PFAS ID QSM B15 Prep Prep Batch: 738457
 Analytical Method: PFAS Isotope Dilution QSM B15 Analytical Batch: 738768

GCAL QC ID: 2332460

ANALYTE	UNITS	SPIKE ADDED	SAMPLE RESULT	LCS RESULT	LCS % REC	#	QC LIMITS
6:2 Fluorotelomersulfonic acid	ug/kg	1.9	0	1.75	92		64 - 140
8:2 Fluorotelomersulfonic acid	ug/kg	1.92	0	1.83	96		65 - 137
NEtFOSAA	ug/kg	2	0	1.78	89		61 - 139
NMeFOSAA	ug/kg	2	0	1.8	90		63 - 144
Perfluorobutanesulfonic acid	ug/kg	1.77	0	1.56	88		72 - 128
Perfluorobutanoic acid	ug/kg	2	0	1.77	89		71 - 135
Perfluorodecanoic acid	ug/kg	2	0	1.78	89		69 - 133
Perfluorododecanoic acid	ug/kg	2	0	1.77	89		69 - 135
Perfluoroheptanoic acid	ug/kg	2	0	1.74	87		71 - 131
Perfluorohexanesulfonic acid	ug/kg	1.83	0	1.57	86		67 - 130
Perfluorohexanoic acid	ug/kg	2	0	1.75	88		70 - 132
Perfluorononanoic acid	ug/kg	2	0	1.77	88		72 - 129
Perfluorooctanesulfonic acid	ug/kg	1.86	0	1.54	83		68 - 136
Perfluorooctanoic acid	ug/kg	2	0	1.75	87		69 - 133
Perfluoropentanoic acid	ug/kg	2	0	1.78	89		69 - 132
Perfluorotetradecanoic acid	ug/kg	2	0	1.74	87		69 - 133
Perfluorotridecanoic acid	ug/kg	2	0	1.8	90		66 - 139
Perfluoroundecanoic acid	ug/kg	2	0	1.74	87		64 - 136

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-2

3D
SOIL SEMIVOLATILE LCS/LCSD RECOVERY

Report No: 222040645
 Prep Method: PFAS ID QSM B15 Prep
 Analytical Method: PFAS Isotope Dilution QSM B15

Prep Batch: 738457
 Analytical Batch: 738768

GCAL QC ID: 2332461

ANALYTE	UNITS	SPIKE ADDED	LCSD RESULT	LCSD % REC	#	% RPD	#	QC LIMITS	
								REC	RPD
6:2 Fluorotelomersulfonic acid	ug/kg	1.9	1.68	88		4		64 - 140	0 - 30
8:2 Fluorotelomersulfonic acid	ug/kg	1.92	1.77	92		4		65 - 137	0 - 30
NETFOSAA	ug/kg	2	1.68	84		6		61 - 139	0 - 30
NMeFOSAA	ug/kg	2	1.76	88		2		63 - 144	0 - 30
Perfluorobutanesulfonic acid	ug/kg	1.77	1.54	87		1		72 - 128	0 - 30
Perfluorobutanoic acid	ug/kg	2	1.75	87		2		71 - 135	0 - 30
Perfluorodecanoic acid	ug/kg	2	1.72	86		3		69 - 133	0 - 30
Perfluorododecanoic acid	ug/kg	2	1.72	86		3		69 - 135	0 - 30
Perfluoroheptanoic acid	ug/kg	2	1.72	86		1		71 - 131	0 - 30
Perfluorohexanesulfonic acid	ug/kg	1.83	1.56	86		.3		67 - 130	0 - 30
Perfluorohexanoic acid	ug/kg	2	1.72	86		2		70 - 132	0 - 30
Perfluorononanoic acid	ug/kg	2	1.74	87		1		72 - 129	0 - 30
Perfluorooctanesulfonic acid	ug/kg	1.86	1.54	83		.1		68 - 136	0 - 30
Perfluorooctanoic acid	ug/kg	2	1.72	86		2		69 - 133	0 - 30
Perfluoropentanoic acid	ug/kg	2	1.73	87		3		69 - 132	0 - 30
Perfluorotetradecanoic acid	ug/kg	2	1.7	85		2		69 - 133	0 - 30
Perfluorotridecanoic acid	ug/kg	2	1.79	89		.5		66 - 139	0 - 30
Perfluoroundecanoic acid	ug/kg	2	1.72	86		1		64 - 136	0 - 30

RPD : 0 out of 18 outside limits

Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 36 outside limits

* Values outside of QC limits

FORM III SV-2

EXTRACTED INTERNAL STANDARD RECOVERY

Report No 221081365

%Rec Limits 50 - 150

* Value outside QC limits

CLIENT SAMPLE ID	LAB ID	EIS1	EIS2	EIS3	EIS4	EIS5	EIS6	EIS7	EIS8	EIS9	EIS10
WU-DECON-01	22108136501	94	89	67	92	92	92	93	96	88	77
WU-DECON-02	22108136502	91	98	87	89	89	91	93	94	89	91
MB2227758	2227758	92	94	71	84	84	86	88	89	89	84
LCS2227759	2227759	84	91	84	83	85	86	89	90	91	89
LCSD2227760	2227760	91	89	84	85	87	89	90	90	90	89

CLIENT SAMPLE ID	LAB ID	EIS11	EIS12	EIS13	EIS14	EIS15	EIS16	EIS17			
WU-DECON-01	22108136501	94	87	91	95	71	77	73			
WU-DECON-02	22108136502	91	88	91	94	89	83	88			
MB2227758	2227758	88	83	87	89	75	80	84			
LCS2227759	2227759	89	88	90	89	86	82	87			
LCSD2227760	2227760	91	89	91	91	86	85	91			

EIS1) M2 6:2 FTS

EIS2) M2 8:2 FTS

EIS3) M2PFTA

EIS4) M3PFBS

EIS5) M3PFHxS

EIS6) M4PFHpA

EIS7) M5PFHxA

EIS8) M5PFPeA

EIS9) M6PFDA

EIS10) M7PFUnA

EIS11) M8PFOA

EIS12) M8PFOS

EIS13) M9PFNA

EIS14) MPFBA

EIS15) MPFDoA

EIS16) d3-NMeFOSAA

EIS17) d5-NEtFOSAA

8E - EXTRACTED INTERNAL STANDARD RECOVERY

Report No 222040903

%Rec Limits 50 - 150

* Value outside QC limits

CLIENT SAMPLE ID	LAB ID	EIS1	EIS2	EIS3	EIS4	EIS5	EIS6	EIS7	EIS8	EIS9	EIS10
AOI01-01-GW	22204090301	110	108	96	102	102	100	99	98	103	101
AOI01-02-GW	22204090302	130	117	100	108	107	104	102	103	108	106
AOI02-01-GW	22204090303	113	115	90	106	104	104	103	103	100	95
AOI02-01-GW-MS	22204090304	112	104	90	102	105	102	101	100	100	96
AOI02-01-GW-MSD	22204090305	109	102	86	100	103	102	101	100	99	90
AOI02-01-GW-D	22204090306	98	102	63	96	97	101	101	100	97	98
AOI02-02-GW	22204090307	108	107	87	99	90	97	93	95	98	95
AOI02-03-GW	22204090308	115	113	101	106	103	105	102	104	105	102
AOI02-04-GW	22204090309	116	119	85	108	99	107	105	101	106	106
WU-ERB-07	22204090310	93	98	76	93	90	93	95	97	94	94
WU-ERB-08	22204090311	102	105	94	101	101	100	100	99	101	97
MB2336115	2336115	111	105	88	100	100	100	99	98	99	97
LCS2336116	2336116	102	102	91	97	98	96	95	94	99	97
LCSD2336117	2336117	106	102	97	98	102	101	99	99	100	101
MB2337443	2337443	102	96	89	96	96	99	97	99	97	95
LCS2337444	2337444	89	93	85	93	91	96	95	96	95	96

CLIENT SAMPLE ID	LAB ID	EIS11	EIS12	EIS13	EIS14	EIS15	EIS16	EIS17			
AOI01-01-GW	22204090301	102	104	101	100	100	87	97	NA	NA	NA
AOI01-02-GW	22204090302	108	108	106	105	107	109	104	NA	NA	NA
AOI02-01-GW	22204090303	106	102	103	103	88	89	93	NA	NA	NA
AOI02-01-GW-MS	22204090304	105	104	103	102	91	95	95	NA	NA	NA
AOI02-01-GW-MSD	22204090305	102	103	101	101	87	88	91	NA	NA	NA
AOI02-01-GW-D	22204090306	101	95	100	97	91	89	101	NA	NA	NA
AOI02-02-GW	22204090307	100	100	98	94	91	94	96	NA	NA	NA
AOI02-03-GW	22204090308	107	107	105	104	98	92	103	NA	NA	NA
AOI02-04-GW	22204090309	108	108	107	103	103	117	101	NA	NA	NA
WU-ERB-07	22204090310	97	94	94	96	81	82	98	NA	NA	NA
WU-ERB-08	22204090311	103	103	102	99	92	90	94	NA	NA	NA
MB2336115	2336115	101	101	102	98	94	86	96	NA	NA	NA
LCS2336116	2336116	99	98	97	94	93	93	95	NA	NA	NA
LCSD2336117	2336117	101	104	102	98	97	95	100	NA	NA	NA
MB2337443	2337443	100	96	98	97	91	88	96	NA	NA	NA
LCS2337444	2337444	96	93	96	94	91	87	96	NA	NA	NA

EIS1) M2 6:2 FTS

EIS2) M2 8:2 FTS

EIS3) M2PFTA

EIS4) M3PFBS

EIS5) M3PFHxS

EIS6) M4PFHpA

EIS7) M5PFHxA

EIS8) M5PFPeA

EIS9) M6PFDA

EIS10) M7PFUnA

EIS11) M8PFOA

EIS12) M8PFOS

EIS13) M9PFNA

EIS14) MPFBA

EIS15) MPFDaA

EIS16) d3-NMeFOSAA

EIS17) d5-NEtFOSAA

8E - EXTRACTED INTERNAL STANDARD RECOVERY

Report No 222040903

%Rec Limits 50 - 150

* Value outside QC limits

CLIENT SAMPLE ID	LAB ID	EIS1	EIS2	EIS3	EIS4	EIS5	EIS6	EIS7	EIS8	EIS9	EIS10
LCSD2337445	2337445	86	88	81	90	88	91	92	94	92	89

CLIENT SAMPLE ID	LAB ID	EIS11	EIS12	EIS13	EIS14	EIS15	EIS16	EIS17			
LCSD2337445	2337445	95	90	92	92	85	85	89	NA	NA	NA

EIS1) M2 6:2 FTS

EIS2) M2 8:2 FTS

EIS3) M2PFTA

EIS4) M3PFBS

EIS5) M3PFHxS

EIS6) M4PFHpA

EIS7) M5PFHxA

EIS8) M5PFPeA

EIS9) M6PFDA

EIS10) M7PFUnA

EIS11) M8PFOA

EIS12) M8PFOS

EIS13) M9PFNA

EIS14) MPFBA

EIS15) MPFDoA

EIS16) d3-NMeFOSAA

EIS17) d5-NEtFOSAA

8E - EXTRACTED INTERNAL STANDARD RECOVERY

Report No 222040507

%Rec Limits 50 - 150

* Value outside QC limits

CLIENT SAMPLE ID	LAB ID	EIS1	EIS2	EIS3	EIS4	EIS5	EIS6	EIS7	EIS8	EIS9	EIS10
AOI01-01-SB-0.0-2.0	22204050701	77	78	92	106	84	87	80	79	77	87
WU-ERB-01	22204050702	NA	83	76	95	105	103	108	109	108	107
WU-ERB-03	22204050703	NA	75	75	94	104	101	106	107	108	103
WU-ERB-04	22204050704	NA	98	101	85	90	90	88	88	89	91
WU-ERB-05	22204050705	NA	73	72	88	100	99	106	106	107	98
WU-ERB-06	22204050706	NA	79	74	85	97	98	102	102	102	101
WU-DECON-03	22204050707	NA	71	72	82	98	97	102	101	102	92
AOI01-01-SB-0.0-2.0-MS	22204050708	53	57	64	71	55	57	54	53	52	59
AOI01-01-SB-0.0-2.0-MSD	22204050709	32*	36*	42*	58	44*	48*	40*	39*	37*	46*
AOI02-02-SB-0.0-2.0	22204050710	92	98	103	97	88	89	89	90	88	93
AOI01-01-SB-37.0-39.0	22204050711	57	62	71	64	62	62	61	61	60	64
AOI01-01-SB-0.0-2.0-D	22204050712	82	86	97	100	81	82	79	80	79	85
AOI02-02-SB-14.0-16.0	22204050713	69	71	86	80	77	78	75	76	74	80
WU-FRB-01	22204050714	104	118	136	117	109	110	113	113	112	119
AOI02-04-SB-0.0-2.0	22204050715	115	113	127	120	96	96	97	97	94	105
AOI02-04-SB-14.0-16.0	22204050716	80	76	85	78	80	77	77	78	80	80

CLIENT SAMPLE ID	LAB ID	EIS11	EIS12	EIS13	EIS14	EIS15	EIS16	EIS17	EIS18	EIS19	
AOI01-01-SB-0.0-2.0	22204050701	93	74	84	90	86	74	92	46*	57	NA
WU-ERB-01	22204050702	100	NA	107	101	106	111	99	89	91	NA
WU-ERB-03	22204050703	101	NA	107	100	105	109	99	91	94	NA
WU-ERB-04	22204050704	89	NA	90	94	92	88	88	86	95	NA
WU-ERB-05	22204050705	92	NA	106	94	102	109	92	82	87	NA
WU-ERB-06	22204050706	95	NA	105	98	102	104	90	85	86	NA
WU-DECON-03	22204050707	85	NA	103	91	97	103	86	76	82	NA
AOI01-01-SB-0.0-2.0-MS	22204050708	61	51	56	61	58	50	62	44*	47*	NA
AOI01-01-SB-0.0-2.0-MSD	22204050709	49*	41*	43*	52	44*	34*	49*	18*	23*	NA
AOI02-02-SB-0.0-2.0	22204050710	95	85	91	92	93	86	93	79	87	NA
AOI01-01-SB-37.0-39.0	22204050711	65	59	64	65	64	58	62	51	55	NA
AOI01-01-SB-0.0-2.0-D	22204050712	91	80	84	88	84	76	92	55	64	NA
AOI02-02-SB-14.0-16.0	22204050713	82	73	80	81	80	73	80	57	66	NA
WU-FRB-01	22204050714	123	108	116	114	117	109	116	113	118	NA
AOI02-04-SB-0.0-2.0	22204050715	114	95	102	102	102	90	113	79	92	NA
AOI02-04-SB-14.0-16.0	22204050716	80	72	78	78	79	83	79	72	75	NA

EIS1) M2 4:2 FTS

EIS2) M2 6:2 FTS

EIS3) M2 8:2 FTS

EIS4) M2PFTA

EIS5) M3PFBS

EIS6) M3PFHxS

EIS7) M4PFHpA

EIS8) M5PFHxA

EIS9) M5PFPeA

EIS10) M6PFDA

EIS11) M7PFUnA

EIS12) M8FOSA

EIS13) M8PFOA

EIS14) M8PFOS

EIS15) M9PFNA

EIS16) MPFBA

EIS17) MPFDoA

EIS18) d3-NMeFOSAA

EIS19) d5-NEtFOSAA

8E - EXTRACTED INTERNAL STANDARD RECOVERY

Report No 222040507

%Rec Limits 50 - 150

* Value outside QC limits

CLIENT SAMPLE ID	LAB ID	EIS1	EIS2	EIS3	EIS4	EIS5	EIS6	EIS7	EIS8	EIS9	EIS10
MB2331063	2331063	141	141	165*	142	136	136	132	132	131	139
LCS2331064	2331064	100	107	115	103	100	100	100	100	98	103
LCSD2331065	2331065	102	108	118	106	102	103	102	103	102	106
MB2332013	2332013	106	116	130	106	106	106	108	109	108	114
LCS2332014	2332014	104	109	122	112	107	106	108	108	108	112
LCSD2332015	2332015	100	105	116	103	101	103	105	104	103	108
MB2334174	2334174	NA	67	70	87	98	96	100	100	102	97
LCS2334175	2334175	NA	73	70	92	95	95	101	99	101	97
LCSD2334176	2334176	NA	79	71	91	96	96	100	100	100	99
MB2337269	2337269	NA	108	113	93	99	100	96	96	99	100
LCS2337270	2337270	NA	104	112	86	99	100	96	96	100	100
LCSD2337271	2337271	NA	103	106	92	97	99	95	95	98	98

CLIENT SAMPLE ID	LAB ID	EIS11	EIS12	EIS13	EIS14	EIS15	EIS16	EIS17	EIS18	EIS19	
MB2331063	2331063	141	127	136	139	137	128	137	131	141	NA
LCS2331064	2331064	103	97	102	101	101	98	102	96	103	NA
LCSD2331065	2331065	109	103	104	104	104	102	103	100	106	NA
MB2332013	2332013	115	105	113	108	112	105	112	108	115	NA
LCS2332014	2332014	113	109	112	110	111	105	112	110	116	NA
LCSD2332015	2332015	107	100	107	105	107	101	106	106	109	NA
MB2334174	2334174	92	NA	99	92	99	103	93	79	83	NA
LCS2334175	2334175	93	NA	99	94	99	102	95	85	87	NA
LCSD2334176	2334176	97	NA	102	98	100	103	97	87	87	NA
MB2337269	2337269	99	NA	100	103	101	97	96	98	105	NA
LCS2337270	2337270	99	NA	100	102	101	97	93	96	98	NA
LCSD2337271	2337271	98	NA	100	102	99	97	96	94	96	NA

EIS1) M2 4:2 FTS**EIS2**) M2 6:2 FTS**EIS3**) M2 8:2 FTS**EIS4**) M2PFTA**EIS5**) M3PFBS**EIS6**) M3PFHxS**EIS7**) M4PFHpA**EIS8**) M5PFHxA**EIS9**) M5PFPeA**EIS10**) M6PFDA**EIS11**) M7PFUnA**EIS12**) M8FOSA**EIS13**) M8PFOA**EIS14**) M8PFOS**EIS15**) M9PFNA**EIS16**) MPFBA**EIS17**) MPFDoA**EIS18**) d3-NMeFOSAA**EIS19**) d5-NEtFOSAA

8E - EXTRACTED INTERNAL STANDARD RECOVERY

Report No 222040645

%Rec Limits 50 - 150

* Value outside QC limits

CLIENT SAMPLE ID	LAB ID	EIS1	EIS2	EIS3	EIS4	EIS5	EIS6	EIS7	EIS8	EIS9	EIS10
AOI02-07-SB-0.0-2.0	22204064507	79	76	87	73	67	78	78	63	61	61
AOI02-03-SB-0.0-2.0	22204064508	79	78	85	75	71	78	77	69	66	68
AOI01-02-SB-0.0-1.0-DRE	22204064509	50	NA	56	61	51	63	63	57	58	58
AOI01-02-SB-0.0-1.0-D	22204064509	NA	52	NA	NA	NA	NA	NA	NA	NA	NA
AOI01-02-SB-0.0-1.0	22204064510	62	62	64	61	56	67	66	53	52	52
AOI02-01-SB-0.0-2.0	22204064511	58	55	61	52	56	62	59	55	55	55
AOI02-01-SB-14.5-16.5	22204064512	54	52	61	63	64	72	74	69	70	68
AOI01-02-SB-25.5-27.5	22204064513	54	55	57	49*	59	59	59	55	55	55
AOI02-03-SB-16.5-18.5	22204064514	47*	44*	50	48*	56	65	62	59	61	62
AOI02-06-SB-0.0-0.5	22204064515	67	66	74	63	54	69	68	51	51	50
AOI02-05-SB-0.0-0.5	22204064516	27*	25*	31*	39*	29*	36*	37*	29*	30*	29*
MB2343356	2343356	90	89	91	83	89	90	90	86	86	86
LCS2343357	2343357	89	94	94	87	94	95	95	93	91	91
LCSD2343358	2343358	87	88	92	87	92	90	90	88	87	87
MB2345193	2345193	102	92	97	97	92	111	111	106	109	109
LCS2345194	2345194	89	89	91	100	94	114	115	109	111	111

CLIENT SAMPLE ID	LAB ID	EIS11	EIS12	EIS13	EIS14	EIS15	EIS16	EIS17	EIS18	EIS19	EIS20
AOI02-07-SB-0.0-2.0	22204064507	67	69	31*	64	75	67	60	67	50	61
AOI02-03-SB-0.0-2.0	22204064508	74	77	53	69	76	71	68	74	53	64
AOI01-02-SB-0.0-1.0-DRE	22204064509	65	66	55	59	64	59	54	56	32*	40*
AOI01-02-SB-0.0-1.0-D	22204064509	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AOI01-02-SB-0.0-1.0	22204064510	59	59	29*	55	65	56	51	59	37*	41*
AOI02-01-SB-0.0-2.0	22204064511	55	56	11*	56	59	56	55	51	42*	44*
AOI02-01-SB-14.5-16.5	22204064512	74	70	45*	68	72	67	65	65	44*	51
AOI01-02-SB-25.5-27.5	22204064513	55	56	16*	57	58	56	56	51	47*	48*
AOI02-03-SB-16.5-18.5	22204064514	63	59	48*	60	62	59	58	52	42*	47*
AOI02-06-SB-0.0-0.5	22204064515	56	59	28*	54	67	56	49*	58	31*	35*
AOI02-05-SB-0.0-0.5	22204064516	35*	38*	31*	32*	39*	32*	26*	33*	14*	17*
MB2343356	2343356	90	89	72	89	87	90	86	83	86	90
LCS2343357	2343357	96	93	25*	94	93	94	91	87	89	92
LCSD2343358	2343358	90	90	64	90	90	91	86	87	89	92
MB2345193	2345193	111	106	98	108	108	107	106	98	92	99
LCS2345194	2345194	115	106	94	113	112	109	110	101	95	102

- | | | | | |
|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|
| EIS1) M2 4:2 FTS | EIS2) M2 6:2 FTS | EIS3) M2 8:2 FTS | EIS4) M2PFTA | EIS5) M3HFPODA |
| EIS6) M3PFBS | EIS7) M3PFHxS | EIS8) M4PFHpA | EIS9) M5PFHxA | EIS10) M5PFPeA |
| EIS11) M6PFDA | EIS12) M7PFUnA | EIS13) M8FOSA | EIS14) M8PFOA | EIS15) M8PFOS |
| EIS16) M9PFNA | EIS17) MPFBA | EIS18) MPFDoA | EIS19) d3-NMeFOSAA | EIS20) d5-NEtFOSAA |

8E - EXTRACTED INTERNAL STANDARD RECOVERY

Report No 222040645

%Rec Limits 50 - 150

* Value outside QC limits

CLIENT SAMPLE ID	LAB ID	EIS1	EIS2	EIS3	EIS4	EIS5	EIS6	EIS7	EIS8	EIS9	EIS10
LCSD2345195	2345195	85	80	91	97	94	111	112	107	112	110

CLIENT SAMPLE ID	LAB ID	EIS11	EIS12	EIS13	EIS14	EIS15	EIS16	EIS17	EIS18	EIS19	EIS20
LCSD2345195	2345195	114	105	102	109	109	105	108	101	90	97

- | | | | | |
|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|
| EIS1) M2 4:2 FTS | EIS2) M2 6:2 FTS | EIS3) M2 8:2 FTS | EIS4) M2PFTA | EIS5) M3HFPODA |
| EIS6) M3PFBS | EIS7) M3PFHxS | EIS8) M4PFHpA | EIS9) M5PFHxA | EIS10) M5PFPeA |
| EIS11) M6PFDA | EIS12) M7PFUnA | EIS13) M8FOSA | EIS14) M8PFOA | EIS15) M8PFOS |
| EIS16) M9PFNA | EIS17) MPFBA | EIS18) MPFDoA | EIS19) d3-NMeFOSAA | EIS20) d5-NEtFOSAA |

8E - EXTRACTED INTERNAL STANDARD RECOVERY

Report No 222040645

%Rec Limits 50 - 150

* Value outside QC limits

CLIENT SAMPLE ID	LAB ID	EIS1	EIS2	EIS3	EIS4	EIS5	EIS6	EIS7	EIS8	EIS9	EIS10
WV-FRB-02	22204064506	NA	79	72	88	110	108	114	115	117	100
AOI02-07-SB-0.0-2.0	22204064507	111	121	123	103	90	93	84	83	79	94
AOI02-03-SB-0.0-2.0	22204064508	133	142	146	133	105	109	108	104	103	118
AOI01-02-SB-0.0-1.0-D	22204064509	113	121	120	106	93	96	89	88	85	97
AOI01-02-SB-0.0-1.0	22204064510	124	130	131	121	101	105	103	101	98	113
AOI02-01-SB-0.0-2.0	22204064511	133	141	134	129	111	112	113	113	110	120
AOI02-01-SB-14.5-16.5	22204064512	108	113	129	78	96	99	99	96	95	116
AOI01-02-SB-25.5-27.5	22204064513	106	113	111	50	92	96	92	92	90	103
AOI02-03-SB-16.5-18.5	22204064514	103	118	131	59	97	102	101	98	95	116
AOI02-06-SB-0.0-0.5	22204064515	116	123	121	108	96	100	95	93	89	102
AOI02-05-SB-0.0-0.5	22204064516	116	120	121	109	97	103	94	93	88	102
MB2332459	2332459	127	134	129	113	107	109	107	106	104	113
LCS2332460	2332460	121	131	124	114	106	107	108	108	105	112
LCS2332461	2332461	125	135	129	117	107	110	111	111	109	117
MB2334174	2334174	NA	67	70	87	98	96	100	100	102	97
LCS2334175	2334175	NA	73	70	92	95	95	101	99	101	97

CLIENT SAMPLE ID	LAB ID	EIS11	EIS12	EIS13	EIS14	EIS15	EIS16	EIS17	EIS18	EIS19	
WV-FRB-02	22204064506	90	NA	114	101	109	118	91	82	87	NA
AOI02-07-SB-0.0-2.0	22204064507	101	NA	89	99	91	77	102	75	86	NA
AOI02-03-SB-0.0-2.0	22204064508	128	NA	111	111	115	102	127	111	126	NA
AOI01-02-SB-0.0-1.0-D	22204064509	102	NA	92	100	95	83	102	77	89	NA
AOI01-02-SB-0.0-1.0	22204064510	117	92	107	111	109	95	115	90	101	NA
AOI02-01-SB-0.0-2.0	22204064511	126	103	117	118	119	107	122	117	121	NA
AOI02-01-SB-14.5-16.5	22204064512	123	NA	103	111	109	94	121	107	119	NA
AOI01-02-SB-25.5-27.5	22204064513	105	NA	95	104	101	90	96	96	104	NA
AOI02-03-SB-16.5-18.5	22204064514	123	NA	104	112	110	95	114	109	115	NA
AOI02-06-SB-0.0-0.5	22204064515	106	NA	96	104	100	87	108	74	85	NA
AOI02-05-SB-0.0-0.5	22204064516	107	NA	96	105	99	88	105	69	78	NA
MB2332459	2332459	113	106	111	113	112	104	111	109	120	NA
LCS2332460	2332460	114	109	112	111	111	105	113	112	116	NA
LCS2332461	2332461	118	111	115	115	115	108	114	116	121	NA
MB2334174	2334174	92	NA	99	92	99	103	93	79	83	NA
LCS2334175	2334175	93	NA	99	94	99	102	95	85	87	NA

EIS1) M2 4:2 FTS

EIS2) M2 6:2 FTS

EIS3) M2 8:2 FTS

EIS4) M2PFTA

EIS5) M3PFBS

EIS6) M3PFHxS

EIS7) M4PFHpA

EIS8) M5PFHxA

EIS9) M5PFPeA

EIS10) M6PFDA

EIS11) M7PFUnA

EIS12) M8FOSA

EIS13) M8PFOA

EIS14) M8PFOS

EIS15) M9PFNA

EIS16) MPFBA

EIS17) MPFDoA

EIS18) d3-NMeFOSAA

EIS19) d5-NEtFOSAA

8E - EXTRACTED INTERNAL STANDARD RECOVERY

Report No 222040645

%Rec Limits 50 - 150

* Value outside QC limits

CLIENT SAMPLE ID	LAB ID	EIS1	EIS2	EIS3	EIS4	EIS5	EIS6	EIS7	EIS8	EIS9	EIS10
LCSD2334176	2334176	NA	79	71	91	96	96	100	100	100	99

CLIENT SAMPLE ID	LAB ID	EIS11	EIS12	EIS13	EIS14	EIS15	EIS16	EIS17	EIS18	EIS19	
LCSD2334176	2334176	97	NA	102	98	100	103	97	87	87	NA

EIS1) M2 4:2 FTS

EIS2) M2 6:2 FTS

EIS3) M2 8:2 FTS

EIS4) M2PFTA

EIS5) M3PFBS

EIS6) M3PFHxS

EIS7) M4PFHpA

EIS8) M5PFHxA

EIS9) M5PFPeA

EIS10) M6PFDA

EIS11) M7PFUnA

EIS12) M8FOSA

EIS13) M8PFOA

EIS14) M8PFOS

EIS15) M9PFNA

EIS16) MPFBA

EIS17) MPFDoA

EIS18) d3-NMeFOSAA

EIS19) d5-NEtFOSAA

XIV - ANALYSIS RUN LOG

Report No: 222040645 Analytical Batch: 737979 Start Date: 04/08/22
 Instrument ID: PH METER Analytical Method: EPA 9045D End Date: 04/08/22
WATERS

<i>CLIENT SAMPLE ID</i>	<i>LAB</i>		<i>ANALYTES</i>	
	<i>SAMPLE ID</i>	<i>DILUTION</i>	<i>TIME</i>	<i>pH</i>
ICV	1600	1	1338	X
AOI02-01-SB-14.5-16.5	22204064502	1	1339	X
AOI01-02-SB-0.0-1.0	22204064501	1	1339	X

FORM XIV - GENCHEM

II - CONTINUING CALIBRATION VERIFICATION

Report No: 222040645 Instrument ID: TOC7
 Analysis Date: 04/14/22 1030 Lab File ID: 9579
 Analytical Method: EPA 9060A Solid (DOD) Analytical Batch: 738467

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>% REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
Total Organic Carbon	mg/kg	2000	1970	98	90	110	

FORM II - GENCHEM

II - CONTINUING CALIBRATION VERIFICATION

Report No: 222040645 Instrument ID: TOC7
 Analysis Date: 04/14/22 1405 Lab File ID: 9579
 Analytical Method: EPA 9060A Solid (DOD) Analytical Batch: 738467

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>% REC</i>	<i>LCL</i>	<i>UCL</i>	<i>Q</i>
Total Organic Carbon	mg/kg	10000	9140	91	90	110	

FORM II - GENCHEM

III - METHOD BLANK

Report No: 222040645 Blank ID: MB2332476
Matrix: Solid Instrument ID: TOC7
Analysis Date: 04/14/22 1021 Lab File ID: 9579
Analytical Method: EPA 9060A Analytical Batch: 738467

<i>ANALYTE</i>	<i>RESULT</i>	<i>UNITS</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>
Total Organic Carbon	350	mg/kg	U	153	350	500

FORM III - GENCHEM

III - CONTINUING CALIBRATION BLANK

Report No:	<u>222040645</u>	Blank ID:	<u>CCB for HBN 738467</u>
Matrix:	<u>Solid</u>	Instrument ID:	<u>TOC7</u>
Analysis Date:	<u>04/14/22 1412</u>	Lab File ID:	<u>9579</u>
Analytical Method:	<u>EPA 9060A</u>	Analytical Batch:	<u>738467</u>

<i>ANALYTE</i>	<i>RESULT</i>	<i>UNITS</i>	<i>Q</i>	<i>DL</i>	<i>LOD</i>	<i>LOQ</i>
Total Organic Carbon	350	mg/kg	U	153	350	500

V - MS/MSD RECOVERY

Report No:	<u>222040645</u>	Parent Sample ID:	<u>AOI02-01-SB-14.5-16.5</u>
Prep Date:	<u>NA</u>	Parent LAB ID:	<u>22204064502</u>
Prep Batch:	<u>NA</u>	Analytical Batch:	<u>738467</u>
Prep Method:	<u>NA</u>	Analytical Method:	<u>EPA 9060A Solid (DOD)</u>

LAB QC ID:	22204064503 MS	Instrument ID:	TOC7
Analyst:	JGD	Lab File ID:	9579
Analysis Date:	04/14/22 1231	Dilution:	1

<i>ANALYTE</i>	<i>UNITS</i>	<i>SPIKE ADDED</i>	<i>SAMPLE RESULT</i>	<i>MS RESULT</i>	<i>MS % REC</i>	<i>#</i>	<i>QC LIMITS</i>
Total Organic Carbon	mg/kg	26000	229	15500	77		69 - 128

LAB QC ID:	22204064504 MSD	Instrument ID:	TOC7
Analyst:	JGD	Lab File ID:	9579
Analysis Date:	04/14/22 1342	Dilution:	1

<i>ANALYTE</i>	<i>UNITS</i>	<i>SPIKE ADDED</i>	<i>MSD RESULT</i>	<i>MSD % REC</i>	<i>#</i>	<i>% RPD</i>	<i>#</i>	<i>%REC LIMITS</i>	<i>RPD LIMITS</i>
Total Organic Carbon	mg/kg	26000	17300	86		11		69 - 128	0 - 20

FORM V - GENCHEM

VII - LABORATORY CONTROL SPIKE

Report No:	<u>222040645</u>	LAB ID:	<u>LCS2332477</u>
Matrix:	<u>Solid</u>	Instrument ID:	<u>TOC7</u>
Analyst:	<u>JGD</u>	Lab File ID:	<u>9579</u>
Prep Date:	<u>NA</u>	Analysis Date:	<u>04/14/22 1012</u>
Prep Batch:	<u>NA</u>	Analytical Batch:	<u>738467</u>
Prep Method:	<u>NA</u>	Analytical Method:	<u>EPA 9060A Solid (DOD)</u>

<i>ANALYTE</i>	<i>UNITS</i>	<i>TRUE</i>	<i>FOUND</i>	<i>%REC</i>	<i>Q</i>	<i>% REC LIMITS</i>
Total Organic Carbon	mg/kg	10000	9140	91		69 - 128

XIV - ANALYSIS RUN LOG

Report No: 222040645 Analytical Batch: 738467 Start Date: 04/14/22
 Instrument ID: TOC7 Analytical Method: EPA 9060A Solid (DOD) End Date: 04/14/22

<i>CLIENT SAMPLE ID</i>	<i>LAB</i>		<i>ANALYTES</i>	
	<i>SAMPLE ID</i>	<i>DILUTION</i>	<i>TIME</i>	<i>TOC</i>
LCS2332477	2332477	1	1012	X
MB2332476	2332476	1	1021	X
CCV	1800	1	1030	X
AOI01-02-SB-0.0-1.0	22204064501	1	1208	X
AOI02-01-SB-14.5-16.5	22204064502	1	1221	X
AOI02-01-SB-14.5-16.5-MS	22204064503	1	1231	X
AOI02-01-SB-14.5-16.5-MSD	22204064504	1	1342	X
AOI02-01-SB-14.5-16.5-D	22204064505	1	1354	X
CCV	1800	1	1405	X
CCB	1900	1	1412	X

FORM XIV - GENCHEM

TOC-Control L Report

2022_03_23_001.tlx

Cal. Curve

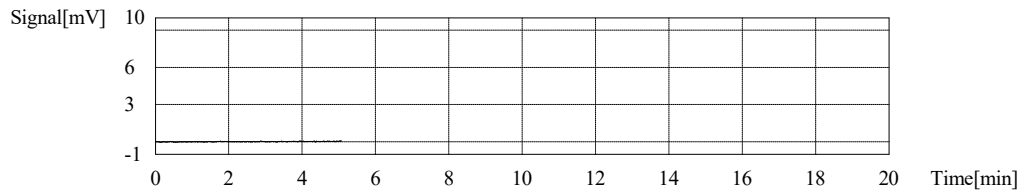
Sample Name: ICAL
Sample ID: TOC7,SSM,ICAL
Cal. Curve: SSM,ICAL 7.2022_03_23_10_35_34.cal
Status: Completed

Type	Anal.
Standard	SSM-TC

AbsC: 0.000ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	0.000	0.000	0.000ug	1000mg	*****		3/23/2022 10:41:27 AM

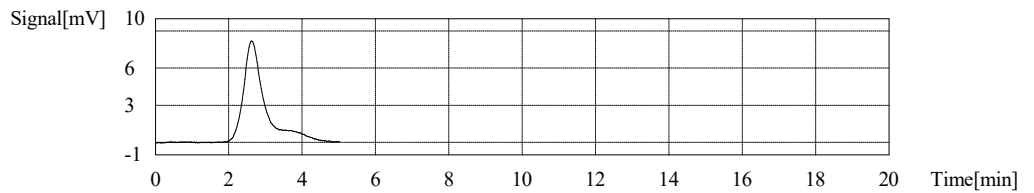
Mean Area 0.000
Mean CNV 0.000



AbsC: 200.0ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	32.76	32.76	200.0ug	1000mg	*****		3/23/2022 10:52:55 AM

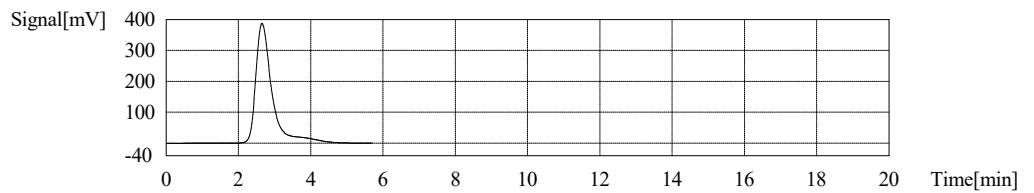
Mean Area 32.76
Mean CNV 32.76



AbsC: 10000ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	1222	1222	10000ug	1000mg	*****		3/23/2022 11:03:46 AM

Mean Area 1222
Mean CNV 1222



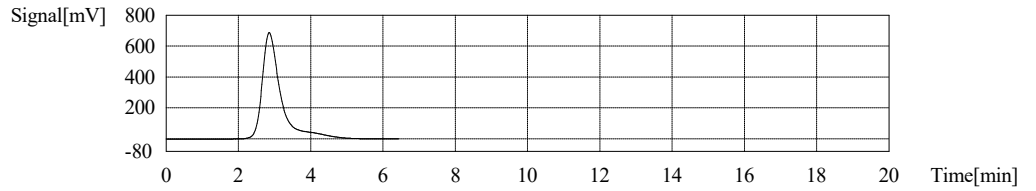
AbsC: 20000ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	2489	2489	20000ug	1000mg	*****		3/23/2022 11:29:08 AM

TOC-Control L Report

2022_03_23_001.tlx

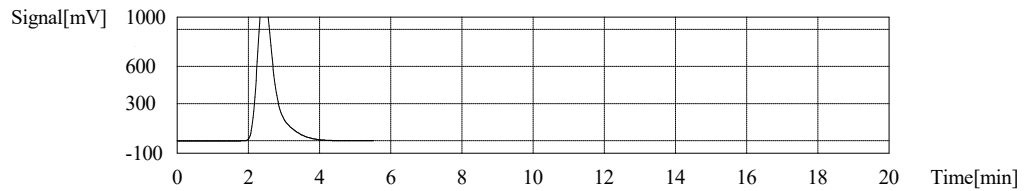
Mean Area 2489
Mean CNV 2489



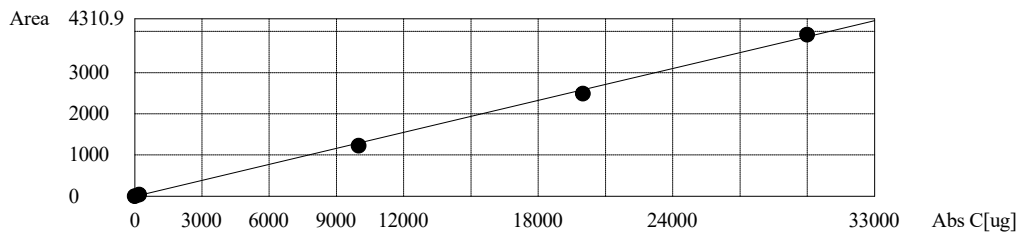
AbsC: 30000ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	3919	3919	30000ug	1000mg	*H*****		3/23/2022 11:54:54 AM

Mean Area 3919
Mean CNV 3919



Slope: 0.1293
Intercept: 0.000
r²: 0.9988
r: 0.9994
RSE(%): N/A
Zero Shift: Yes



TOC-Control L Report

2022_03_23_001.tlx

Sample

Sample Name: CCB
Sample ID: SSM
Origin: SSM7.met
Status: Completed
Chk. Result

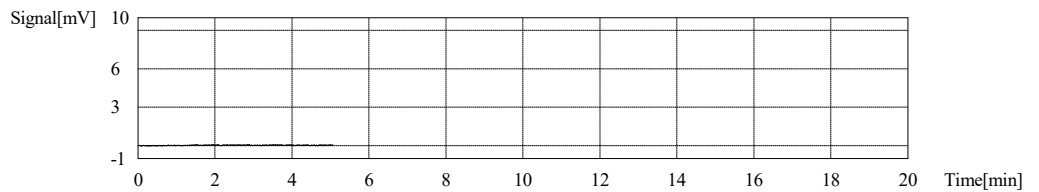
Type	Anal.	Manual Dilution	Density	Result
Unknown	SSM-TC	1.000	1.000mg/ul	SSM-TC:0.000ppm

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	0.000	0.000	0.000ug	0.000ppm	1000mg	1000uL		SSM ICAL 7.2021_10_11_11_02_35.cal	3/23/2022 12:07:03 PM

Mean Area 0.000
Mean CNV 0.000
Mean Conc. 0.000ppm



TOC-Control L Report

2022_03_23_001.tlx

Sample

Sample Name: LOQ
Sample ID: SSM
Origin: SSM7.met
Status: Completed
Chk. Result

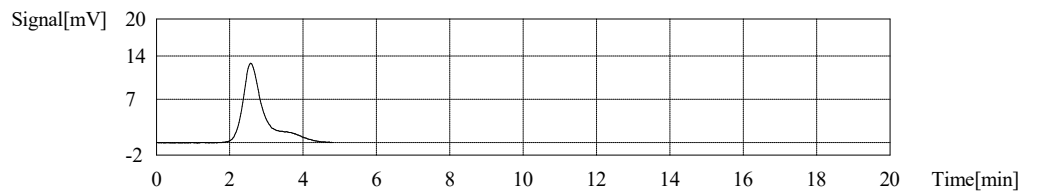
Type	Anal.	Manual Dilution	Density	Result
Unknown	SSM-TC	1.000	1.000mg/ul	SSM-TC:426.5ppm

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	51.82	51.82	426.5ug	426.5ppm	1000mg	1000uL		SSM ICAL 7.2021_10_11_11_02_35.cal	3/23/2022 12:17:05 PM

Mean Area 51.82
Mean CNV 51.82
Mean Conc. 426.5ppm



TOC-Control L Report

2022_03_23_001.tlx

Sample

Sample Name: ICV10
Sample ID: SSM
Origin: SSM7.met
Status: Completed
Chk. Result

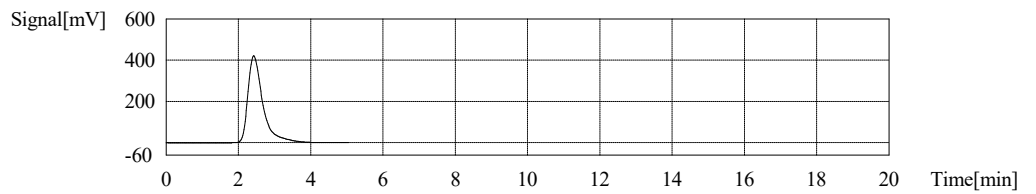
Type	Anal.	Manual Dilution	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:9984ppm

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	1213	1213	9984ug	9984ppm	1000mg	1000uL		SSM ICAL 7.2021_10_11_11_02_35.cal	3/23/2022 12:30:56 PM

Mean Area 1213
Mean CNV 1213
Mean Conc. 9984ppm



TOC-Control L Report

2022_03_23_001.tlx

Sample

Sample Name: ICV20
Sample ID: SSM
Origin: SSM7.met
Status: Completed
Chk. Result

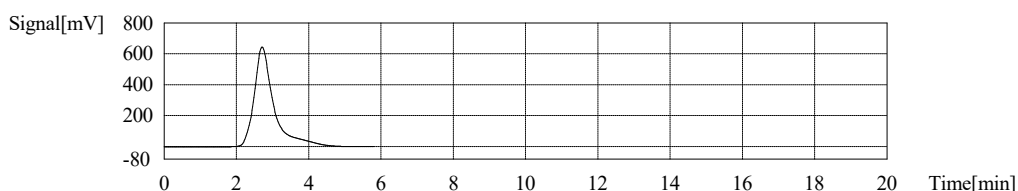
Type	Anal.	Manual Dilution	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:20208ppm

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	2455	2455	20208ug	20208ppm	1000mg	1000uL		SSM ICAL 7.2021_10_11_11_02_35.cal	3/23/2022 12:44:22 PM

Mean Area 2455
Mean CNV 2455
Mean Conc. 20208ppm



Sample Summary

Lab ID	Client ID	Matrix	Collect Date	Receive Date
22108136501	WU-DECON-01	Water	8/09/21 08:55	8/13/21 10:42
22108136502	WU-DECON-02	Water	8/09/21 09:15	8/13/21 10:42

Sample Summary

Lab ID	Client ID	Matrix	Collect Date	Receive Date
22204090301	AOI01-01-GW	Water	4/05/22 12:30	4/08/22 09:45
22204090302	AOI01-02-GW	Water	4/05/22 13:35	4/08/22 09:45
22204090303	AOI02-01-GW	Water	4/04/22 15:45	4/08/22 09:45
22204090304	AOI02-01-GW-MS	Water	4/04/22 15:45	4/08/22 09:45
22204090305	AOI02-01-GW-MSD	Water	4/04/22 15:45	4/08/22 09:45
22204090306	AOI02-01-GW-D	Water	4/04/22 15:45	4/08/22 09:45
22204090307	AOI02-02-GW	Water	4/05/22 08:30	4/08/22 09:45
22204090308	AOI02-03-GW	Water	4/05/22 14:55	4/08/22 09:45
22204090309	AOI02-04-GW	Water	4/05/22 15:45	4/08/22 09:45
22204090310	WU-ERB-07	Water	4/05/22 17:00	4/08/22 09:45
22204090311	WU-ERB-08	Water	4/06/22 10:00	4/08/22 09:45

Sample Summary

Lab ID	Client ID	Matrix	Collect Date	Receive Date
22204050701	AOI01-01-SB-0.0-2.0	Solid	3/21/22 10:45	4/04/22 14:50
22204050702	WU-ERB-01	Water	3/21/22 12:00	4/04/22 14:50
22204050703	WU-ERB-03	Water	3/28/22 11:20	4/04/22 14:50
22204050704	WU-ERB-04	Water	3/28/22 15:00	4/04/22 14:50
22204050705	WU-ERB-05	Water	3/28/22 15:05	4/04/22 14:50
22204050706	WU-ERB-06	Water	3/28/22 15:30	4/04/22 14:50
22204050707	WU-DECON-03	Water	3/29/22 09:45	4/04/22 14:50
22204050708	AOI01-01-SB-0.0-2.0-MS	Solid	3/21/22 10:45	4/04/22 14:50
22204050709	AOI01-01-SB-0.0-2.0-MSD	Solid	3/21/22 10:45	4/04/22 14:50
22204050710	AOI02-02-SB-0.0-2.0	Solid	3/23/22 09:40	4/04/22 14:50
22204050711	AOI01-01-SB-37.0-39.0	Solid	3/22/22 09:45	4/04/22 14:50
22204050712	AOI01-01-SB-0.0-2.0-D	Solid	3/21/22 10:45	4/04/22 14:50
22204050713	AOI02-02-SB-14.0-16.0	Solid	3/23/22 11:50	4/04/22 14:50
22204050714	WU-FRB-01	Solid	3/21/22 13:30	4/04/22 14:50
22204050715	AOI02-04-SB-0.0-2.0	Solid	3/23/22 14:30	4/04/22 14:50
22204050716	AOI02-04-SB-14.0-16.0	Solid	3/23/22 15:55	4/04/22 14:50

Sample Summary

Lab ID	Client ID	Matrix	Collect Date	Receive Date
22204064501	AOI01-02-SB-0.0-1.0	Solid	3/28/22 09:00	4/06/22 10:02
22204064502	AOI02-01-SB-14.5-16.5	Solid	3/24/22 14:25	4/06/22 10:02
22204064503	AOI02-01-SB-14.5-16.5-MS	Solid	3/24/22 14:25	4/06/22 10:02
22204064504	AOI02-01-SB-14.5-16.5-MSD	Solid	3/24/22 14:25	4/06/22 10:02
22204064505	AOI02-01-SB-14.5-16.5-D	Solid	3/24/22 14:25	4/06/22 10:02
22204064506	WV-FRB-02	Water	4/01/22 10:45	4/06/22 10:02
22204064507	AOI02-07-SB-0.0-2.0	Solid	3/29/22 14:10	4/06/22 10:02
22204064508	AOI02-03-SB-0.0-2.0	Solid	3/24/22 09:35	4/06/22 10:02
22204064509	AOI01-02-SB-0.0-1.0-D	Solid	3/28/22 09:10	4/06/22 10:02
22204064510	AOI01-02-SB-0.0-1.0	Solid	3/28/22 09:10	4/06/22 10:02
22204064511	AOI02-01-SB-0.0-2.0	Solid	3/24/22 13:40	4/06/22 10:02
22204064512	AOI02-01-SB-14.5-16.5	Solid	3/24/22 14:10	4/06/22 10:02
22204064513	AOI01-02-SB-25.5-27.5	Solid	3/28/22 11:05	4/06/22 10:02
22204064514	AOI02-03-SB-16.5-18.5	Solid	3/24/22 10:05	4/06/22 10:02
22204064515	AOI02-06-SB-0.0-0.5	Solid	3/29/22 14:00	4/06/22 10:02
22204064516	AOI02-05-SB-0.0-0.5	Solid	3/29/22 13:50	4/06/22 10:02

Case Narrative

Client: AECOM **Report:** 221081365

Pace Analytical Gulf Coast received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

This report was completed in accordance with DOD QSM 5.3 as specified in the contract.

No anomalies were found for the analyzed sample(s).

Case Narrative

Client: AECOM **Report:** 222040903

Pace Analytical Gulf Coast received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

This report was completed in accordance with DOD QSM 5.3 as specified in the contract.

No anomalies were found for the analyzed sample(s).

Case Narrative

Client: AECOM **Report:** 222040507

Pace Analytical Gulf Coast received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

This report was completed in accordance with DOD QSM 5.3 as specified in the contract.

SEMI-VOLATILES MASS SPECTROMETRY

In the PFAS Isotope Dilution QSM B15 analysis for prep batch 738250, the MS/MSD exhibited RPD failures.

In the PFAS Isotope Dilution QSM B15 analysis, the recovery for the extracted internal standard d3-NMeFOSAA is outside the control limits for sample 22204050701 (AOI01-01-SB-0.0-2.0) . The sample was re-extracted with similar results for this extracted internal standard.

In the PFAS Isotope Dilution QSM B15 analysis, the recovery for the extracted internal standard d3-NMeFOSAA is outside the control limits for sample 22204050708 (AOI01-01-SB-0.0-2.0-MS) . The recovery of the associated compounds is within control limits.

In the PFAS Isotope Dilution QSM B15 analysis, the recovery for the extracted internal standard d5-NEtFOSAA is outside the control limits for sample 22204050708 (AOI01-01-SB-0.0-2.0-MS) . The recovery of the associated compounds is within control limits.

In the PFAS Isotope Dilution QSM B15 analysis, the recovery for the extracted internal standard d3-NMeFOSAA is outside the control limits for sample 22204050709 (AOI01-01-SB-0.0-2.0-MSD) . The recovery of the associated compounds is within control limits.

In the PFAS Isotope Dilution QSM B15 analysis, the recovery for the extracted internal standard M2 4:2 FTS is outside the control limits for sample 22204050709 (AOI01-01-SB-0.0-2.0-MSD) . The recovery of the associated compounds is within control limits.

In the PFAS Isotope Dilution QSM B15 analysis, the recovery for the extracted internal standard M2 8:2 FTS is outside the control limits for sample 22204050709 (AOI01-01-SB-0.0-2.0-MSD) . The recovery of the associated compounds is within control limits.

In the PFAS Isotope Dilution QSM B15 analysis, the recovery for the extracted internal standard M3PFBS is outside the control limits for sample 22204050709 (AOI01-01-SB-0.0-2.0-MSD) . The recovery of the associated compounds is within control limits.

In the PFAS Isotope Dilution QSM B15 analysis, the recovery for the extracted internal standard M3PFHxS is outside the control limits for sample 22204050709 (AOI01-01-SB-0.0-2.0-MSD) . The recovery of the associated compounds is within control limits.

In the PFAS Isotope Dilution QSM B15 analysis, the recovery for the extracted internal standard M5PFHxA is outside the control limits for sample 22204050709 (AOI01-01-SB-0.0-2.0-MSD) . The recovery of the associated compounds is within control limits.

In the PFAS Isotope Dilution QSM B15 analysis, the recovery for the extracted internal standard M5PFPeA is outside the control limits for sample 22204050709 (AOI01-01-SB-0.0-2.0-MSD) . The recovery of the associated compounds is within control limits.

In the PFAS Isotope Dilution QSM B15 analysis, the recovery for the extracted internal standard M6PFDA is outside the control limits for sample 22204050709 (AOI01-01-SB-0.0-2.0-MSD) . The recovery of the associated compounds is within control limits.

In the PFAS Isotope Dilution QSM B15 analysis, the recovery for the extracted internal standard M7PFUnA is outside the control limits for sample 22204050709 (AOI01-01-SB-0.0-2.0-MSD) . The recovery of the associated compounds is within control limits.

In the PFAS Isotope Dilution QSM B15 analysis, the recovery for the extracted internal standard M8FOSA is outside the control limits for sample 22204050709 (AOI01-01-SB-0.0-2.0-MSD) . The recovery of the associated compounds is within control limits.

In the PFAS Isotope Dilution QSM B15 analysis, the recovery for the extracted internal standard M8PFOA is outside the control limits for sample 22204050709 (AOI01-01-SB-0.0-2.0-MSD) . The recovery of the associated compounds is within control limits.

In the PFAS Isotope Dilution QSM B15 analysis, the recovery for the extracted internal standard M9PFNA is outside the control limits for sample 22204050709 (AOI01-01-SB-0.0-2.0-MSD) . The recovery of the associated compounds is within control limits.

In the PFAS Isotope Dilution QSM B15 analysis, the recovery for the extracted internal standard MPFBA is outside the control limits for sample 22204050709 (AOI01-01-SB-0.0-2.0-MSD) . The recovery of the associated compounds is within control limits.

In the PFAS Isotope Dilution QSM B15 analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22204050709 (AOI01-01-SB-0.0-2.0-MSD) . The recovery of the associated compounds is within control limits.

In the PFAS Isotope Dilution QSM B15 analysis, the recoveries for extracted internal standards are outside control limits for sample 22204050709 (AOI01-01-SB-0.0-2.0-MSD) . This is attributed to matrix interference.

In the PFAS Isotope Dilution QSM B15 analysis, the recoveries for extracted internal standards are outside control limits for sample 22204050709 (AOI01-01-SB-0.0-2.0-MSD) . This is attributed to matrix interference.

In the PFAS Isotope Dilution QSM B15 analysis, the recoveries for extracted internal standards are outside control limits for sample 22204050709 (AOI01-01-SB-0.0-2.0-MSD) . This is attributed to matrix interference.

Case Narrative

Client: AECOM **Report:** 222040645

Pace Analytical Gulf Coast received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

This report was completed in accordance with DOD QSM 5.3 as specified in the contract.

No anomalies were found for the analyzed sample(s).



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 221081365		CHECKLIST		YES	NO
Client PM AEC 4838 - AECOM	Transport Method FEDEX	Samples received with proper thermal preservation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Radioactivity is <1600 cpm? If no, record cpm value in notes section.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile Number 290377	Received By McCune, Dodie N.	COC relinquished and complete (including sampleIDs, collect times, and sampler)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		All containers received in good condition and within hold time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Line Item(s) 2 - GW - 18 compounds	Receive Date(s) 08/13/21	All sample labels and containers received match the chain of custody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Preservative added to any containers?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		If received, was headspace for VOC water containers < 6mm?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Samples collected in containers provided by Pace Gulf Coast?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
COOLERS		DISCREPANCIES	LAB PRESERVATIONS		
Airbill Thermometer ID: E34 528279550221	Temp °C 1.9	None	None		
NOTES					



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 222040903		CHECKLIST		YES	NO
Client PM CAD 4838 - AECOM	Transport Method FEDEX	Samples received with proper thermal preservation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Radioactivity is <1600 cpm? If no, record cpm value in notes section.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile Number 290377		COC relinquished and complete (including sampleIDs, collect times, and sampler)?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
		All containers received in good condition and within hold time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Line Item(s) 2 - GW - 18 compounds		All sample labels and containers received match the chain of custody?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Receive Date(s) 04/08/22		Preservative added to any containers?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
		If received, was headspace for VOC water containers < 6mm?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Samples collected in containers provided by Pace Gulf Coast?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
COOLERS		DISCREPANCIES	LAB PRESERVATIONS		
Airbill	Thermometer ID: E34	Temp °C	None		
2717 3852 0614		0.9			
NOTES					



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 222040507		CHECKLIST		YES	NO
Client PM CAD 4838 - AECOM	Transport Method FEDEX	Samples received with proper thermal preservation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Radioactivity is <1600 cpm? If no, record cpm value in notes section.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile Number 290377	Received By McCune, Dodie N.	COC relinquished and complete (including sampleIDs, collect times, and sampler)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		All containers received in good condition and within hold time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Line Item(s) 1 - Soil - 18 compounds 2 - GW - 18 compounds	Receive Date(s) 04/04/22	All sample labels and containers received match the chain of custody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Preservative added to any containers?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		If received, was headspace for VOC water containers < 6mm?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Samples collected in containers provided by Pace Gulf Coast?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
COOLERS		DISCREPANCIES	LAB PRESERVATIONS		
Airbill	Thermometer ID: E34	Temp °C	None		
907394680601		3.9			
90739468#645		19.6			
907394680667		21.1			
907394680634		19.9			
907394680612		19.9			
907394680689		22.7			
907394680623		24.0			
907394680690		23.2			
907394680678		20.3			
907394680656		22.9			
NOTES					



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 222040645		CHECKLIST		YES	NO
Client PM CAD 4838 - AECOM	Transport Method FEDEX	Samples received with proper thermal preservation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Radioactivity is <1600 cpm? If no, record cpm value in notes section.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Profile Number 290377		Received By Roberts, George S.	COC relinquished and complete (including sampleIDs, collect times, and sampler)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Line Item(s) 1 - Soil - 18 compounds 2 - GW - 18 compounds		Receive Date(s) 04/06/22	All containers received in good condition and within hold time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			All sample labels and containers received match the chain of custody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Preservative added to any containers?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
			If received, was headspace for VOC water containers < 6mm?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Samples collected in containers provided by Pace Gulf Coast?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
COOLERS		DISCREPANCIES	LAB PRESERVATIONS		
Airbill	Thermometer ID: E34	Temp °C	None		
271637377744		5.6			
271637377814		5.4			
271637377799		5.3			
271637377755		5.4			
271637377777		0.6			
271637377733		5.8			
271637377788		3.0			
271637372803		5.8			
271637377766		2.5			
271637377825		2.9			
NOTES					



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CHAIN OF CUSTODY RECORD

Client ID: 4838 - AECOM

SDG: 222040507



PM: CAD

Report To: Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Naoum Tavantzis Phone: 919-461-1178 Email: naoum.tavantzis@aecom.com				Bill To: Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Claire Mitchell Phone: 703-682-9098 Email: claire.mitchell@aecom.com				Analytical Requests & Method PFAS (LC/MS/MS QSM 5.3 Table B-15) TOC + pH (EPA 9060A/9045D) Grain size (ASTM D422/CA-551)				Custody Seal: Used: <input type="checkbox"/> Yes <input type="checkbox"/> No Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Temperature: _____ <input type="checkbox"/> Dissolved Analysis Requested <input type="checkbox"/> Field Filtered <input type="checkbox"/> Lab Filtered	
P.O. Number 104397		Project Name/Number 60552172.0006 SI 35 SI-HI UTES Waiawa											
Sampled By: Justin Wood ; Jordan Henlein													
Matrix ¹	Date	Time (2400)	Comp	Grab	Sample Description	No. of Containers					← Preservative / Notes ↓	GCAL ID	
S	3/2/22	1045		X	AOI 01-01-SB-0.0-2.0-MS	1	X				Matrix Spike	8	
<i>del</i> <i>3/30/22</i>													
Airbill Number:													
Turn Around Time(Business Days): <input type="checkbox"/> RUSH* _____ Day <input checked="" type="checkbox"/> Standard (per contract/quote)													
Relinquished by: (Signature) <i>Justin Wood</i>		Date/Time: 3/2/22 1060		Received by: (Signature) <i>Jordan Henlein</i>		Date/Time: 3/2/22 1450		Notes: E34 19.6					
Relinquished by: (Signature) <i>Justin Wood</i>		Date/Time: 3/2/22 1450		Received by: (Signature) <i>Jordan Henlein</i>		Date/Time: 3/2/22 1450							
Relinquished by: (Signature)		Date/Time:		Received by: (Signature)		Date/Time:							

¹Matrix: W = Water, S=Solid, L=Liquid, T=Tissue.

*- Requires prior approval, Rush charges may apply. We cannot accept verbal changes. Please email written changes to your PAGC Project Manager.

9073 9468 X645



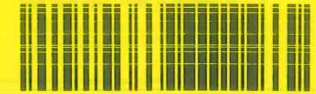
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CHAIN OF CUSTODY RECORD

Client ID: 4838 - AECOM

SDG: 222040507

PM: CAD



Report To: Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Naoum Tavantzis Phone: 919-461-1178 Email: naoum.tavantzis@aecom.com					Bill To: Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Claire Mitchell Phone: 703-682-9098 Email: claire.mitchell@aecom.com					Analytical Requests & Method PFAS (LC/MS/MS QSM 5.3 Table B-15) TOC + pH (EPA 9060A/9045D) Grain size (ASTM D422/CA-551)										Custody Seal: Used: <input type="checkbox"/> Yes <input type="checkbox"/> No Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Temperature: _____ <input type="checkbox"/> Dissolved Analysis Requested <input type="checkbox"/> Field Filtered <input type="checkbox"/> Lab Filtered				
P.O. Number 104397			Project Name/Number 60552172.0006 SI 35 SI-HI UTES Waiawa																					
Sampled By: Justin Wood ; Jordan Heinlein																								
Matrix ¹	Date	Time (2400)	Comp	Grab	Sample Description	No. of Containers												← Preservative / Notes ↓	GCAL ID					
S	3/21/22	1045		X	AOI 01-01-SB-0.0-2.0-MSD	1 (X)												MSD Sample	9					
Airbill Number:																								
Turn Around Time(Business Days): <input type="checkbox"/> RUSH* _____ Day <input type="checkbox"/> Standard (per contract/quote)																								
Relinquished by: (Signature) <i>Justin Wood</i>					Date/Time: 3/30/22 1050					Received by: (Signature) <i>Theresa Perkins</i>					Date/Time: 4/14/22					Notes: E34 21.1				
Relinquished by: (Signature) <i>Fred Ek</i>					Date/Time: 4/14/22 1450					Received by: (Signature) <i>Theresa Perkins</i>					Date/Time: 4/14/22									
Relinquished by: (Signature)					Date/Time:					Received by: (Signature)					Date/Time:									

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CHAIN OF CUSTODY RECORD

Client ID: 4838 - AECOM

SDG: 222040507

PM: CAD



Report To: Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Naoum Tavantzis Phone: 919-461-1178 Email: naoum.tavantzis@aecom.com				Bill To: Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Claire Mitchell Phone: 703-682-9098 Email: claire.mitchell@aecom.com				Analytical Requests & Method PFAS (LC/MS/MS QSM 5.3 Table B-15) TOC + pH (EPA 9060A/9045D) Grain size (ASTM D422/CA-551)						Custody Seal: Used: <input type="checkbox"/> Yes <input type="checkbox"/> No Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Temperature: _____ <input type="checkbox"/> Dissolved Analysis Requested <input type="checkbox"/> Field Filtered <input type="checkbox"/> Lab Filtered	
P.O. Number 104397		Project Name/Number 60552172.0006 SI 35 SI-HI UTES Waiawa													
Sampled By: <i>Justin Wood & Jordan Heinlein</i>															
Matrix ¹	Date	Time (2400)	Comp	Grab	Sample Description	No. of Containers						← Preservative / Notes ↓	GCAL ID		
S	3/23/22	0940		X	AOL02-02-SB-0.0-2.0	1	X						10		
<i>lnw</i> <i>3/30/22</i>															
Airbill Number:															
Turn Around Time(Business Days): <input type="checkbox"/> RUSH* ___ Day <input checked="" type="checkbox"/> Standard (per contract/quote)															
Relinquished by: (Signature) <i>Justin Wood</i>		Date/Time: 3/30/22 1000		Received by: (Signature)		Date/Time:		Notes: <i>E 34 19.9</i>							
Relinquished by: (Signature) <i>Fred Ex</i>		Date/Time: 4/4/22 1450		Received by: (Signature) <i>Shannon Perkins</i>		Date/Time: 4/4/22 1500									
Relinquished by: (Signature)		Date/Time:		Received by: (Signature)		Date/Time:									

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9073 9468 0634



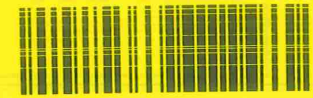
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CHAIN OF CUSTODY RECORD

Client ID: 4838 - AECOM

SDG: 222040507

PM: CAD



Report To: Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Naoum Tavantzis Phone: 919-461-1178 Email: naoum.tavantzis@aecom.com				Bill To: Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Claire Mitchell Phone: 703-682-9098 Email: claire.mitchell@aecom.com				Analytical Requests & Method PFAS (LC/MS/MS QSM 5.3 Table B-15) TOC + pH (EPA 9060A/9045D) Grain size (ASTM D422/CA-551)						Custody Seal: Used: <input type="checkbox"/> Yes <input type="checkbox"/> No Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Temperature: _____ <input type="checkbox"/> Dissolved Analysis Requested <input type="checkbox"/> Field Filtered <input type="checkbox"/> Lab Filtered	
P.O. Number 104397		Project Name/Number 60552172.0006 SI 35 SI-HI UTES Waiawa													
Sampled By: <i>Justin Wood & Jordan Hankin</i>															
Matrix ¹	Date	Time (2400)	Comp	Grab	Sample Description	No. of Containers						← Preservative / Notes ↓	GCAL ID		
S	3/21/22	1045		X	AOI01-01-5B-0.0-20-D	1	X					Duplicate Sample	12		
<i>3/30/22</i>															
Airbill Number:															
Turn Around Time(Business Days): <input type="checkbox"/> RUSH* <input type="checkbox"/> Day <input type="checkbox"/> Standard (per contract/quote)															
Relinquished by: (Signature) <i>Justin Wood</i>		Date/Time: 3/30/22 → 1000		Received by: (Signature) <i>Banner Pechis</i>		Date/Time: 4/4/22 1450		Notes: E34 22.7							
Relinquished by: (Signature) <i>Fred Ex</i>		Date/Time: 4/4/22 1450		Received by: (Signature) <i>Banner Pechis</i>		Date/Time: 4/4/22 1450									
Relinquished by: (Signature)		Date/Time:		Received by: (Signature)		Date/Time:									

¹Matrix: W = Water, S=Solid, L=Liquid, T=Tissue. *- Requires prior approval, Rush charges may apply. We cannot accept verbal changes. Please email written changes to your PAGC Project Manager.

9073 9468 0689

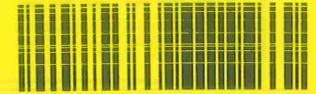


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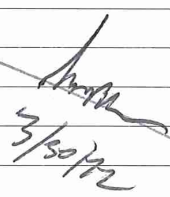
CHAIN OF CUSTODY RECORD

Client ID: 4838 - AECOM

SDG: 222040507



PM: CAD

Report To: Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Naoum Tavantzis Phone: 919-461-1178 Email: naoum.tavantzis@aecom.com				Bill To: Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Claire Mitchell Phone: 703-682-9098 Email: claire.mitchell@aecom.com				Analytical Requests & Method PFAS (LC/MS/MS QSM 5.3 Table B-15) TOC + pH (EPA 9060A/9045D) Grain size (ASTM D422/CA-551)						Custody Seal: Used: <input type="checkbox"/> Yes <input type="checkbox"/> No Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Temperature: _____ <input type="checkbox"/> Dissolved Analysis Requested <input type="checkbox"/> Field Filtered <input type="checkbox"/> Lab Filtered	
P.O. Number 104397		Project Name/Number 60552172.0006 SI 35 SI-HI UTES Waiawa													
Sampled By: <i>Justin Wood & Jordan Heinken</i>															
Matrix ¹	Date	Time (2400)	Comp	Grab	Sample Description	No. of Containers					← Preservative / Notes ↓	GCAL ID			
S	3/23/22	1150		X	AOI 02-02-SB-14.0-16.0	(1)	X					B			
  															
Airbill Number:															
Turn Around Time (Business Days): <input type="checkbox"/> RUSH* <input type="checkbox"/> Standard (per contract/quote)															
Relinquished by: (Signature) <i>Justin Wood</i>		Date/Time: 3/30/22 1000		Received by: (Signature) <i>Brennan Perkins</i>		Date/Time: 4/4/22 1450		Notes: E34 24							
Relinquished by: (Signature) <i>Justin Wood</i>		Date/Time: 4/4/22 1450		Received by: (Signature) <i>Brennan Perkins</i>		Date/Time: 4/4/22									
Relinquished by: (Signature)		Date/Time:		Received by: (Signature)		Date/Time:									

¹Matrix: W = Water, S=Solid, L=Liquid, T=Tissue.

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9073 9468 0623



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CHAIN OF CUSTODY RECORD

Client ID: 4838 - AECOM

SDG: 222040507

PM: CAD



Report To:				Bill To:				Analytical Requests & Method				Custody Seal: Used: <input type="checkbox"/> Yes <input type="checkbox"/> No Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Temperature: _____ <input type="checkbox"/> Dissolved Analysis Requested <input type="checkbox"/> Field Filtered <input type="checkbox"/> Lab Filtered		
Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Naoum Tavantzis Phone: 919-461-1178 Email: naoum.tavantzis@aecom.com				Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Claire Mitchell Phone: 703-682-9098 Email: claire.mitchell@aecom.com				PFAS (LC/MS/MS QSM 5.3 Table B-15) TOC + pH (EPA 9060A/9045D) Grain size (ASTM D422/CA-551)						
P.O. Number 104397		Project Name/Number 60552172.0006 SI 35 SI-HI UTES Waiawa												
Sampled By: <i>Justin Wood & Jordan Heinlein</i>														
Matrix ¹	Date	Time (2400)	Comp	Grab	Sample Description	No. of Containers								GCAL ID
S	3/13/22	1430		X	API Ø2-Ø4-SB-0.0- 20	1	X							15
← Preservative / Notes ↓														
Airbill Number:														
Turn Around Time (Business Days): <input type="checkbox"/> RUSH* _____ Day <input checked="" type="checkbox"/> Standard (per contract/quote)														
Relinquished by: (Signature) <i>Justin Wood</i>		Date/Time: 3/30/22 10:00		Received by: (Signature)				Date/Time:		Notes: E34 20.3				
Relinquished by: (Signature) <i>Eric</i>		Date/Time: 4/4/22 1450		Received by: (Signature) <i>Brennan Rubin</i>				Date/Time: 4/4/22						
Relinquished by: (Signature)		Date/Time:		Received by: (Signature)				Date/Time:						

¹Matrix: W = Water, S=Solid, L=Liquid, T=Tissue. * - Requires prior approval, Rush charges may apply. We cannot accept verbal changes. Please email written changes to your PAGC Project Manager.

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CHAIN OF CUSTODY RECORD

Client ID: 4838 - AECOM
SDG: 222040507
PM: CAD

Report To: Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Naoum Tavantzis Phone: 919-461-1178 Email: naoum.tavantzis@aecom.com				Bill To: Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Claire Mitchell Phone: 703-682-9098 Email: claire.mitchell@aecom.com				Analytical Requests & Method PFAS (LC/MS/MS QSM 5.3 Table B-15) TOC + pH (EPA 9060A/9045D) Grain size (ASTM D422/CA-551)						Custody Seal: Used: <input type="checkbox"/> Yes <input type="checkbox"/> No Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Temperature: _____ <input type="checkbox"/> Dissolved Analysis Requested <input type="checkbox"/> Field Filtered <input type="checkbox"/> Lab Filtered	
P.O. Number 104397		Project Name/Number 60552172.0006 SI 35 SI-HI UTES Waiawa													
Sampled By: <i>Justin Wood & Jordan Henlein</i>															
Matrix ¹	Date	Time (2400)	Comp	Grab	Sample Description	No. of Containers					← Preservative / Notes ↓	GCAL ID			
S	3/23/22	1555		X	AOI 02-04-S03.14.0-16.0	1	X					10			
 Justin Wood 3/30/22 															
Airbill Number:															
Turn Around Time (Business Days): <input type="checkbox"/> RUSH* _____ Day <input checked="" type="checkbox"/> Standard (per contract/quote)															
Relinquished by: (Signature) <i>Fred Ev</i>		Date/Time: 4/4/22		Received by: (Signature) <i>Brianne Robinson</i>		Date/Time: 4/4/22		Notes: E34 22.9							
Relinquished by: (Signature)		Date/Time:		Received by: (Signature)		Date/Time:									
Relinquished by: (Signature)		Date/Time:		Received by: (Signature)		Date/Time:									

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9073 9468 0656



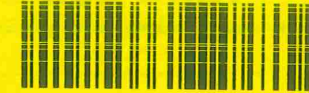
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CHAIN OF CUSTODY RECORD

Client ID: 4838 - AECOM

SDG: 222040645

PM: CAD



Report To: Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Naoum Tavantzis Phone: 919-461-1178 Email: naoum.tavantzis@aecom.com				Bill To: Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Claire Mitchell Phone: 703-682-9098 Email: claire.mitchell@aecom.com				Analytical Requests & Method PFAS (LC/MS/MS QSM 5.3 Table B-15) TOC + pH (EPA 9060A/9045D) Grain size (ASTM D422/CA-551)				Custody Seal: Used: <input type="checkbox"/> Yes <input type="checkbox"/> No Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Temperature: _____ <input type="checkbox"/> Dissolved Analysis Requested <input type="checkbox"/> Field Filtered <input type="checkbox"/> Lab Filtered	
P.O. Number 104397		Project Name/Number 60552172.0006 SI 35 SI-HI UTES Waiawa											
Sampled By: JW, JH													
Matrix ¹	Date	Time (2400)	Comp	Grab	Sample Description	No. of Containers					← Preservative / Notes ↓	GCAL ID	
S	3/28/22	09:00		X	A0I01-02-SB-0.0-1.0	1	X					1	
S	3/24/22	14:25		X	A0I02-01-SB-14.5-16.5	1	X					2	
S	3/24/22	14:25		X	A0I02-01-SB-14.5-16.5-MS	1	X					3	
S	3/24/22	14:25		X	A0I02-01-SB-14.5-16.5-MSD	1	X					4	
S	3/24/22	14:25		X	A0I02-01-SB-14.5-16.5-D	1	X					5	
W	4/1/22	10:45		X	WU-FRB-02	2	X					6	
Airbill Number:													
Turn Around Time(Business Days): <input type="checkbox"/> RUSH* _____ Day <input checked="" type="checkbox"/> Standard (per contract/quote)													
Relinquished by: (Signature) <i>[Signature]</i>		Date/Time: 4/4/22 8:35		Received by: (Signature) <i>[Signature]</i>		Date/Time: 4/4/22 10:02		Notes: Soil samples requires ISM processing 2714 3737 2744					
Relinquished by: (Signature) <i>[Signature]</i>		Date/Time: 4/4/22 10:02		Received by: (Signature) <i>[Signature]</i>		Date/Time: 4/4/22 10:02							
Relinquished by: (Signature)		Date/Time:		Received by: (Signature)		Date/Time:							

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CHAIN OF CUSTODY RECEIPT

Client ID: 4838 - AECOM
SDG: 222040645
PM: CAD



Report To:				Bill To:				Analytical Requests & Method										Custody Seal:																						
Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Naoum Tavantzis Phone: 919-461-1178 Email: naoum.tavantzis@aecom.com				Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Claire Mitchell Phone: 703-682-9098 Email: claire.mitchell@aecom.com				<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">PFAS (LC/MS/MS QSM 5.3 Table B-15)</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">TOC + pH (EPA 9060A/9045D)</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Grain size (ASTM D422/CA-551)</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>										PFAS (LC/MS/MS QSM 5.3 Table B-15)	TOC + pH (EPA 9060A/9045D)	Grain size (ASTM D422/CA-551)																			Used: <input type="checkbox"/> Yes <input type="checkbox"/> No Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Temperature: _____	
PFAS (LC/MS/MS QSM 5.3 Table B-15)	TOC + pH (EPA 9060A/9045D)	Grain size (ASTM D422/CA-551)																																						
P.O. Number 104397		Project Name/Number 60552172.0006 SI 35 SI-HI UTES Waiawa																<input type="checkbox"/> Dissolved Analysis Requested <input type="checkbox"/> Field Filtered <input type="checkbox"/> Lab Filtered																						
Sampled By: <i>Justin Wood & Jordan Heinlein</i>																																								
Matrix ¹	Date	Time (2400)	Comp	Grab	Sample Description	No. of Containers																																		
S	3/24/22	0935		X	AOI02-03-SB-0.0-2.0	1	X																																	
← Preservative / Notes ↓																			GCAL ID 8																					
Airbill Number:																																								
Turn Around Time(Business Days): <input type="checkbox"/> RUSH* _____ Day <input checked="" type="checkbox"/> Standard (per contract/quote)																																								
Relinquished by: (Signature) <i>Justin Wood</i>				Date/Time: 4/3/1900 3/27/21 10:02				Received by: (Signature) <i>[Signature]</i>				Date/Time:				Notes: SOIL SAMPLES NEED S.I.B.34 ISM PROCESSING 2716 3737 7799																								
Relinquished by: (Signature) <i>Feddy</i>				Date/Time: 4/16/22 10:02				Received by: (Signature) <i>[Signature]</i>				Date/Time: 4/16/22 10:02																												
Relinquished by: (Signature)				Date/Time:				Received by: (Signature)				Date/Time:																												

¹Matrix: W = Water, S=Solid, L=Liquid, T=Tissue. * - Requires prior approval, Rush charges may apply. We cannot accept verbal changes. Please email written changes to your PAGC Project Manager.



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CHAIN OF CUSTODY RECORD

Client ID: 4838 - AECOM
SDG: 222040645
PM: CAD

Report To: Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Naoum Tavantzis Phone: 919-461-1178 Email: naoum.tavantzis@aecom.com				Bill To: Client: AECOM Address: 12420 Milestone Center Dr. Germantown, MD 20876 Contact: Claire Mitchell Phone: 703-682-9098 Email: claire.mitchell@aecom.com				Analytical Requests & Method PFAS (LC/MS/MS QSM 5.3 Table B-15) TOC + pH (EPA 9060A/9045D) Grain size (ASTM D422/CA-551)						Custody Seal: Used: <input type="checkbox"/> Yes <input type="checkbox"/> No Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Temperature: _____ <input type="checkbox"/> Dissolved Analysis Requested <input type="checkbox"/> Field Filtered <input type="checkbox"/> Lab Filtered								
P.O. Number 104397		Project Name/Number 60552172.0006 SI 35 SI-HI UTES Waiawa																				
Sampled By: <i>Justin Wood</i>																						
Matrix ¹	Date	Time (2400)	Comp	Grab	Sample Description	No. of Containers														← Preservative / Notes ↓	GCAL ID	
S	3/16/22	1350		X	AOT02-05-SB-0.0-0.5	1	X															16
Airbill Number:																						
Turn Around Time (Business Days): <input type="checkbox"/> RUSH* _____ Day <input checked="" type="checkbox"/> Standard (per contract/quote)																						
Relinquished by: (Signature) <i>Justin Wood</i>			Date/Time: 4/3/22 1400			Received by: (Signature) <i>FedEx</i>			Date/Time:			Notes: SOIL SAMPLES NEED 15M 2.7294 PROCESSING 2716 3737 7836										
Relinquished by: (Signature) <i>FedEx</i>			Date/Time: 4/6/22 10:02			Received by: (Signature) <i>DTM</i>			Date/Time: 4/6/22 10:02													
Relinquished by: (Signature)			Date/Time:			Received by: (Signature)			Date/Time:													

¹Matrix: W = Water, S=Solid, L=Liquid, T=Tissue. * - Requires prior approval, Rush charges may apply. We cannot accept verbal changes. Please email written changes to your PAGC Project Manager.

Data Qualifying Codes

Two types of data qualifying codes or flags are applied in the course of the data review: (1) Data Validation Flags and (2) Reason Codes. The data validation flags could indicate data that are not usable for decision-making, more than normally biased and/or variable, or not representative of field conditions. These codes and their definitions are presented below in the hierarchy stipulated in the National Functional Guidelines for Organic/Inorganic Data Review (November 2020) and Department of Defense General Data Validation Guidelines (November 2019).

Data Validation Flags

Flag	Interpretation
R	The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
U	The analyte was not detected and was reported as less than the LOD or as defined by the customer. The LOD has been adjusted for any dilution or concentration of the sample. *
B	The analyte was analyzed for, but not detected at a level greater than or equal to the level of the adjusted detection limits for sample and method.*
J+	Reported value may not be accurate or precise, but the result may be biased high.
J-	Reported value may not be accurate or precise, but the result may be biased low.
J	The analyte was positively identified, and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the Limit of Detection (LOD)).
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a "tentative identification."
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
UJ	The analyte was not detected at a level greater than or equal to the adjusted DL. However, the reported adjusted DL is approximate and may be inaccurate or imprecise.
C	This qualifier applies to pesticide and Aroclor results when the identification has been confirmed by gas Chromatograph/Mass Spectrometer (GC/MS)
X **	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and to meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team (which should include a project chemist), but exclusion of the data is recommended.

* B or U flag will be used for blank qualification based on regional/state and project requirements

** DoD Flag, "R" flag only applied by project team to replace X-flag on DoD projects in a final decision

The other type of code used by AECOM is a “Reason Code”. The reason code indicates the type of quality control failure that led to the application of the data validation flag.

Reason Codes

Code	Description	Code	Description
a	Tracer recovery (radiochemical data only)	ld	Laboratory duplicate RPDs (matrix duplicate, MSD, LCSD)
be	Equipment blank contamination	lp	Laboratory control sample/laboratory control sample duplicate RPDs
bf	Field blank contamination	m	Matrix spike recovery
bi	Bias indeterminate	md	Matrix spike/matrix spike duplicate RPD
bl	Laboratory blank contamination	nb	Negative laboratory blank contamination
bm	Missing Blank Information	p	Chemical preservation issue
bt	Trip Blank	pe	Post Extraction Spike
c	Calibration issue	ps	Performance Evaluation Sample
cl	Clean-up standard recovery	q	Quantitation issue
cp	Insufficient in growth (radiochemical data only)	r	Dual column RPD
cr	Chromatographic resolution	rp	Re-extraction precision issue [PAHs only]
d	Reporting limit raised due to chromatographic interference	rt	SIM ions not within + 2 seconds
dt	Dissolved result > total over limit	s	Surrogate recovery
e	Ether interference	sc	Sample collection issues
fd	Field duplicate RPDs	sp	Sample preparation issue
g	Chromatographic pattern match issue	su	Evidence of ion suppression
h	Holding times	t	Temperature Preservation Issue
i	Internal standard areas	u	High combined sample result uncertainty (radiochemical data only)
ii	Injection internal standard area or retention time exceedance	v	Compound identification issue
k	Estimated Maximum Possible Concentrations	x	Low % solids
l	LCS recoveries	y	Serial dilution results
lc	Labeled compound recovery	z	ICS results

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Appendix B

Field Documentation

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Appendix B1

Logs of Daily Notice of Field Activities

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Log of Daily Notice of Field Activity
ARNG PFAS, Site Inspection
Waiawa Gulch Training Site and UTES, Hawaii

Date	AECOM Personnel	Weather	Summary Daily Activities	Issues	Progress to Date	Subcontractor(s)/ Visitors
4/11/2022	- Gita Datt	Cloudy, 80°, Windy	- AECOM conducted DTM, reviewed AHAs and discussed scope of work with HEG, Inc. (surveyor). - Completed surveying of all six newly installed permanent monitoring wells and three surface soil sampling locations. - SI field work complete. AECOM and HEG, Inc. mobilized onsite.	- None	- HA Soil Borings: 3/3 - DPT/SFA Soil Borings: 6/6 - Soil Samples: 15/15 - Permanent Wells: 6/6 - Developed Wells: 6/6 - Groundwater Samples: 6/6 - Wells Surveyed: 6/6	- Leslie Chau (HIARNG) - Micah Cruz (HEG, Inc.) - James Makaio (HEG, Inc.) - John Lynn Mafua (HEG, Inc.)
4/6/2022	- Justin Wood (SSHO) - Gita Datt	Cloudy, 82° with 6 mph wind (ENE), Windy	- AECOM conducted DTM, reviewed AHAs and discussed scope of work - Completed synoptic gauging event for all permanent wells installed onsite. - Performed general site cleanup and IDW staging.	- None	- HA Soil Borings: 3/3 - DPT/SFA Soil Borings: 6/6 - Soil Samples: 15/15 - Permanent Wells: 6/6 - Developed Wells: 6/6 - Groundwater Samples: 6/6 - Wells Surveyed: 0/6	- None
4/5/2022	- Marc Muraoka (SSHO) - Jordan Heinlein	Cloudy, 80° with 6 mph wind (ENE), Windy	- AECOM conducted DTM, reviewed AHAs and discussed scope of work - Resumed groundwater sampling. - Collected groundwater samples from permanent wells AOI02-02, AOI02-03, AOI02-04, AOI01-01 and AOI01-02. - Groundwater sampling complete for all permanent wells installed onsite.	- None	- HA Soil Borings: 3/3 - DPT/SFA Soil Borings: 6/6 - Soil Samples: 15/15 - Permanent Wells: 6/6 - Developed Wells: 6/6 - Groundwater Samples: 6/6 - Wells Surveyed: 0/6	- None
4/4/2022	- Marc Muraoka (SSHO) - Jordan Heinlein	Cloudy, 78° with 7 mph wind (ENE), Windy	- AECOM conducted DTM, reviewed AHAs and discussed scope of work. - Resumed and concluded development at AOI02-03 and AOI02-04. Slow recharge in wells AOI02-03 and AOI02-04 prevented water quality parameter stabilization. Well development was completed by purging each well dry three times. - Began groundwater sampling of permanent wells installed across the facility. - Collected groundwater samples from AOI02-01.	- Recharge at monitoring wells AOI02-03 and AOI02-04 was slow (i.e. unable to keep pace with the minimum flow rate of the development pump). Locations were developed by pumping dry three successive times at the minimum flow rate for the development pump.	- HA Soil Borings: 3/3 - DPT/SFA Soil Borings: 6/6 - Soil Samples: 15/15 - Permanent Wells: 6/6 - Developed Wells: 6/6 - Groundwater Samples: 1/6 - Wells Surveyed: 0/6	- None
4/1/2022	- Justin Wood (SSHO) - Jordan Heinlein	Cloudy, 84° with 5 mph wind (ENE), intermittent showers	- AECOM conducted DTM, reviewed AHAs and discussed scope of work. - AECOM developed wells AOI01-01, AOI01-02, AOI02-02, and AOI02-01. - AECOM began development on AOI02-03 and AOI02-04; however, slow recharge prevented these wells from stabilizing before running dry. Development will continue 4/4/2022.	- Recharge at monitoring wells AOI01-01, AOI01-02, and AOI02-02 is very slow (i.e. unable to keep pace with the minimum flow rate of the development pump). Locations were developed by pumping dry three successive times at the minimum flow rate for the development pump.	- HA Soil Borings: 3/3 - DPT/SFA Soil Borings: 6/6 - Soil Samples: 15/15 - Permanent Wells: 6/6 - Developed Wells: 4/6 - Groundwater Samples: 0/6 - Wells Surveyed: 0/6	- None
3/31/2022	- Justin Wood (SSHO) - Jordan Heinlein	Cloudy, 80° with 5 mph wind (ESE), intermittent showers	- AECOM met at offsite warehouse conducted DTM, review AHAs and discuss scope of work - Packaged soil samples with ice, chains of custody, and appropriate labels and stickers. Packaged samples were brought to USDA for soil inspection before shipping samples to the lab via FedEx. - AECOM mobilized to the Waiawa Training Site and UTES facility, calibrated equipment, and began well development. All permanent wells were allowed to sit over 24 hours following well completion prior to development. - Development process began at AOI01-01 and AOI01-02.	- Recharge at monitoring wells AOI01-01 and AOI01-02 is very slow (i.e. unable to keep pace with the minimum flow rate of the development pump). Both locations were pumped dry during initial development.	- HA Soil Borings: 3/3 - DPT/SFA Soil Borings: 6/6 - Soil Samples: 15/15 - Permanent Wells: 6/6 - Developed Wells: 0/6 - Groundwater Samples: 0/6 - Wells Surveyed: 0/6	- Heidi Long (USACE)
3/30/2022	- Justin Wood (SSHO) - Jordan Heinlein	Cloudy, 82° with 5 mph wind (ESE), intermittent showers	- No work conducted on-site. Permanent monitoring wells allowed to sit 24 hours following installation. - AECOM met at offsite warehouse, prepared samples for shipment, chains of custody, USDA soil shipping permits, soil shipping stickers, coordinated with USDA and airport for required soil inspection on 31 March 2022. - Returned equipment no longer needed and picked up new equipment for remaining tasks.	- None	- HA Soil Borings: 3/3 - DPT/SFA Soil Borings: 6/6 - Soil Samples: 15/15 - Permanent Wells: 6/6 - Developed Wells: 0/6 - Groundwater Samples: 0/6 - Wells Surveyed: 0/6	- None
3/29/2022	- Justin Wood (SSHO) - Jordan Heinlein	Cloudy, 84° with 5 mph wind (NW), intermittent showers	- AECOM, GeoTek conduct DTM, review AHAs and discuss scope of work. - Setup to continue drilling at AOI01-01, drilled to 56ft bgs and set 2" x 10ft well screen from 45-55ft bgs. - Complete permanent monitoring well construction for AOI01-01 and AOI01-02. - Decon all drilling equipment. - GeoTek loaded materials and demobilized from the site. - Collected surface soil samples from locations AOI02-05, AOI02-06, and AOI02-07.	- None	- HA Soil Borings: 3/3 - DPT/SFA Soil Borings: 6/6 - Soil Samples: 15/15 - Permanent Wells: 6/6 - Developed Wells: 0/6 - Groundwater Samples: 0/6 - Wells Surveyed: 0/6	- Heidi Long (USACE) - John Shjegstad (GeoTek) - Zack Tullis (GeoTek)

Log of Daily Notice of Field Activity
ARNG PFAS, Site Inspection
Waiawa Gulch Training Site and UTES, Hawaii

Date	AECOM Personnel	Weather	Summary Daily Activities	Issues	Progress to Date	Subcontractor(s)/ Visitors
3/28/2022	- Justin Wood (SSHO) - Jordan Heinlein	Cloudy, 82° with 5-8 mph wind (NW), intermittent showers	- AECOM, GeoTek conduct DTM, review AHAs and discuss scope of work. - Setup for drilling at AOI01-02, HA the first 5 feet and cleared the location, drilled to 43ft bgs and set 2" x 10ft well screen from 27-37ft bgs. - Collected surface soil sample and subsurface soil sample at AOI01-02. - Setup to continue drilling at AOI01-01 from 45-50ft bgs	- None	- HA Soil Borings: 0/3 - DPT/SFA Soil Borings: 6/6 - Soil Samples: 12/15 - Permanent Wells: 4/6 - Developed Wells: 0/6 - Groundwater Samples: 0/6 - Wells Surveyed: 0/6	- Heidi Long (USACE) - Karl Bromwell (HIARNG) - John Shjegstad (GeoTek) - Zack Tullis (GeoTek)
3/25/2022	- Justin Wood (SSHO) - Jordan Heinlein	Cloudy, 81° with 5 mph wind (NW), intermittent showers	- AECOM, GeoTek conduct DTM, review AHAs and discuss scope of work. - Set up for drilling at AOI02-02, drilled to 25ft bgs. - Set screened intervals for wells AOI02-01, AOI02-02, and AOI02-03 from 15 to 25ft bgs - Set screened interval at AOI02-04 from 14 to 24ft bgs. - Completed permanent well construction at AOI02-01, AOI02-02, AOI02-03, and AOI02-04.	- None	- HA Soil Borings: 0/3 - DPT/SFA Soil Borings: 5/6 - Soil Samples: 10/15 - Permanent Wells: 4/6 - Developed Wells: 0/6 - Groundwater Samples: 0/6 - Wells Surveyed: 0/6	- Amanda Sullivan (ARNG G9) - Karl Bromwell (HIARNG) - John Shjegstad (GeoTek) - Zack Tullis (GeoTek)
3/24/2022	- Justin Wood (SSHO) - Jordan Heinlein	Cloudy, 82° with 5-10 mph wind (NW), intermittent showers	- AECOM, GeoTek conduct DTM, review AHAs and discuss scope of work. - Set up for drilling at AOI02-03, HA to refusal and cleared the location, drilled to 25ft bgs and set 2" x 10ft well screen to monitor water in the open borehole. - Collected surface soil sample and subsurface soil sample at AOI02-03. - Set up for drilling at AOI02-01, HA to 5ft and cleared the location, drilled to 25ft bgs and set 2" x 10ft well screen to monitor water in the open borehole. - Collected surface soil sample and subsurface soil sample at AOI02-01.	- None	- HA Soil Borings: 0/3 - DPT/SFA Soil Borings: 5/6 - Soil Samples: 10/15 - Permanent Wells: 0/6 - Developed Wells: 0/6 - Groundwater Samples: 0/6 - Wells Surveyed: 0/6	- Amanda Sullivan (ARNG G9) - Karl Bromwell (HIARNG) - John Shjegstad (GeoTek) - Zack Tullis (GeoTek)
3/23/2022	- Justin Wood (SSHO) - Jordan Heinlein	Cloudy, 82° with 5-10 mph wind (NW), intermittent showers	- AECOM, GeoTek conduct DTM, review AHAs and discuss scope of work. - Set up for drilling at AOI02-02, HA the first 5ft and cleared the location, drilled to 20ft bgs and set 2" x 5ft well screen to monitor water in the open borehole. - Collected surface soil sample and subsurface soil sample at AOI02-02. - Set up for drilling at AOI02-04, HA the first 5ft and cleared the location, drilled to 24ft bgs and set 2" x 5ft well screen to monitor water in the open borehole. - Collected surface soil sample and subsurface soil sample at AOI02-04.	- Saturated conditions encountered at AOI 2 borings; however Sandy and Gravelly Clays are producing little to no water. - Basalt boulders and tight clay are slowing drilling progress.	- HA Soil Borings: 0/3 - DPT/SFA Soil Borings: 3/6 - Soil Samples: 6/15 - Permanent Wells: 0/6 - Developed Wells: 0/6 - Groundwater Samples: 0/6 - Wells Surveyed: 0/6	- Amanda Sullivan (ARNG G9) - Karl Bromwell (HIARNG) - John Shjegstad (GeoTek) - Zack Tullis (GeoTek)
3/22/2022	- Justin Wood (SSHO) - Jordan Heinlein	Cloudy, 83° with 5-10 mph wind (SW) with intermittent showers	- AECOM, GeoTek conduct DTM, review AHAs and discuss scope of work. - Continued drilling at location AOI01-01 to a depth of 50ft bgs. - Identified new IDW & decontamination water staging area behind Building 30 to avoid potential flooding. All supplies moved to the new staging area.	- Saturated conditions not encountered at AOI01-01 from 0-50 ft bgs. Thin moist zones were observed in the drilled column. Anticipated groundwater depth exceeded. - Basalt boulders and tight clay are slowing drilling progress.	- HA Soil Borings: 0/3 - DPT/SFA Soil Borings: 1/6 - Soil Samples: 2/15 - Permanent Wells: 0/6 - Developed Wells: 0/6 - Groundwater Samples: 0/6 - Wells Surveyed: 0/6	- Amanda Sullivan (ARNG G9) - Karl Bromwell (HIARNG) - Karl Motoyama (HIARNG) - Sven Lindstrom (HDOH) - Roger Brewer (HDOH) - John Shjegstad (GeoTek) - Zack Tullis (GeoTek)
3/21/2022	- Justin Wood (SSHO) - Jordan Heinlein	Sunny, 78° with 5-10 mph wind (SW)	- AECOM, GeoTek HI arrived onsite and conducted kickoff DTM, AHA, QAPP/SSHP review - Performed site walk with Amanda Sullivan (ARNG G9), Karl Bromwell (HIARNG); identified sample location access, bathroom, discussed IDW storage area. - Hand cleared well location AOI01-01 and began drilling to install monitoring well via DPT/DT32 and SFA.	- Long-term IDW storage area to be determined. Original location identified prone to water ponding and floods.	- HA Soil Borings: 0/3 - DPT/SFA Soil Borings: 1/6 - Soil Samples: 1/15 - Permanent Wells: 0/6 - Developed Wells: 0/6 - Groundwater Samples: 0/6 - Wells Surveyed: 0/6	- Amanda Sullivan (ARNG G9) - Karl Bromwell (HIARNG) - John Shjegstad (GeoTek) - Zack Tullis (GeoTek)
3/18/2022	- Justin Wood (SSHO)	Sunny, 73° with 5-10 mph wind (SW)	- AECOM, GPRS arrived onsite and conducted kickoff DTM, AHA, QAPP/SSHP review - Performed site walk with Karl Bromwell (HIARNG); identified sample locations. - Performed utility clearance using ground penetrating radar at each proposed soil boring location. Cleared all locations.	- Proposed sample location AOI02-04 is located near overhead powerlines. An alternative location was identified clear from overhead powerlines and subsurface utilities. The revised location is described in a field change request.	- HA Soil Borings: 0/3 - DPT/SFA Soil Borings: 0/6 - Soil Samples: 0/15 - Permanent Wells: 0/6 - Developed Wells: 0/6 - Groundwater Samples: 0/6 - Wells Surveyed: 0/6	- Ivan Martinez (GPRS) - Karl Bromwell (HIARNG)

Notes

AOI = Area of Interest
 AHA = Activity Hazard Analysis
 ARNG = Army National Guard
 bgs = below ground surface
 DPT/DT32= Direct Push Technology / Dual Tube
 DTM = Daily Tailgate Meeting
 GPRS = Ground Penetrating Radar Systems, LLC
 HA = hand auger

IDW = investigation derived waste
 HIARNG = Hawaii Army National Guard
 mph = miles per hour
 SFA = Solid Flight Auger
 SSHO = Site Safety and Health Officer
 SSHP = Site Safety and Health Plan
 QAPP = Quality Assurance Project Plan

Appendix B2 Sampling Forms

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Surface Soil Sampling Form

AECOM

LOCATION	Project Name: ARNG PFAS SI				Project #: 60552172				
	Site: Waiawa Gulch Training Site and UTES, HI								
Sample ID (List Duplicate, MS/MSD samples)	Sample Date	Sample Time	Sample Depth (ft)	Sampled By	Moisture Content	Major Fraction (sand, silt, clay, gravel)	Color	Notes (Debris, etc.)	Analytical Parameters
A0102-01-SB-14.5-16.5-160	3/24/22	14:25	14.5-16.5	JW, JH	M	70, 30, <5, <5	7.5YR 3/3		TOC (USEPA 9060A) + PH (USEPA 9045D)
A0102-01-SB-14.5-16.5-D	3/24/22	14:30	14.5-16.5	JW, JH	M	" "	" "		TOC (USEPA 9060A) + PH (USEPA 9045D)
A0101-02-SB-0.0-1.0	3/28/22	09:00	0.0-1.0	JW, JH	D	30, 35, 40, 5, 10, 15	7.5YR 3/3	Refusal @ 1.0 ft	TOC (USEPA 9060A) + PH (USEPA 9045D)
A0101-02-SB-0.0-1.0	3/28/22	09:10	0.0-1.0	JW, JH	D	" "	" "	↓	PFAS by DOD GSM Table B-15
A0101-02-SB-0.0-1.0-D	3/28/22	09:10	0.0-1.0	JW, JH	D	" "	" "		PFAS by DOD GSM Table B-15
A0101-02-SB-25.5-27.5	3/28/22	11:05	25.5-27.5	JW, JH	D-M	30, 35, 25, 10	Grey 6/1		PFAS by DOD GSM Table B-15
A0102-05-SB-0.0-0.5	3/29/22	13:50	0.0-0.5	JW, JH	D	40, 30, 15, 25	7.5YR 3/4	Refusal w/ hand auger	PFAS by DOD GSM Table B-15
A0102-06-SB-0.0-0.5	3/29/22	14:00	0.0-0.5	JW, JH	D	" "	" "	Refusal w/ hand auger	PFAS by DOD GSM Table B-15
A0102-07-SB-0.0-0.5	3/29/22	14:10	0.0-0.5	JW, JH	D	" "	" "	Refusal w/ hand auger	PFAS by DOD GSM Table B-15
Comments									Moisture Content D - Dry M - Moist W - Wet S - Saturated

LOCATION	Site: Waiiawa Gulch Training Site and UTES, HI	LocID: A0I02-01	Date: 4/4/22
	Project Name: ARNG PFAS SI	Project Number: 60552172	Recorded By: MM Checked By:

EQUIPMENT	Sampling Equipment - Pump: Peristaltic #049825	Controller: N/A	Compressor: N/A
	Water Level Indicator Type/ID#: Solinst #049808	Water Quality Meter Type: YSI	Sonde ID: 048652 Handset ID: 048657
	PID Type/ID#: N/A	Equipment Decon: LIQUINOX	

WELL & SAMPLING INFO	Description: -	Screen Interval (BTOC): -	Initial Depth to Water (BTOC): 15.81	Ambient PID (ppm): N/A	
	Historic Pump Settings: -		Pump Inlet Depth (BTOC): -	Well Head PID (ppm): N/A	
	Condition of Well/Comments: N/A		Height of stick-up (ft): -		
	NOTE: Start pump @ 15:15				

Date (MM/DD/YY)	Time (24 hr)	Depth to Water (BTOC)	Volume Removed (gallons)	Pumping Rate (Lpm)	Temp (°C)	Specific Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Pump Refill/Discharge (seconds)	Pump Pressure (PSI)	Comment
4/4/22	1520	15.85	0.90	0.150	26.8	0.508	1.42	6.58	152.5	64.4	-	-	
	1525	15.85	1.15	0.150	26.9	0.508	1.44	6.57	148.0	17.2	-	-	
	1530	15.85	1.27	0.150	26.8	0.506	1.18	6.55	143.0	3.20	-	-	
	1535	15.85	1.45	0.150	26.8	0.504	1.10	6.49	142.7	2.13	-	-	
	1540	15.85	1.60	0.150	26.8	0.504	1.08	6.50	141.1	1.81	-	-	
<div style="display: flex; justify-content: space-between; align-items: center;"> MM MM 4/4/22 </div>													

Pumping Rate: ≤ 0.5L/min; Measurements: every 3 - 5 minutes; Stabilization is defined as the following for three consecutive readings: ± 3% Temp, ± 3% Conductivity; + 10% DO; ± 0.1 pH; ± 10mV ORP; 10% Turb

Sample ID Numbers and Sample Time	Container Count, Volume & Type	Preservative	Parameter(s)
A0I02-01-GW MS/MSD DUP	8 x 125mL Poly	N/A	

~

LOCATION	Site: Waiawa Gulch Training Site and UTES, HI	LocID: <i>A0102-04</i>	Date: <i>4/5/22</i>
	Project Name: ARNG PFAS SI	Project Number: 60552172	Recorded By: <i>MM</i> Checked By:

EQUIPMENT	Sampling Equipment - Pump: <i>Peristaltic #049825</i>	Controller: <i>N/A</i>	Compressor: <i>N/A</i>
	Water Level Indicator Type/ID#: <i>Solinst #049808</i>	Water Quality Meter Type: <i>YSI</i> Sonde ID: <i>048652</i>	Handset ID: <i>048657</i>
	PID Type/ID#: <i>N/A</i>	Equipment Decon: <i>LIQUINOX, DI WATER</i>	

WELL & SAMPLING INFO	Description: -	Screen Interval (BTOC): -	Initial Depth to Water (BTOC): <i>15.56</i>	Ambient PID (ppm): <i>N/A</i>
	Historic Pump Settings: -		Pump Inlet Depth (BTOC): -	Well Head PID (ppm): <i>N/A</i>
	Condition of Well/Comments: <i>N/A</i>		Height of stick-up (ft): -	
	NOTE:			

Date (MM/DD/YY)	Time (24 hr)	Depth to Water (BTOC)	Volume Removed (gallons)	Pumping Rate (Lpm)	Temp (°C)	Specific Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Pump Refill/Discharge (seconds)	Pump Pressure (PSI)	Comment
<i>4/5/22</i>	<i>1520</i>	<i>15.77</i>	<i>0.125</i>	<i>0.100</i>	<i>27.6</i>	<i>0.937</i>	<i>9.44</i>	<i>6.93</i>	<i>130.1</i>	<i>17.7</i>	-	-	
	<i>1525</i>	<i>15.77</i>	<i>0.250</i>	<i>0.100</i>	<i>27.6</i>	<i>0.934</i>	<i>8.19</i>	<i>6.91</i>	<i>129.9</i>	<i>13.6</i>	-	-	
	<i>1530</i>	<i>15.79</i>	<i>0.750</i>	<i>0.125</i>	<i>27.4</i>	<i>0.893</i>	<i>8.19</i>	<i>6.93</i>	<i>130.3</i>	<i>11.8</i>	-	-	
	<i>1535</i>	<i>15.81</i>	<i>1.00</i>	<i>0.125</i>	<i>27.4</i>	<i>0.884</i>	<i>8.08</i>	<i>6.93</i>	<i>127.7</i>	<i>9.32</i>	-	-	
	<i>1540</i>	<i>15.83</i>	<i>1.50</i>	<i>0.125</i>	<i>27.4</i>	<i>0.871</i>	<i>8.05</i>	<i>6.93</i>	<i>126.1</i>	<i>8.76</i>	-	-	
<i>Mon Mon</i>				<i>4/5/22</i>									

Pumping Rate: ≤ 0.5L/min; Measurements: every 3 - 5 minutes; Stabilization is defined as the following for three consecutive readings: ± 3% Temp, ± 3% Conductivity; + 10% DO; ± 0.1 pH; ± 10mV ORP; 10% Turb

Sample ID Numbers and Sample Time	Container Count, Volume & Type	Preservative	Parameter(s)
<i>1545</i>	<i>2x 125ml Poly</i>		
<i>A0102-04-6W</i>			



Monitoring Well Sample Collection Form

LOCATION	Site: Waiawa Gulch Training Site and UTES, HI	LocID: A0I01-01	Date: 4/5/22
	Project Name: ARNG PFAS SI	Project Number: 60552172	Recorded By: MM Checked By:

EQUIPMENT	Sampling Equipment - Pump: BLADDER	Controller: MP50	Compressor: MP50
	Water Level Indicator Type/ID#: Solinist #079808	Water Quality Meter Type: YSI Sonde ID: 48652	Handset ID: 048657
	PID Type/ID#: N/A	Equipment Decon: LIQUINOX, DI WATER	

WELL & SAMPLING INFO	Description: -	Screen Interval (BTOC): -	Initial Depth to Water (BTOC): 48.45	Ambient PID (ppm): N/A
	Historic Pump Settings: -		Pump Inlet Depth (BTOC): -	Well Head PID (ppm): N/A
	Condition of Well/Comments: N/A		Height of stick-up (ft): -	
	NOTE:			

Date (MM/DD/YY)	Time (24 hr)	Depth to Water (BTOC)	Volume Removed (gallons)	Pumping Rate (Lpm)	Temp (°C)	Specific Conductivity (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)	Pump Refill/Discharge (seconds)	Pump Pressure (PSI)	Comment
4/5/22	1200	48.55	0.10	0.150	28.8	1.585	5.87	6.83	124.5	16.3	18/12	2.5	
	1205	48.55	0.20	0.150	28.8	1.578	5.09	6.74	134.9	17.5			
	1210	48.55	0.40	0.150	28.7	1.585	4.81	6.67	143.2	14.2			
	1215	48.55	0.50	0.150	28.6	1.622	4.76	6.67	145.1	13.9			
	1220	48.55	0.70	0.150	28.5	1.649	4.74	6.67	143.8	13.2			
	1225	48.55	0.90	0.150	28.5	1.667	4.73	6.67	144.5	13.1			

Pumping Rate: ≤ 0.5L/min; Measurements: every 3 - 5 minutes; Stabilization is defined as the following for three consecutive readings: ± 3% Temp, ± 3% Conductivity; + 10% DO; ± 0.1 pH; ± 10mV ORP; 10% Turb

Sample ID Numbers and Sample Time	Container Count, Volume & Type	Preservative	Parameter(s)
1230 A0I ^m 01-01-6W	2x125mL Poly	N/A	

Synoptic Water Level Measurements

Well ID	Depth to Water (ft btoc)	Date gauged*
AOI01-01-GW	45.08	4/6/22 (09:21)
AOI01-02-GW	30.92	4/6/22 (09:28)
AOI02-01-GW	15.80	4/6/22 (09:59)
AOI02-02-GW	17.65	4/6/22 (09:46)
AOI02-03-GW	17.21	4/6/22 (09:56)
AOI02-04-GW	15.42	4/6/22 (09:50)

ft btoc = feet below top of casing

* Collect synoptic water level measurements during or after surveying wells

- Water Levels collected by JW & GD on April 6 2022
- Solinst water level meter model 101 501347 (Pine Environmental rental)
decorated w/ lignox: ~~etc~~ DI water between wells

QC SAMPLE LOG (ERBs, FRBs)

ARNG PFAS

Site: Waiawa Gulch Training Site and UTES, HI

Sample ID	Collection Date	Collection Time	Equipment Type (If Applicable)	Associated Samples
WU-ERB-01	3/21/22	12:00	Hand Auger	AOI01-01-SB-0.0-2.0
WU-FRB-01	3/21/22	13:30	Lab Sand	AOI01-01-SB-37.0-39.0
WU-ERB03	3/28/22	11:20	Hand Troncel	AOI01-02-SB-0.0-2.0
WU-ERB-04	3/28/22	15:00	Macro core Shoe	AOI01-01-SB-37.0-39.0
WU-ERB-05	3/28/22	15:05	DT32	AOI01-02-25.5-27.5
WU-ERB-06	3/28/22	15:30	SFA shoe	AOI01-02-25.5-27.5
WU-Decon-03	3/29/22	09:45	Geotek HI Decon Tank	AOI01-01-SB-37.0-39.0 AOI01-02-SB-25.5-27.5
WU-FRB-02	4/1/22	10:45		AOI01-02
WU-ERB-07	4/5/22	17:00		
WU-ERB-08	4/6/22	10:00		
QA/QC Soil Samples:				
AOI01-01-SB-0-2-D	3/21/22	10:45		AOI01-01-SB-0-2
AOI01-01-SB-0-2-MS	3/21/22	10:45		AOI01-01-SB-0-2
AOI01-01-SB-0-2-MSD	3/21/22	10:45		AOI01-01-SB-0-2
AOI01-02-SB-0-1-D	3/28/22	09:10		AOI01-02-SB-0-2
AOI02-01-SB-14.5-16.5-D	3/24/22	14:25		AOI02-01-SB-14.5-16.5
AOI02-01-SB-14.5-16.5-MS	3/24/22	14:25		AOI02-01-SB-14.5-16.5
AOI02-01-SB-14.5-16.5-MSD	3/24/22	14:25		AOI02-01-SB-14.5-16.5
QA/QC Aqueous Samples:				
AOI02-01-GW-D	4/4/22	15:45		AOI02-01-GW
AOI02-01-GW-MS	4/4/22	15:45		AOI02-01-GW
AOI02-01-GW-MSD	4/4/22	15:45		AOI02-01-GW
Previously Collected Decon Water Source Samples:				
WU-Decon-01				
WU-Decon-02				

Appendix B3

Monitoring Well Development Forms

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LOCATION	Site: Waiawa Gulch Training Site and UTES, HI		LocID: A0I01-01				Date: 3/31/22							
	Project Name: ARNG PFAS SI		Project Number: 60552172				Recorded By: JW		Checked By:					
EQUIPMENT	Development Equipment: Solinst 101 # 049808, PSI Pro Plus # 048652, Proactive Monsoon Pro # 24901													
	Water Level Indicator Type/ID#: ↓					Water Quality Meter Type: ↓								
	PID Type/ID#: None					Equipment Decon: Liquinox								
WELL INFO	Casing ID (inches) [a]: 2"			Unit Casing Volume (gallon/linear foot) [b]: 0.16			Initial Depth to Water (FT BTOC) [c]: 49.50							
	Total Well Depth (FT BTOC) [d]: 54.91			Water Column Thickness (FT) [d-c]: 5.93			Well Volume (gallon) [(d-c) x b]: 0.94							
	Ground Condition of Well: Flush mount, dry soil/grass													
CASING INFO	Casing ID (inches) [a]:			1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0	Ambient PID (ppm):
	Unit Casing Volume (gal/linear foot) [b]:			0.09	0.16	0.20	0.37	0.65	0.75	1.0	1.5	2.0	2.6	Well Head PID (ppm):
Date (MM/DD/YY)	Time (24 hr)	Method (pump, surge, bail)	Depth to Water (BTOC)	Volume Removed (gallons)	Pumping Rate (Lpm)	Temp (°C)	Specific Conductivity (mS/cm)	pH	DO (mg/L)	Turbidity (NTU)	Sediment (mL/L)	Comment		
03/31/22	12:40	pump	52.18	0.5	1.0	29.3	2.159	6.79	3.13	151.3	ORP			
03/31/22	12:45	pump	52.23	1.75	0.400	28.2	2.400	7.11	3.81	290.3				
03/31/22	12:50	pump	52.33	2.25	0.800	28.8	2.374	7.18	4.70	309				
03/31/22	12:55	pump	52.35	3.00		29.0	2.618	7.14	4.63	380		pumping at recharge rate, low		
03/31/22	13:00	pump	52.15	3.00		29.3	2.655	6.92	4.54	371				
03/31/22	13:05	pump	52.16	3.5		29.9	2.676	6.93	4.37	345				
03/31/22	13:10	pump	52.17	3.25		29.3	2.674	6.81	3.71	861				
	13:15	pump	52.18	3.		30.4	2.581	6.80	4.20	789				
	13:25	pump	52.19	3.5		30.4	2.503	6.83	4.25	626		recharging from 13:15		
	13:28	pump	52.20									Stop pump for recharge		
03/31/22	14:10	Stop pump, well dry. End development for 03/31												
04/01/22	08:10	start pump		7.5	12									
04/01/22	08:15	pump	52.60	5.0	0.800	27.2	1809	6.97	4.88	870				
04/01/22	08:20	pump	53.80	5.75		28.6	1745	7.00	4.58	622				
	08:25		54.36	6.0	0.300	29.1	1708	6.92	5.44	486	117.6			
	08:30	Stop pump, well dry - Recharging												
	09:00	start pump	52.89	6.00										
	09:05	pump	54.32	6.25	400	30.8	1461	6.68	3.75	304	108.5			
	09:10	stop pump, well dry												
4/1/22	17:00	pump		0.0	0.25	26.9	1.358	6.85	4.74	217	176.3	recharge rate 50 mL/min		
4/1/22	17:05	pump		1.0	0.25	27.0	1.510	6.82	4.91	150	171.8			

DEVELOPMENT CRITERIA: Measurements every 5 minutes; Development is considered complete if water added during boring and well construction is removed and parameters are within the following criteria for 3 consecutive readings: ± 1°C, ± 5% Conductivity; ± 0.1 pH; Turbidity ± 10 NTU for 30 minutes or < 50 NTU and sediment < 0.75 mL/L

LOCATION	Site: Waiawa Gulch Training Site and UTES, HI	LocID: A0101-02	Date: 3/31/22
	Project Name: ARNG PFAS SI	Project Number: 60552172	Recorded By: J. Wood Checked By:

EQUIPMENT	Development Equipment: Proactive Mensor PTO #24901		
	Water Level Indicator Type/ID#: Solinst 101 #049808	Water Quality Meter Type: YSI Pro Plus # 048657	
	PID Type/ID#: N/A	Equipment Decon: Ciplior	

WELL INFO	Casing ID (inches) [a]: 2"	Unit Casing Volume (gallon/linear foot) [b]: 0.16	Initial Depth to Water (FT BTOC) [c]: 30.80
	Total Well Depth (FT BTOC) [d]: 37.05	Water Column Thickness (FT) [d-c]: 6.25	Well Volume (gallon) [(d-c) x b]: 1.0 gal
	Ground Condition of Well: grass/erosion soil		

CASING INFO	Casing ID (inches) [a]:	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0	Ambient PID (ppm):
	Unit Casing Volume (gal/linear foot) [b]:	0.09	0.16	0.20	0.37	0.65	0.75	1.0	1.5	2.0	2.6	Well Head PID (ppm):

Date (MM/DD/YY)	Time (24 hr)	Method (pump, surge, bail)	Depth to Water (BTOC)	Volume Removed (gallons)	Pumping Rate (Lpm)	Temp (°C)	Specific Conductivity (mS/cm)	pH	DO (mg/L)	Turbidity (NTU)	Sediment (mL/L)	Comment
03/31/22	14:25	pump	30.80	1.5	2.85	31.1	2.058	7.30	3.00	328		stop pump after reading for recharge
03/31/22	14:35	pump	32.00	2.5		28.0	1.729	7.45	5.00	845		restart pump
3/31/22	15:00		well pumped dry. End of development on 3/31/22									
04/01/22	10:10	start pump	30.80									
04/01/22	10:45	pump	33.57	3.5	750	30.6	1.46	7.18	5.39	352	85.2	
04/01/22	10:50	pump	35.07	5.0	1100	28.7	1.067	7.29	6.04	215	99.1	
	10:55	stop	pump, well dry wait recharge									
4/1/22	17:25	pump	30.12	5.0		26.5	0.857	7.19	4.72	174.2	140.8	
4/1/22	17:30	pump	33.0	6.0		26.5	0.983	7.28	5.20	92.3	140.8	
4/1/22	17:35	pump	34.9	7.0		26.5	0.944	7.30	5.19	92.2	140.2	
4/1/22	17:40	stop	pump, well dry									
4/1/22												

DEVELOPMENT CRITERIA: Measurements: every 5 minutes; Development is considered complete if water added during boring and well construction is removed and parameters are within the following criteria for 3 consecutive readings: ± 1°C, ± 5% Conductivity; ± 0.1 pH; Turbidity ± 10 NTU for 30 minutes or < 50 NTU and sediment < 0.75 mL/L

LOCATION	Site: Waiawa Gulch Training Site and UTES, HI	LocID: A0102-02	Date: 4/1/22
	Project Name: ARNG PFAS SI	Project Number: 60552172	Recorded By: J. Wood Checked By:

EQUIPMENT	Development Equipment: Proactive Monsoon Pro #24901		
	Water Level Indicator Type/ID#: Solinst 101 #049808	Water Quality Meter Type: VSI Pro Plus #048652	
	PID Type/ID#: N/A	Equipment Decon: Zymox	

WELL INFO	Casing ID (inches) [a]: 2"	Unit Casing Volume (gallon/linear foot) [b]: 0.16	Initial Depth to Water (FT BTOC) [c]: 17.60
	Total Well Depth (FT BTOC) [d]: 24.76	Water Column Thickness (FT) [d-c]: 7.16	Well Volume (gallon) [(d-c) x b]: 1.14 gal
	Ground Condition of Well:		

CASING INFO	Casing ID (inches) [a]:	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0	Ambient PID (ppm):
	Unit Casing Volume (gal/linear foot) [b]:	0.09	0.16	0.20	0.37	0.65	0.75	1.0	1.5	2.0	2.6	Well Head PID (ppm):

Date (MM/DD/YY)	Time (24 hr)	Method (pump, surge, bail)	Depth to Water (BTOC)	Volume Removed (gallons)	Pumping Rate (Lpm)	Temp (°C)	Specific Conductivity (mS/cm)	pH	DO (mg/L)	Turbidity (NTU)	Sediment (mL/L)	Comment
04/01/22	11:25	pump	21.35	1.25	0.900	29.2	2.174	7.10	1.15	259	108.0	
04/01/22	11:30	pump	23.48	3.0	1.300	29.0	1.918	7.36	3.65	507	100.3	
	11:35	stop										
	12:55	pump	22.51	3.5	0.350	28.70	1.631	7.12	3.54	320	107.8	start pump 1250 w 2.51
	1300	pump	23.55	4.0	0.350	28.40	1.345	7.18	4.03	1140	113.6	stop pump after reading. Dry
4/1/22	17:55	pump	21.05	4.0		27.1	1.307	7.13	4.55	221	139.8	
4/1/22	18:00	pump	22.55	4.5		27.5	1.043	7.15	4.55	248	140.7	
	18:05	pump	23.53	5.0		27.5	1.113	7.14	4.49	150	137.7	
	18:10	pump	23.6	5.5		26.9	1.216	7.17	4.56	175	140.4	
	18:15	stop	pump, well dry									

DEVELOPMENT CRITERIA: Measurements: every 5 minutes; Development is considered complete if water added during boring and well construction is removed and parameters are within the following criteria for 3 consecutive readings: ± 1°C, ± 5% Conductivity; ± 0.1 pH; Turbidity ± 10 NTU for 30 minutes or < 50 NTU and sediment < 0.75 mL/L

LOCATION	Site: Waiawa Gulch Training Site and UTES, HI		LocID: A0107-03		Date: 4/1/22								
	Project Name: ARNG PFAS SI		Project Number: 60552172		Recorded By: J.W.-1 Checked By:								
EQUIPMENT	Development Equipment: <i>Monsoon Pro #24901</i>												
	Water Level Indicator Type/ID#: <i>Solinst 101 #049808</i>			Water Quality Meter Type: <i>YSI Pro Plus #048652</i>									
	PID Type/ID#: <i>N/A</i>			Equipment Decon: <i>Lig</i>									
WELL INFO	Casing ID (inches) [a]: <i>2</i>		Unit Casing Volume (gallon/linear foot) [b]: <i>0.16</i>		Initial Depth to Water (FT BTOC) [c]: <i>17.13</i>								
	Total Well Depth (FT BTOC) [d]: <i>24.85</i>		Water Column Thickness (FT) [d-c]:		Well Volume (gallon) {[d-c] x b):								
	Ground Condition of Well: <i>-</i>												
CASING INFO	Casing ID (inches) [a]: <i>2</i>		1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0	Ambient PID (ppm):
	Unit Casing Volume (gal/linear foot) [b]:		0.09	0.16	0.20	0.37	0.65	0.75	1.0	1.5	2.0	2.6	Well Head PID (ppm):
Date (MM/DD/YY)	Time (24 hr)	Method (pump, surge, bail)	Depth to Water (BTOC)	Volume Removed (gallons)	Pumping Rate (Lpm)	Temp (°C)	Specific Conductivity (mS/cm)	pH	DO (mg/L)	Turbidity (NTU)	Sediment (mL/L) ORP	Comment	
4/1/22	1530	pump	17.13	0.0	0.7	26.7	1.428	6.93		7100	147.4	start pump	
4/1/22	1535	pump	20.30	0.75		26.6	1.447	7.06	2.41	>1000	181.9		
4/1/22	1540	pump	19.10	1.25		26.5	1.500	7.00	1.92	>1000	160.6		
4/1/22	1545	pump	20.80	1.50		26.5	1.514	7.01	2.34	252	159.0		
4/1/22	1550	pump	23.00	2.85		26.9	1.380	7.05	3.32	182	147.2		
4/1/22	1555	stop	pump, well dry										
4/1/22	16:00	while	resetting pump, tube discharged									WL = 18.2 pre pump restart	
4/1/22	16:05	pump	23.00	3.5		26.6	1.325	7.06	4.42	449	139.8		
4/1/22	16:10	pump	stopped, well dry										
4/4/22	12:15	pump	17.34	1.0	0.8	27.2	1.305	7.68	1.98	632	236.2	start pump	
4/4/22	12:20	pump	20.75	1.25	0.33	26.7	1.342	7.27	2.95	946	226.4		
4/4/22	1225	pump	19.95	1.50	0.33	26.7	1.306	7.32	3.47	740	219.7		
4/4/22	1230	pump	20.34	2.50	0.40	26.5	1.344	7.27	3.67	108	219.0		
4/4/22	1235	pump	21.20	3.20	0.33	26.5	1.337	7.26	3.71	673	221.3		
4/4/22	1240	pump	22.37	4.50	0.33	26.6	1.329	7.23	3.69	46.5	218.4		
4/4/22	1245	pump	22.53	5.70	0.40	26.7	1.317	7.18	3.67	67.5	212.7		
4/4/22	1250	pump	22.70	6.75	0.40	26.8	1.308	7.12	3.66	44.3	198.4		
4/4/22	1255	pump	22.92	7.70	0.40	26.8	1.305	7.11	3.66	42.4	195.6		

DEVELOPMENT CRITERIA: Measurements: every 5 minutes; Development is considered complete if water added during boring and well construction is removed and parameters are within the following criteria for 3 consecutive readings: ± 1°C, ± 5% Conductivity; ± 0.1 pH; Turbidity ± 10 NTU for 30 minutes or < 50 NTU and sediment < 0.75 mL/L

LOCATION	Site: Waiawa Gulch Training Site and UTES, HI		LocID: A0102-04				Date: 4/1/22							
	Project Name: ARNG PFAS SI		Project Number: 60552172				Recorded By:		Checked By:					
EQUIPMENT	Development Equipment: Proactive Monsoon Pro #24901													
	Water Level Indicator Type/ID#: Solinst 101 P7 #041908					Water Quality Meter Type: YSI ProPlus #048657								
	PID Type/ID#: NA					Equipment Decon: Lignox								
WELL INFO	Casing ID (inches) [a]: 2			Unit Casing Volume (gallon/linear foot) [b]: 0.16			Initial Depth to Water (FT BTOC) [c]: 13.21							
	Total Well Depth (FT BTOC) [d]: 23.71			Water Column Thickness (FT) [d-c]: 10.50			Well Volume (gallon) [(d-c) x b]: 1.68							
	Ground Condition of Well:													
CASING INFO	Casing ID (inches) [a]:			1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0	Ambient PID (ppm):
	Unit Casing Volume (gal/linear foot) [b]:			0.09	0.16	0.20	0.37	0.65	0.75	1.0	1.5	2.0	2.6	Well Head PID (ppm):
Date (MM/DD/YY)	Time (24 hr)	Method (pump, surge, bail)	Depth to Water (BTOC)	Volume Removed (gallons)	Pumping Rate (Lpm)	Temp (°C)	Specific Conductivity (mS/cm)	pH	DO (mg/L)	Turbidity (NTU)	Sediment (mL/L)	ORP	Comment	
4/1/22	13:25	pump	13.21	0.0	1.0	27.6	0.855	7.30	2.47	>1,000	121.2			
4/1/22	13:30	pump	17.90	0.75	0.5	28.2	0.811	7.17	3.04	334	125.1			
4/1/22	13:35	pump	18.69	1.25	0.3	27.6	0.810	7.18	2.62	282	131.6			
	13:45	pump	18.75	1.50	0.1	29.2	0.855	7.14	2.65	201	125.4		resetting pump	
	13:50	pump	22.84	2.50		28.1	0.864	7.12	2.58	220	118.9			
	13:55			2.6										
4/4/22	11:35	pump	18.94	0.0	0.7	28.1	0.875	6.90	6.33	>1000	151.4		stop pump, well dry	
	11:40	pump	18.04	0.90	0.7	27.8	0.871	7.34	5.57	268	158.4			
	11:45	pump	22.09	1.75	1.0	27.7	0.923	7.34	4.57	420	198.3			
	11:50	pump		2.20	0.7	28.2	0.953	7.35	4.57	112	197.0			
	11:55													
14/5	14:15	pump	20.64	2.50	0.7	29.1	0.880	7.10	4.88	>1,000	182.8		stop pump, well dry (2x)	
14	14:25	pump	21.37	3.21	1.0	28.1	0.858	6.75	5.11	>1,000	211.6			
14	14:30	pump	22.41	3.93	1.0	28.1	0.839	6.93	5.12	368	217.8		stop pump, well dry (3x)	

DEVELOPMENT CRITERIA: Measurements: every 5 minutes; Development is considered complete if water added during boring and well construction is removed and parameters are within the following criteria for 3 consecutive readings: ± 1°C, ± 5% Conductivity; ± 0.1 pH; Turbidity ± 10 NTU for 30 minutes or < 50 NTU and sediment < 0.75 mL/L

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Appendix B4

Field Change Request Forms

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Date: 21 March 2022

AECOM Technical Services Inc.
Field Change Request Form

Report Number: FCR001

Location: Waiawa Gulch Training Site
and UTES, Hawaii

Document Title: Waiawa Gulch Training
Site and UTES SI QAPP
Addendum, Final

Contract Number: W912DR-12-D-0014
DO: W912DR17F0192

<i>Description of Field Change:</i>	Proposed sample location AOI02-04 has been relocated due to accessibility issues. The original AOI02-04 location is within 10 feet of overhead power lines. A revised location for AOI02-04 is necessary to allow for safe drilling away from the overhead power lines as well as subsurface utilities connecting to the newly installed facility Wash Rack.
<i>Proposed Disposition:</i>	See attachments for approximate revised sample location marked with yellow arrows. The accurate location of the revised location will be recorded by the field team. The revised sample location continues to allow for the assessment of PFAS in media downgradient from the storage buildings, firetruck parking area, and old wash rack, which is the same rationale for the placement of the original location.

Submitted by: Joe Witte

Date: 3/21/2022

**Approved by
(Project Manager):** Claire Mitchell

Completed by: Joe Witte

Date: 3/21/2022

**Verified by
(SI Task Manager):** Joe Witte

Date: 3/21/2022

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Waiawa Gulch Training Site and UTES

Field Change Request: AOI02-04 relocation

Legend

- Feature 1
- Feature 2
- Hawaii National Guard

Approximate Revised
AOI02-04 Location

AOI02-04

AOI02-02

AOI02-03

AOI02-01

Google Earth

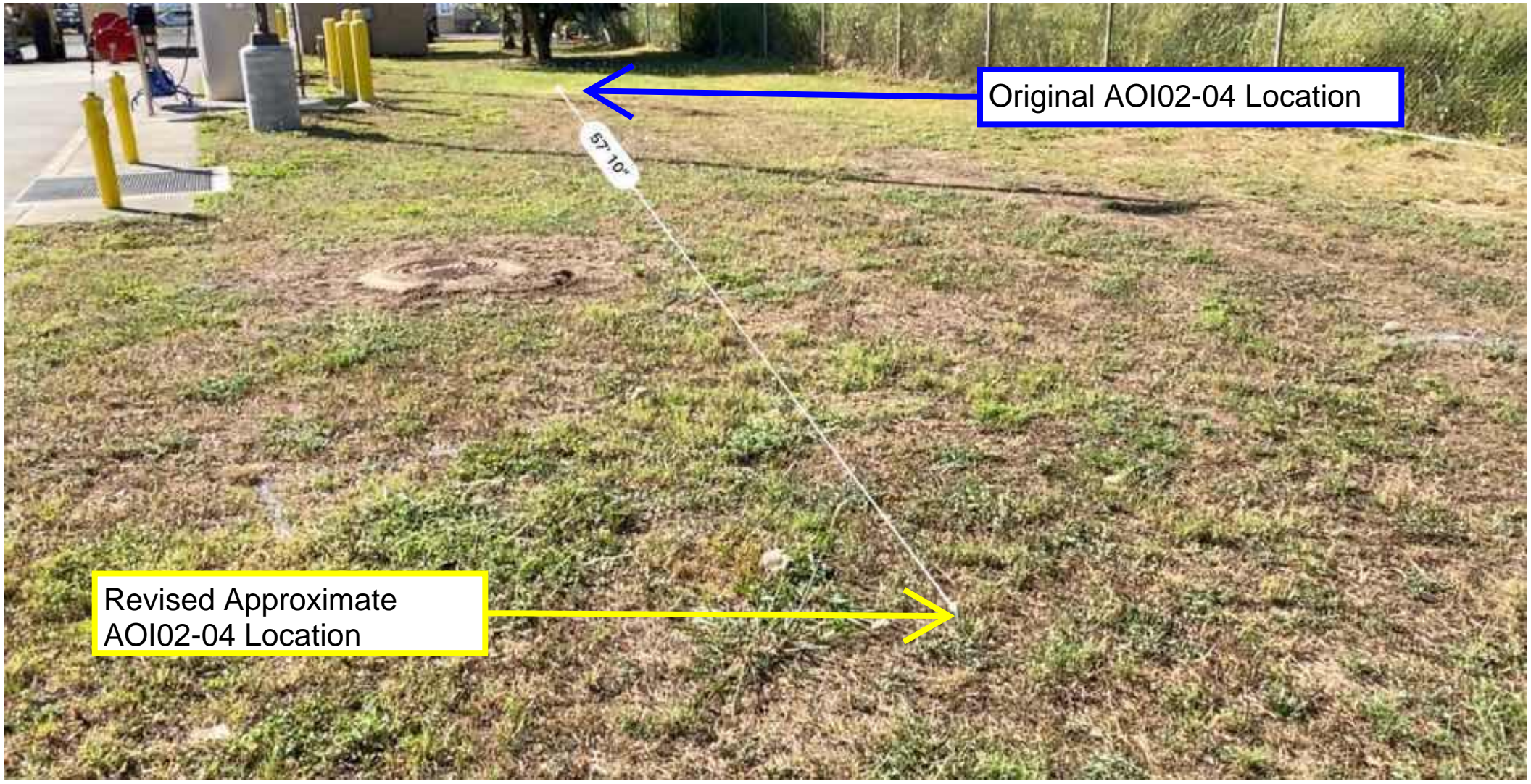


100 ft

Original AOI02-04 Location

57' 10"

Revised Approximate
AOI02-04 Location



Date: 30 March 2022

AECOM Technical Services Inc.
Field Change Request Form

Report Number: FCR002

Location: Waiawa Gulch Training Site
and UTES, Hawaii

Document Title: Waiawa Gulch Training
Site and UTES SI QAPP
Addendum, Final

Contract Number: W912DR-12-D-0014
DO: W912DR17F0192

<i>Description of Field Change:</i>	<p>The proposed well construction details for permanent wells installed as a part of this investigation have been revised based on the Hawaii (HI) Department of Health (DOH) Hazard Evaluation and Emergency Response Office (HEER) Technical Guidance Manual (TGM). The SI QAPP Addendum states that a 2-foot thick hydrated bentonite seal will be placed above the well filter packs followed by a bentonite grout from the top of the bentonite seal to the ground surface.</p> <p>Based on the current DOH HEER TGM and recommendation from the experienced, licensed driller, the use of slurry/grout seals is not recommended due to the potential for infiltration and clogging of the filter pack.</p>
<i>Proposed Disposition:</i>	<p>In accordance with the current DOH HEER TGM and licensed driller recommendation, the permanent wells will be constructed with a hydrated bentonite seal above the filter pack, followed by hydrated bentonite installed in lifts to prevent bridging. Hydrated bentonite will be installed in lifts to within two feet of the well pad. The bentonite will be overlain with at least two feet of neat cement, per the DOH HEER TGM, followed by the concrete well pad.</p>

Submitted by: Joe Witte

Date: 3/30/2022

**Approved by
(Project Manager):** Claire Mitchell

Completed by: Joe Witte

Date: 3/30/2022

**Verified by
(SI Senior Lead):** Greg Burgess

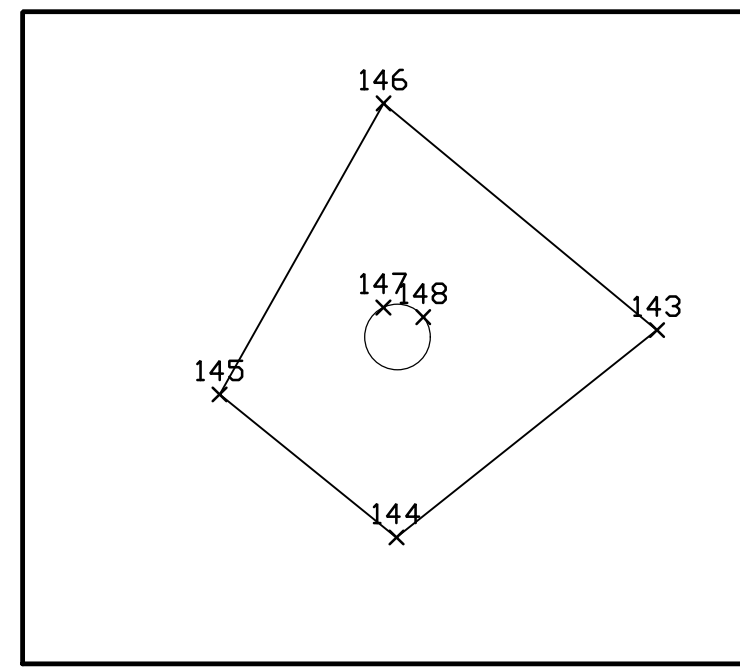
Date: 3/30/2022

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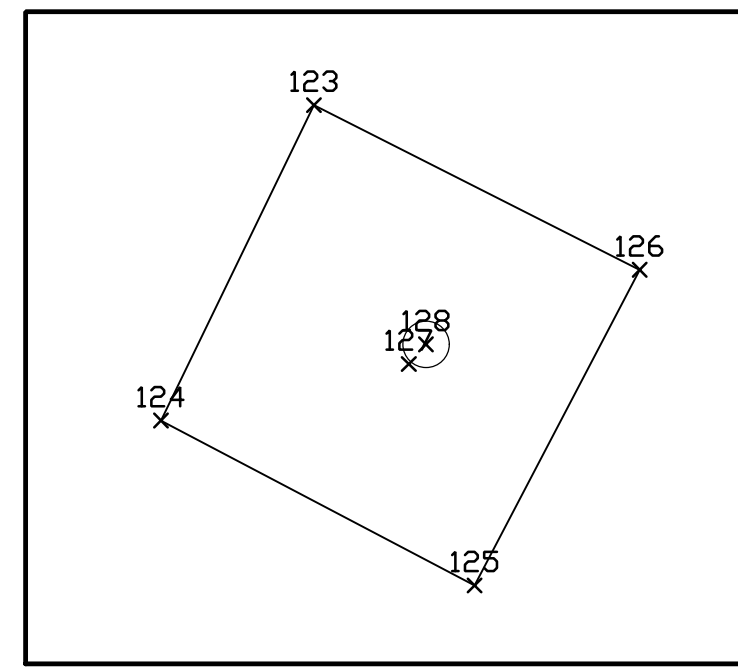
Appendix B5 Survey Data

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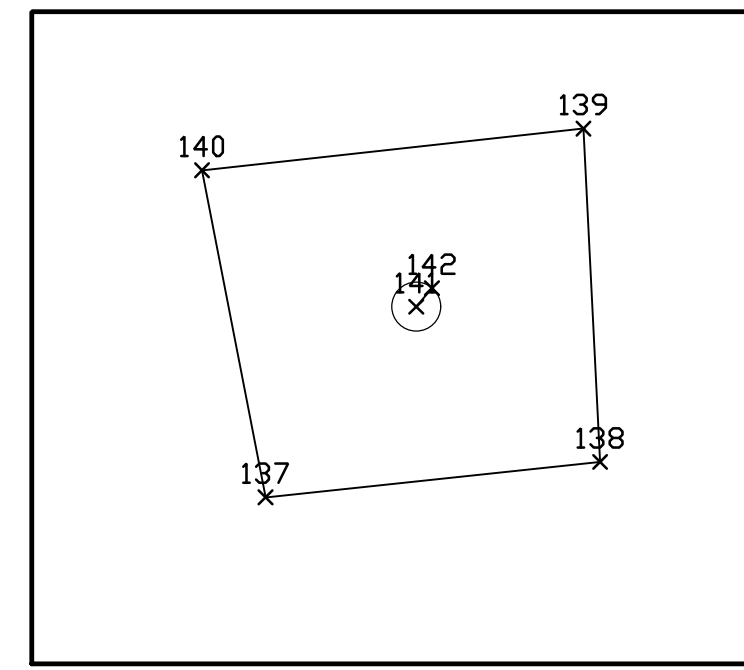
Hawaii State Plane, NAD 83, Zone 3 (feet)				WGS84		UTM Zone 4 (meters)			Notes
PNT	NORTHING	EASTING	ELEVATION	LATITUDE	LONGITUDE	NORTHING	EASTING	ELEVATION	
100	88521.466	1648245.388	90.17	21.4104	-157.9770	2367909.5503	606031.5290	27.49	HEG-100 MAG
101	88109.648	1648036.644	83.91	21.4092	-157.9776	2367783.6565	605968.7205	25.58	HEG-101 MAG
102	88109.648	1648036.643	83.90	21.4092	-157.9776	2367783.6566	605968.7202	25.58	HEG-101 MAG
103	88553.933	1648279.326	89.72	21.4105	-157.9769	2367919.5093	606041.8077	27.35	COR CONC
104	88555.217	1648277.985	89.68	21.4105	-157.9769	2367919.8980	606041.3965	27.34	COR CONC
105	88556.492	1648279.310	89.70	21.4105	-157.9769	2367920.2891	606041.7976	27.35	COR CONC
106	88555.236	1648280.644	89.72	21.4105	-157.9769	2367919.9089	606042.2066	27.35	COR CONC
107	88555.253	1648279.336	89.70	21.4105	-157.9769	2367919.9116	606041.8081	27.35	TOP COVER AOI01-01
108	88555.233	1648279.442	89.40	21.4105	-157.9769	2367919.9057	606041.8403	27.25	TOP CASING AOI01-01
109	88521.462	1648245.378	90.17	21.4104	-157.9770	2367909.5490	606031.5260	27.49	HEG-100 MAG
110	88136.186	1648083.655	83.49	21.4093	-157.9775	2367791.8346	605982.9940	25.45	COR CONC
111	88134.277	1648083.921	83.49	21.4093	-157.9775	2367791.2532	605983.0789	25.45	COR CONC
112	88134.639	1648085.709	83.51	21.4093	-157.9775	2367791.3672	605983.6231	25.46	COR CONC
113	88136.462	1648085.405	83.53	21.4093	-157.9775	2367791.9219	605983.5269	25.46	COR CONC
114	88135.549	1648084.798	83.50	21.4093	-157.9775	2367791.6425	605983.3436	25.46	TOP COVER AOI01-02
115	88135.588	1648084.814	83.13	21.4093	-157.9775	2367791.6546	605983.3487	25.35	TOP CASING AOI01-02
116	87622.483	1647940.123	57.56	21.4079	-157.9779	2367635.0214	605940.2548	17.55	HEG-116 MAG
117	87148.212	1647777.939	47.67	21.4066	-157.9784	2367490.1877	605891.7552	14.53	HEG-117
118	87149.893	1647784.869	48.35	21.4066	-157.9783	2367490.7133	605893.8635	14.74	DISK FND HI002
119	87108.360	1647836.749	48.55	21.4065	-157.9782	2367478.1584	605909.7528	14.80	AOI02-07
120	87095.611	1647826.218	48.67	21.4064	-157.9782	2367474.2531	605906.5686	14.84	AOI02-06
121	87087.359	1647815.968	48.21	21.4064	-157.9783	2367471.7184	605903.4614	14.70	AOI02-05
122	87131.410	1647682.980	50.10	21.4065	-157.9786	2367484.8836	605862.8522	15.28	HEG-122 LN
123	87062.184	1647677.442	49.93	21.4063	-157.9787	2367463.7783	605861.2991	15.22	COR CONC
124	87060.541	1647676.646	49.96	21.4063	-157.9787	2367463.2763	605861.0595	15.23	COR CONC
125	87059.682	1647678.279	49.98	21.4063	-157.9787	2367463.0177	605861.5588	15.24	COR CONC
126	87061.326	1647679.139	49.97	21.4063	-157.9787	2367463.5202	605861.8177	15.24	COR CONC
127	87060.836	1647677.936	49.98	21.4063	-157.9787	2367463.3685	605861.4522	15.24	TOP COVER AOI02-02
128	87060.938	1647678.025	49.61	21.4063	-157.9787	2367463.3997	605861.4790	15.13	TOP CASING AOI02-02
129	86986.113	1647574.875	50.77	21.4061	-157.9790	2367440.3990	605830.1925	15.48	COR CONC
130	86984.954	1647573.479	50.72	21.4061	-157.9790	2367440.0431	605829.7694	15.46	COR CONC
131	86985.979	1647572.350	50.76	21.4061	-157.9790	2367440.3532	605829.4235	15.48	COR CONC
132	86987.320	1647573.570	50.76	21.4061	-157.9790	2367440.7643	605829.7927	15.48	COR CONC
133	86986.106	1647573.603	50.76	21.4061	-157.9790	2367440.3944	605829.8051	15.48	TOP COVER AOI02-04
134	86986.207	1647573.661	50.40	21.4061	-157.9790	2367440.4252	605829.8225	15.37	TOP CASING AOI02-04
135	86914.303	1648127.776	49.46	21.4059	-157.9773	2367419.5906	605998.8107	15.08	HEG-135
136	86841.610	1647705.299	50.48	21.4057	-157.9786	2367396.6197	605870.2155	15.39	HEG-136
137	86820.374	1647671.825	50.71	21.4057	-157.9787	2367390.0835	605860.0569	15.46	COR CONC
138	86820.558	1647673.567	50.74	21.4057	-157.9787	2367390.1431	605860.5872	15.47	COR CONC
139	86822.293	1647673.480	50.67	21.4057	-157.9787	2367390.6716	605860.5573	15.45	COR CONC
140	86822.076	1647671.495	50.74	21.4057	-157.9787	2367390.6017	605859.9527	15.47	COR CONC
141	86821.365	1647672.610	50.75	21.4057	-157.9787	2367390.3872	605860.2939	15.47	TOP COVER AOI02-03
142	86821.463	1647672.691	50.35	21.4057	-157.9787	2367390.4171	605860.3187	15.35	TOP CASING AOI02-03
143	86768.418	1647804.824	49.18	21.4055	-157.9783	2367374.5099	605900.6847	14.99	COR CONC
144	86767.338	1647803.468	49.15	21.4055	-157.9783	2367374.1783	605900.2737	14.99	COR CONC
145	86768.083	1647802.547	49.12	21.4055	-157.9783	2367374.4034	605899.9917	14.98	COR CONC
146	86769.598	1647803.401	49.14	21.4055	-157.9783	2367374.8667	605900.2488	14.98	COR CONC
147	86768.535	1647803.400	49.13	21.4055	-157.9783	2367374.5429	605900.2507	14.98	TOP COVER AOI02-01
148	86768.485	1647803.608	48.86	21.4055	-157.9783	2367374.5280	605900.3141	14.90	TOP CASING AOI02-01
149	86661.488	1647883.717	50.79	21.4052	-157.9781	2367342.0797	605924.9323	15.48	HEG-149
150	86802.219	1647961.063	49.63	21.4056	-157.9778	2367385.1130	605948.2281	15.13	HEG-150
151	87138.562	1648231.051	51.05	21.4066	-157.9770	2367488.1268	606029.8451	15.56	MON WAIHONA ST
152	86568.440	1647668.017	51.57	21.4050	-157.9787	2367313.3075	605859.3855	15.72	MON WAIHONA ST



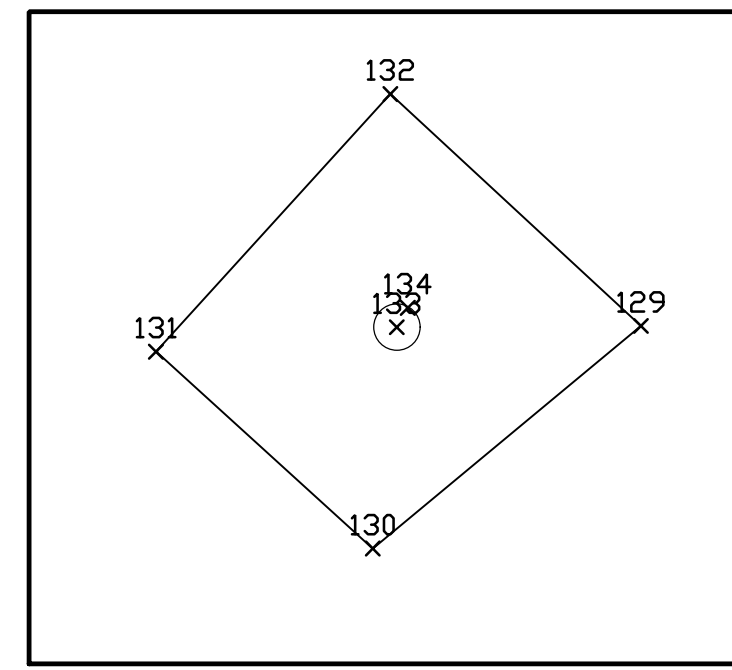
AO102-01



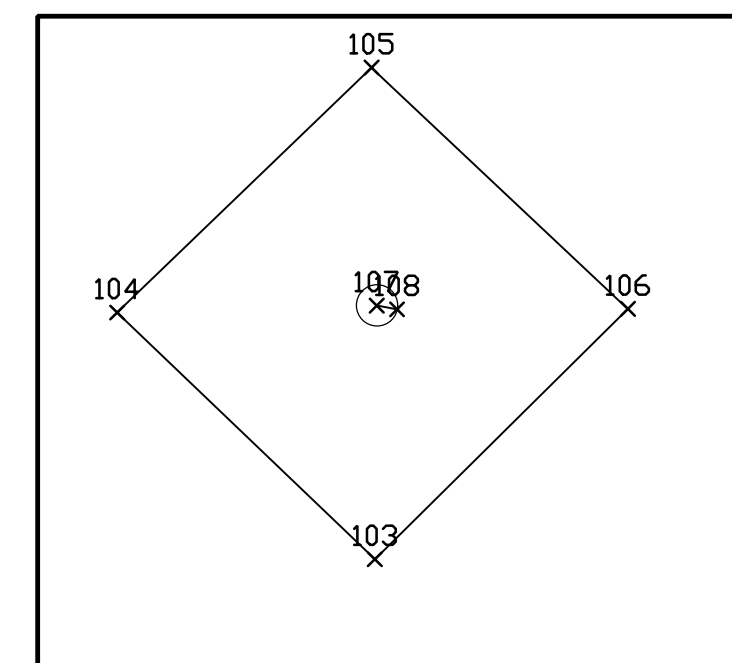
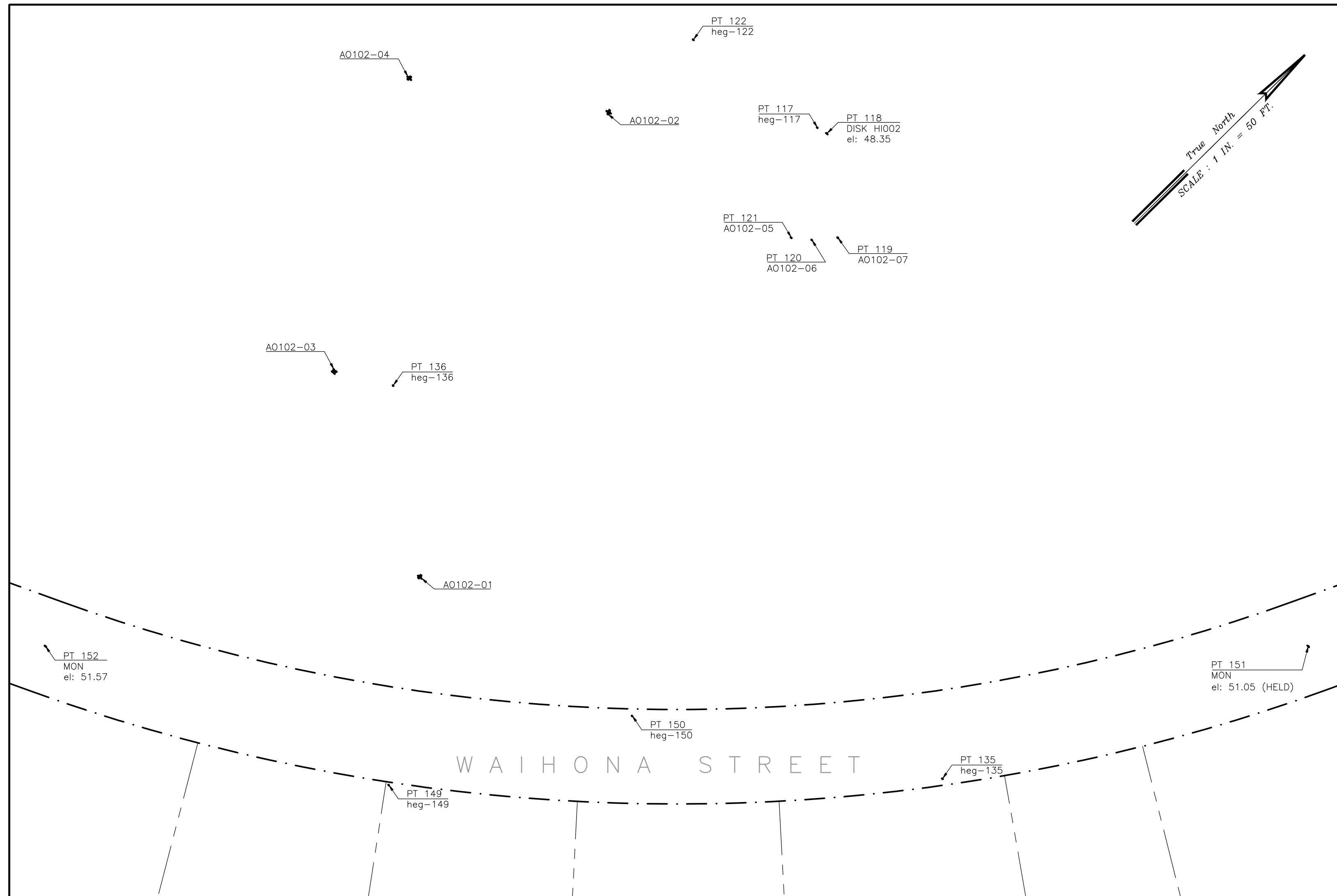
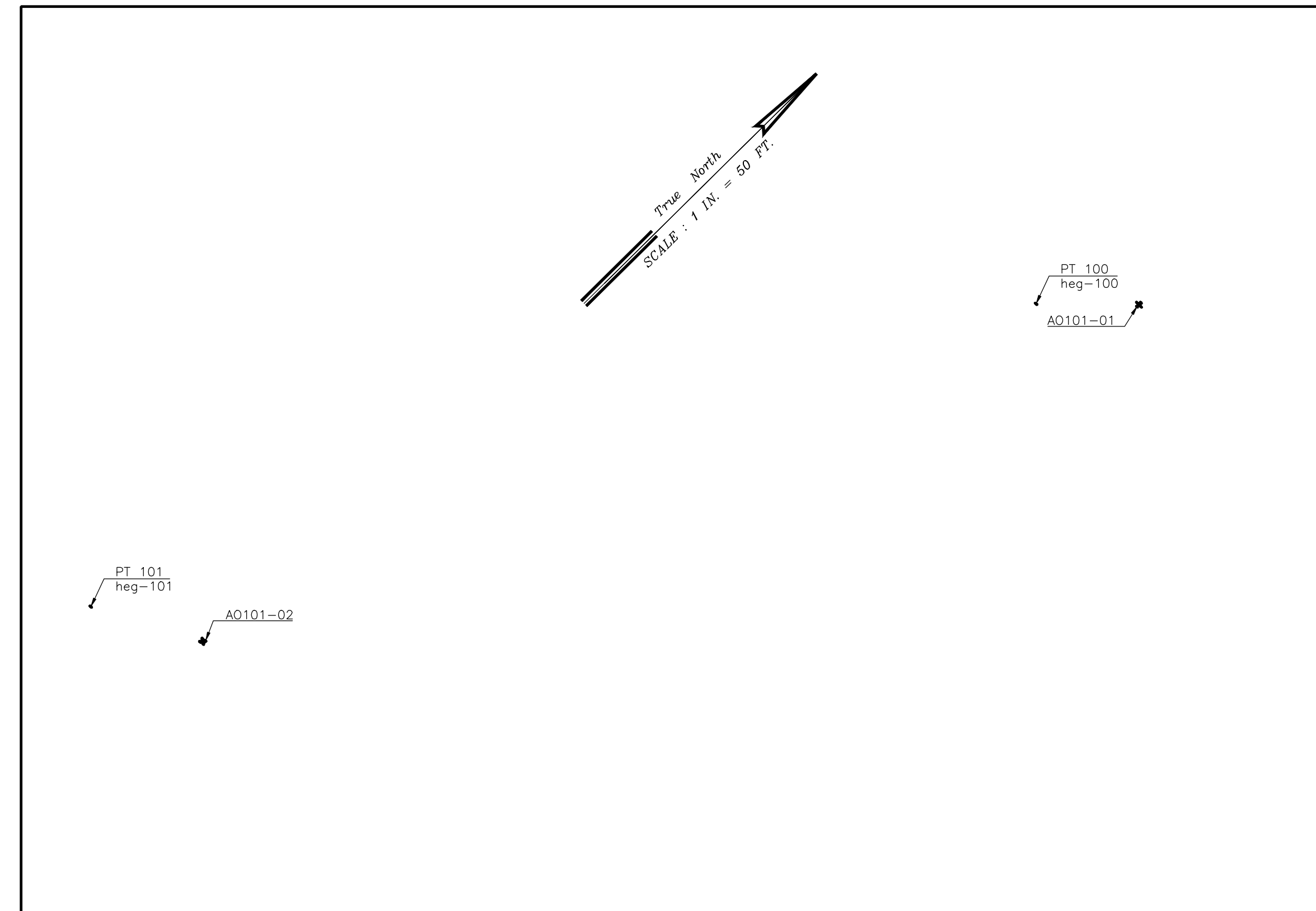
AO102-02



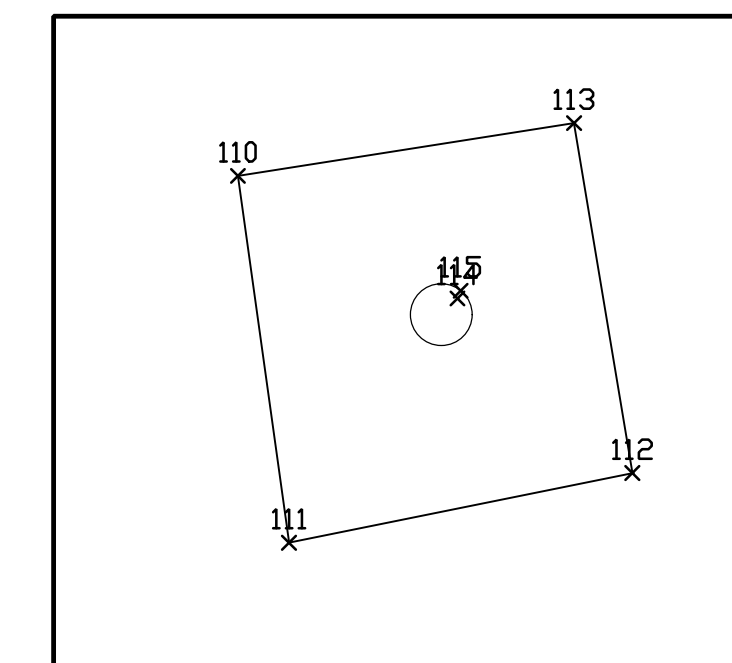
AO102-03



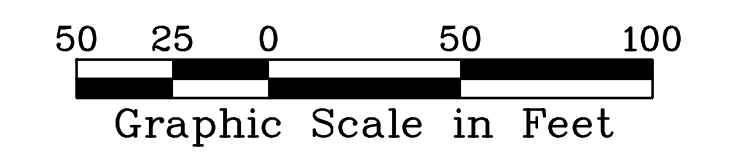
AO102-04



AO101-01



AO101-02



NOTE:
Elevations are tidal referring to City & County of Honolulu Street Monument located on Waihona Street in front of HI Army National Guard Armory
Top of Brass Pin = 51.05

**COORDINATES LIST
REFERENCE MAP**


WAIAWA HIARNG TRAINING SITE
96-1176 WAIHONA STREET
PEARL CITY, OAHU, HAWAII
T.M.K. : (1) 9-6-004 : 015
DATE OF SURVEY: APRIL 11, 2022
DATE: APRIL 11, 2022

HAWAII ENGINEERING GROUP, Inc.
Executive Center
1088 Bishop Street, Suite #2506
Honolulu, Hawaii 96813
Phone: (808) 533-2092
Fax: (808) 533-2059
email: heg@hawaiiengineering.net

Appendix C Photographic Log

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APPENDIX C – Photographic Log		
Site Inspection	Waiawa Gulch Training Site and Unit Training and Equipment Site	O'ahu, Hawaii

Photograph No. 1	
Date: 3/21/22	
Time: N/A	
Description: AOI01-01 Surface soil collected with hand auger.	
Orientation: N/A	

Photograph No. 2	
Date: 3/22/22	
Time: N/A	
Description: AOI01-01 Soil core 30-35ft bgs.	
Orientation: N/A	

APPENDIX C – Photographic Log

Site Inspection

Waiawa Gulch Training Site and
Unit Training and Equipment Site

O'ahu, Hawaii

Photograph No. 3

Date: 3/29/22

Time: N/A

Description:

AOI01-01

Completed
permanent monitoring
well.

Orientation:

N/A



Photograph No. 4

Date: 3/23/22

Time: N/A

Description:

AOI01-02

Subcontractor
operating drill rig
during soil boring.

Orientation:

W



APPENDIX C – Photographic Log

Site Inspection

Waiawa Gulch Training Site and
Unit Training and Equipment Site

O'ahu, Hawaii

Photograph No. 5

Date: 3/25/22

Time: N/A

Description:

AOI01-02

Soil core from 20-25
ft bgs.



Orientation:

N/A

Photograph No. 6

Date: 3/29/22

Time: N/A

Description:

AOI01-02

Exposed top of
monitoring well prior
to pouring of concrete
pad.




Orientation:

S

APPENDIX C – Photographic Log

Site Inspection	Waiawa Gulch Training Site and Unit Training and Equipment Site	O'ahu, Hawaii
-----------------	-----------------------------------------------------------------	---------------

Photograph No. 7	
Date: 3/29/22 Time: N/A	
Description: AOI01-02 Completed permanent monitoring well.	
Orientation: N/A	

Photograph No. 8	
Date: 3/24/22 Time: N/A	
Description: AOI02-01 Soil boring following clearance of asphalt layer.	
Orientation: N	

APPENDIX C – Photographic Log		
Site Inspection	Waiawa Gulch Training Site and Unit Training and Equipment Site	O'ahu, Hawaii

Photograph No. 9	
Date: 3/24/22 Time: N/A	
Description: AOI02-01 Soil core from 15-20 ft bgs.	
Orientation: N/A	

Photograph No. 10	
Date: 3/25/22 Time: N/A	
Description: AOI02-01 Safety cones placed to demarcate drying concrete well pad.	
Orientation: N/A	

APPENDIX C – Photographic Log

Site Inspection

Waiawa Gulch Training Site and
Unit Training and Equipment Site

O'ahu, Hawaii

Photograph No. 11

Date: 3/23/22

Time: N/A

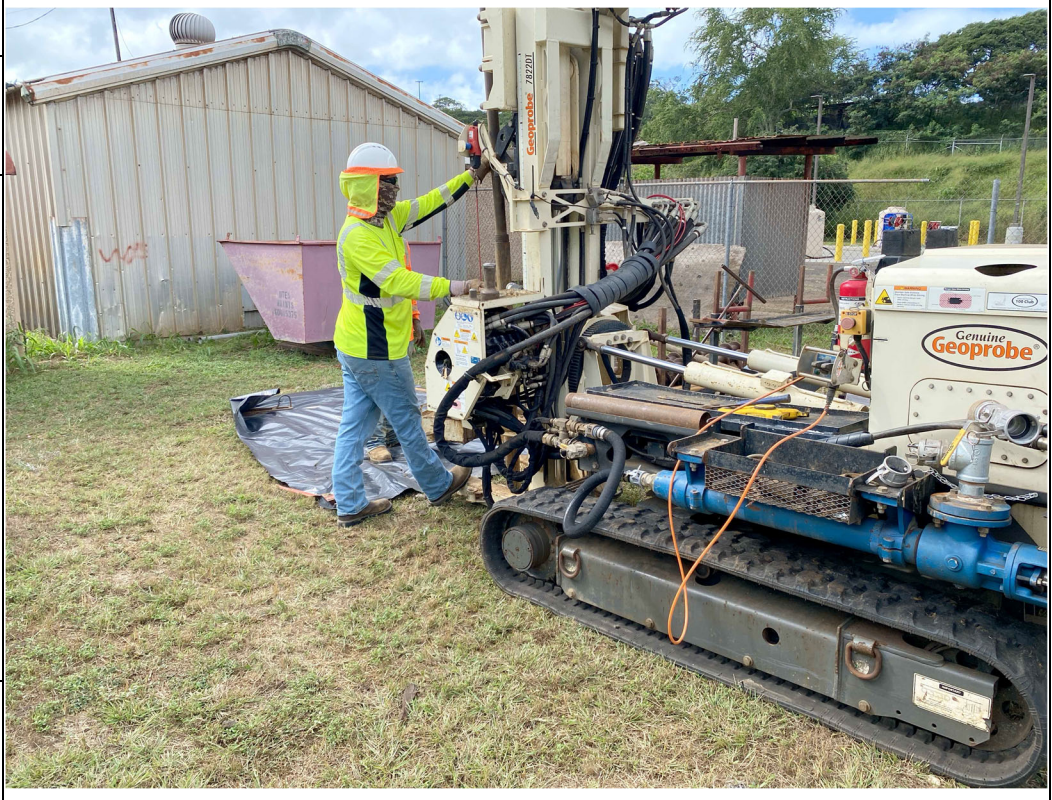
Description:

AOI02-02

Subcontractor
operating drill rig.

Orientation:

SW



Photograph No. 12

Date: 3/23/22

Time: N/A

Description:

AOI02-02

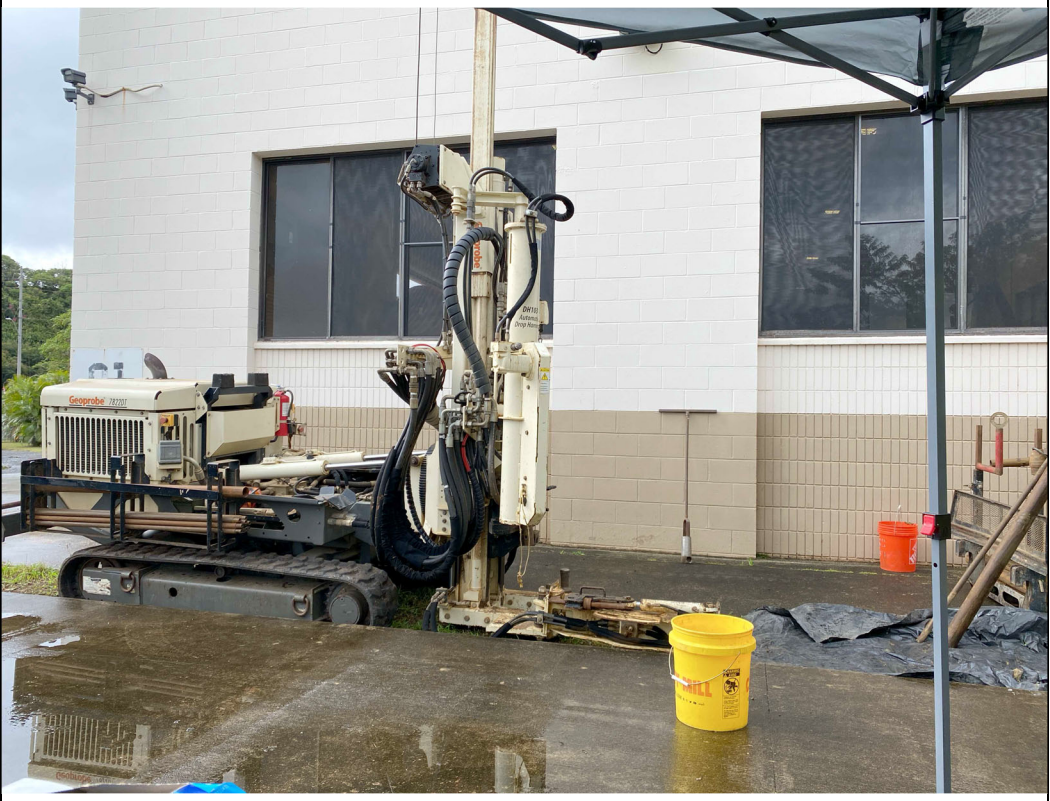
Soil core from 1-5 ft
bgs.

Orientation:

N/A



APPENDIX C – Photographic Log		
Site Inspection	Waiawa Gulch Training Site and Unit Training and Equipment Site	O'ahu, Hawaii

Photograph No. 13	
Date: 3/24/22	
Time: N/A	
Description: AOI02-03 Staged drilling area.	
Orientation: S	

Photograph No. 14	
Date: 3/24/22	
Time: N/A	
Description: AOI02-03 Soil core from 5-10 ft bgs.	
Orientation: N/A	

APPENDIX C – Photographic Log

Site Inspection

Waiawa Gulch Training Site and
Unit Training and Equipment Site

O'ahu, Hawaii

Photograph No. 15

Date: 3/25/22

Time: N/A

Description:

AOI02-03

Completed
permanent monitoring
well.

Orientation:

S



Photograph No. 16

Date: 3/23/22

Time: N/A

Description:

AOI02-04

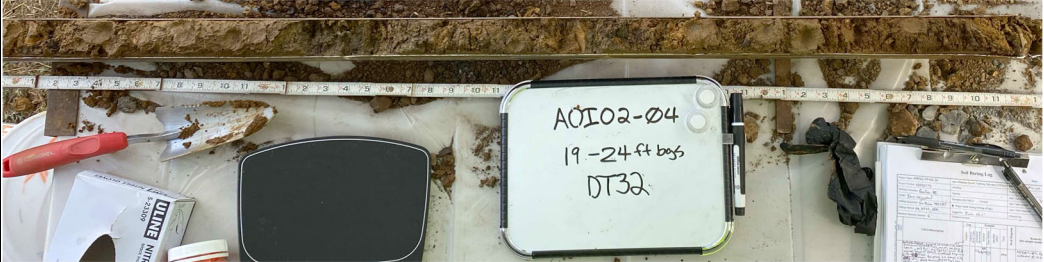
Using auger.

Orientation:

SE



APPENDIX C – Photographic Log		
Site Inspection	Waiawa Gulch Training Site and Unit Training and Equipment Site	O'ahu, Hawaii

Photograph No. 17	
Date: 3/23/22 Time: N/A	
Description: AOI02-04 Soil core from 19-24 ft bgs	
Orientation: N/A	

Photograph No. 18	
Date: 3/25/22 Time: N/A	
Description: AOI02-04 Completed permanent monitoring well.	
Orientation: N/A	

APPENDIX C – Photographic Log		
Site Inspection	Waiawa Gulch Training Site and Unit Training and Equipment Site	O'ahu, Hawaii

Photograph No. 19	
Date: 3/29/22	
Time: N/A	
Description: White flags demarcating surface soil locations: AOI02-05 AOI02-06 AOI02-07	
Orientation: NE	

Photograph No. 20	
Date: 3/31/22	
Time: N/A	
Description: AOI01-01 Well development and groundwater sampling setup. Collecting water quality parameter readings.	
Orientation: NW	

APPENDIX C – Photographic Log

Site Inspection

Waiawa Gulch Training Site and
Unit Training and Equipment Site

O'ahu, Hawaii

Photograph No. 21

Date: 4/6/22

Time: N/A

Description:

IDW staging area.
Collection of labeled
drums containing
liquid and solid waste.

Orientation:

E



Photograph No. 22

Date: 4/6/22

Time: N/A

Description:

IDW staging area.
Drums covered by
protective tarp and
secured by straps.

Orientation:

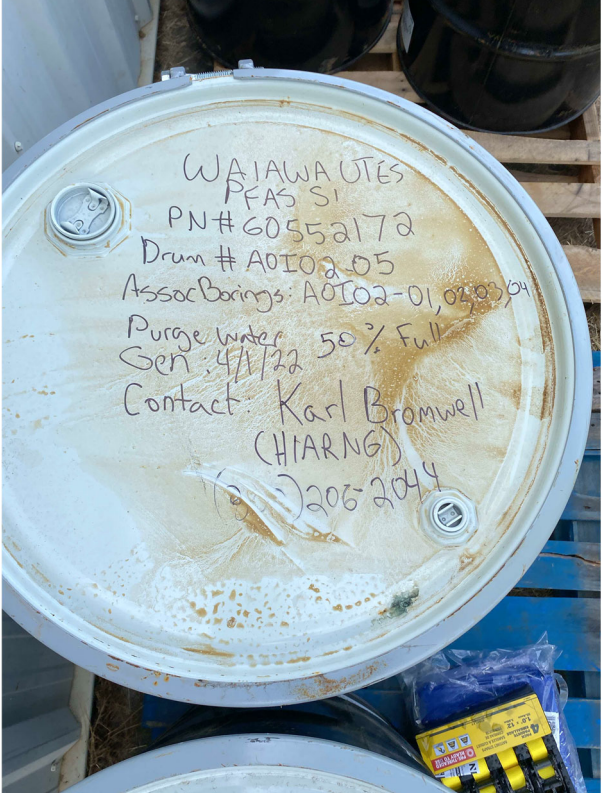
E



APPENDIX C – Photographic Log

Site Inspection	Waiawa Gulch Training Site and Unit Training and Equipment Site	O'ahu, Hawaii
-----------------	--------------------------------------------------------------------	---------------

Photograph No. 23	
Date: 4/6/22	
Time: N/A	
Description:	
<p>Representative IDW drum including: labeling on both side and top of drum, and completed non-hazardous waste sticker.</p>	
Orientation:	
E	

Photograph No. 24	
Date: 4/6/22	
Time: N/A	
Description:	
<p>Information provided on IDW drum cover.</p>	
Orientation:	
N/A	

APPENDIX C – Photographic Log		
Site Inspection	Waiawa Gulch Training Site and Unit Training and Equipment Site	O'ahu, Hawaii

Photograph No. 25	
Date: 4/6/22 Time: N/A	
Description: Completed non-hazardous waste sticker included on IDW drum.	
Orientation: N/A	

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Appendix D TPP Meeting Minutes

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Meeting Minutes

Waiawa Gulch Training Site and Unit Training and Equipment Site (UTES) – Site Inspection (SI)
Technical Project Planning (TPP) – Meeting 3

Site Inspection for Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), Perfluorohexanesulfonic acid (PFHxS), Perfluorononanoic acid (PFNA), Hexafluoropropylene oxide dimer acid (HFPO-DA), and Perfluorobutanesulfonic acid (PFBS) at ARNG Installations, Nationwide

Contract No. W912DR-12-D-0014, DO W912DR17F0192

Monday, 17 April 2023

1500-1655 EST

Participants			
Name	Affiliation*	Phone	E-Mail
Jennifer Solomon	ARNG G-9	703-607-7589	jennifer.l.solomon20.civ@army.mil
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*Notes: AECOM - AECOM Technical Services, Inc.; ARNG G-9 – Army National Guard G-9; BWS – Honolulu Board of Water; CWRM – Hawaii Commission on Water Resource Management; HDOH – Hawaii Department of Health; HIARNG – Hawaii Army National Guard; USACE – United States Army Corps of Engineers

Joe Witte (AECOM) welcomed participants and reviewed the purpose of the meeting, outlined the agenda, and led a roundtable of introductions for everyone on the virtual Technical Project Planning (TPP) 3 meeting. The meeting purpose was to discuss the Army National Guard (ARNG) Per- and Polyfluoroalkyl Substance (PFAS) Preliminary Assessment (PA)/Site Inspection (SI) program and the results of the SI for PFAS at the Waiawa Gulch Training Site and Unit Training and Equipment Site (UTES) in Oahu, Hawaii.

Briefing slides are included as **Attachment A**. Key points discussed during the presentation are provided below. Additionally, a safety moment that discussed ways to mitigate road glare was shared with the participants.

Programmatic Discussion (Slides 5-7):

- The meeting goals for the TPP 3 were presented.
 - o TPP 3 goals included presenting the SI results, resolving concerns to gain concurrence on the SI Report, and discussing future actions at the Site.
- The program follows the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) progress. The CERCLA process was reviewed, and a CERCLA status overview of the site was provided:

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- The Final PA Report for the Waiawa Training Site and UTES was issued in September 2020.
- The SI fieldwork was completed in April 2022.
- The Draft Final SI Report was transmitted to the Hawaii Department of Health (HDOH) and Honolulu Board of Water (BWS) in February 2023.

PA Summary of Findings (Slides 8-11):

- A brief overview of the PA findings was presented. During the PA, five potential source areas were identified and grouped into two Areas of Interest (AOI). The identified release areas included:
 - Firetruck Pump Test Area
 - Vehicle Maintenance Area
 - Firetruck Parking Area
 - Storage Buildings
 - Metal Storage Containers
- AOI 1 – Fire Truck Pump Test Area:
 - The facility firetruck can store and spray aqueous film forming foam (AFFF) and has been used monthly for pump testing with water in the northern portion of the facility. Only water is known to have been used during pump testing since 2008, but this area was included as an AOI based on the possibility of AFFF use prior to 2008, or the possibility for residual AFFF to be incidentally released during training with water.
 - Additionally, the facility firetruck was acquired by the Waiawa Training Site and UTES in 2006 with 25 gallons of AFFF concentrate onboard. At an unknown time and place, the AFFF was discharged.
 - Mr. Sven Lindstrom (HDOH) asked what volume of foam the 25 gallons of AFFF concentrate created. Ms. Leslie Chau (HIARNG) clarified that the facility has historically stored 3% Ansulite and 6% 3M AFFF types; however, the type of AFFF equipped by the firetruck is unknown. Therefore, the total volume of foam created is unknown.
- AOI 2 – Vehicle Maintenance Area, Firetruck Parking Area, and Storage Buildings:
 - The AOI 2 area encompasses four separate potential release areas based on AFFF storage and releases. The metal portable storage buildings once contained a 55-gallon drum and a 5-gallon pail of AFFF concentrate, which were later moved to the hazardous waste storage area. The AFFF has since been transported off facility.
 - The firetruck also contained AFFF and was parked in an area of the southern portion of the facility, which is considered a potential release area as a result.
 - An unknown volume of AFFF was released in the 2000s at the vehicle maintenance area. The type of AFFF released is unknown, but it is possible that this is the single known training event using AFFF from the facility firetruck.
 - Additionally, there is uncertainty regarding the historical presence of Tri-Max™ fire extinguishers at AOI 2. During the PA, it was reported that Tri-Max™ units were emptied in a controlled manner for off-facility disposal at the vehicle maintenance facility; however, there are differing accounts of whether the Tri-Max™ were ever present onsite. As a result, the vehicle maintenance area was conservatively included in AOI 2.

Conceptual Site Model (Slides 12-13):

- A brief summary of the facility conceptual site model (CSM), including geology, hydrogeology, and hydrology of the was provided.
 - The Waiawa Training Site and UTES lies predominately on soil consisting of fill materials originating from dredging or hauled in from nearby areas, and alluvium. The soil is composed of mostly silty clay and sandy clay. At greater depths in SI borings, weathered basalt and basalt rock flour were observed interbedded with the unconsolidated alluvial clayey and silty soils.
 - Soil borings drilled during the SI ranged from approximately 24 to 56 feet below ground surface (bgs).

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- The overall direction of groundwater flow at the facility in the unconsolidated surficial aquifer is southwest based on the respective groundwater elevations at AOI 1 and AOI 2. The SI did not investigate the deeper Waiawa basal aquifer.
- The facility is located within the Pearl Harbor Watershed, and the Waiawa subwatershed, which consists of Waiawa Stream and its tributaries. The Waiawa stream runs parallel to the facility and receives stormwater runoff from a series of drains and a drainage pit near the southwest corner of the facility property.
- The Waiawa stream ultimately drains to the Middle Loch, approximately 1.25 miles away, which empties into the Pacific Ocean.
- Numerous wells of various types are present surrounding the facility, including domestic and public drinking water wells. Based on available data, the majority of these wells are presumed to be screened in the Waiawa basal aquifer, not the unconsolidated surficial aquifer investigated during this SI.
- Drinking water provided to the facility is sourced from BWS wells. Mr. Barry Usagawa (BWS) clarified that the Waiawa Training Site and UTES is served by the BWS Pearl City Shaft and Pearl City Wells I and II, located along Waimano Home Road.
 - Mr. Ernie Lau (BWS) stated that BWS is currently sampling public supply wells in the area in compliance with the fifth Unregulated Contaminants Monitoring Rule (UCMR 5) and is willing to coordinate with ARNG to allow sampling of their wells. Mr. Walter R. Halla (ARNG G-9) noted that the ARNG G-9 is currently coordinating to gain access to properties with domestic wells downgradient of the Waiawa Training Site and UTES for sampling purposes and will work with BWS to include their wells as appropriate.

SI Data Quality Objectives and Screening Levels (Slides 14-15):

- The primary data quality objectives (DQOs) established for the SI included confirming the presence or absence of a release at the potential PFAS release areas, as well as gathering data to refine the CSM.
 - Enhanced DQOs for the SI included determining the presence/absence of PFAS at the facility boundary, checking for alternate sources, and measuring PFAS at/near receptors, if warranted.
- The Department of Defense (DoD) has adopted a policy to retain facilities in the CERCLA process based on risk-based screening levels (SLs) for soil and groundwater. Programmatically, the SLs used were established in a memorandum from the Office of the Secretary of Defense (OSD), dated 6 July 2022, and apply to five compounds: PFOA, PFOS, PFBS, PFHxS, and PFNA.
 - If the maximum concentration for sampled media were to exceed the SLs established in the OSD memorandum, the AOI would proceed to the next phase under CERCLA, which is the Remedial Investigation (RI).
 - The memo also established a SL for HFPO-DA, also called GenX, but only after SI planning and execution was complete. Therefore, HFPO-DA was not analyzed for at the SI stage, but will be during future phases, such as the RI.
 - The potential for the AFFF potentially released at the facility was discussed. Claire Mitchell (AECOM) noted that GenX is generally not a component of military specifications AFFF, and therefore unlikely to be a constituent in the AFFF potentially released at the facility.

SI Summary of Approach (Slides 16-17):

- An overview of the approach to SI sample collection was presented.
- Discrete bulk soil samples were collected from each boring location at the surface (0 to 2 ft) and above the water table (approximately 16 to 45 ft bgs). Following boring advancement, permanent monitoring wells were installed for the collected of groundwater samples. Monitoring wells were installed ranging from approximately 24 to 55 feet bgs.
 - At three locations, only surface soil samples were collected.
 - The bulk soil samples collected were sent to a laboratory for subsampling and analysis via incremental sampling methodology.

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- In total, 15 discrete bulk soil samples were collected from 9 locations (soil boring or hand auger), and 6 groundwater samples were collected from 6 permanent monitoring wells.
 - o A figure demonstrating the locations of all SI samples collected was presented.

SI Summary of Findings (Slides 18-30):

- Groundwater elevations measured during the SI ranged from 31.96 to 52.21 feet local mean sea level. Groundwater elevations at AOI 1 (44.32 to 52.21 feet local mean sea level) were higher than groundwater elevations at AOI 2 (31.96 to 34.98 feet local mean sea level), which indicates a general groundwater flow direction to the southwest across the facility.
 - o Groundwater elevation data from well AOI01-01 was not included for contouring purposes because it indicates a northern flow direction, which conflicts with topography and the known general groundwater flow direction for the area. Well AOI01-01 may have been installed in a separate clay layer than AOI01-02 or may have been set below the groundwater table. As a result, the data is considered inconclusive. Additional data collected during future RI sampling efforts will be used to evaluate groundwater flow direction at AOI 1
 - o Groundwater elevation data at AOI 2 indicates a convergence of groundwater near well AOI02-02, which may be the result of disconnected clay lenses, the influence of stormwater network channels, or the slight depression in topography in that area. Additional sampling during the RI is necessary to determine which direction groundwater flows beyond the southern facility boundary.
 - o Ms. Nancy Matsumoto (BWS) noted that the expected elevation for groundwater in the Waiawa basal aquifer at the facility is approximately 17 to 20 feet local mean sea level, indicating that wells were installed in the alluvial aquifer during the SI.
- In soil samples, PFOA, PFOS, PFBS, PFHxS, and PFNA were detected at concentrations below their respective SLs. Figures demonstrating the soil sample concentrations were presented.
- In groundwater, PFOA, PFOS, and PFHxS were detected above their respective SLs at both AOIs. The maximum concentrations of PFOA, PFOS, and PFHxS were 57.0 ng/L, 271 ng/L, 1,110 J ng/L, respectively, and were all detected in well AOI02-02. PFBS and PFNA were detected below their respective SLs at both AOIs. The lowest detected concentrations tended to be observed in well AOI01-01, which was identified as an upgradient background sample location. Figures demonstrating the groundwater sample concentrations were presented.
 - o The group discussed the inclusion of deeper groundwater samples and installation of cluster wells during the future RI. Mr. Usagawa noted that the inclusion of deeper wells during a future RI merits additional considerations to prevent creating a surface to aquifer pathway for infiltration. Mr. Ryan Imata (CWRM) requested the CWRM be included in future sample planning.
 - o Although this TPP 3 focused on the SI conclusions, future TPP meetings during the RI planning process will allow for continued collaboration between all stakeholders regarding RI sampling strategy.
- Based on the results of the SI samples, a desktop search for offsite domestic wells was conducted. A request for well information was submitted to the DLNR's Commission on Water Resource Management. Using data provided, numerous domestic wells were identified in the downgradient direction. Currently, ARNG is in the process of coordinating to gain access to those properties to sample domestic wells. As of now, no samples have been collected.
 - o Ms. Joann Thomas (USACE) described the process for obtaining rights-of-entry (ROE) to complete residential drinking water sampling and that the process can take several months. Mr. Halla noted that a few fully executed ROEs had been received shortly before the TPP 3 and projected the sampling schedule for those properties to begin in the week following the TPP 3.
- The CSM, which has been refined based on the SI sample results, was presented for AOI 1 and AOI 2. The pathways and receptors for both AOIs are the same and were presented on a figure demonstrating the combined results. Through human activities, precipitation, and runoff, or leaching and infiltration, the exposure pathways may be potentially complete for the following:
 - o The inhalation of dust by current and future site workers, future construction workers, and current and future trespassers.

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- Ingestion of surface soil by the same receptors listed above.
- The ingestion of surface water or sediment by current and future recreational users of Waiawa Stream and downgradient connected waterways.
- The ingestion of subsurface soil by future construction workers.
- The ingestion of groundwater by current and future off-facility residents based on the presence of downgradient drinking water wells.
- Based on the results of the SI Report, both AOI 1 and AOI 2 are recommended for further evaluation during a future RI.
 - The domestic well sampling discussed during this TPP 3 will occur prior to the RI.

Next Steps (Slide 30):

- The next steps for the Waiawa Training Site and UTES were discussed.
 - Comments received from HDOH on the Draft Final SI Report have been resolved. Responses to follow-up comments from BWS have been sent and ARNG awaits concurrence on those responses.
 - The Final SI Report is anticipated to be submitted in May 2023
- Based on the results of the SI, the facility will proceed to RI as the next step in CERCLA process.

Relative Risk Site Evaluation (RRSE) (Slides 31-34):

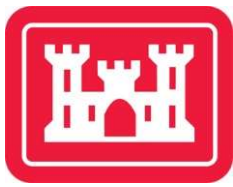
- Ms. Amanda Sullivan (ARNG G-9) presented the DoD's approach for using the Relative Risk Site Evaluation (RRSE) methodology to sequence environmental restoration work. The goal is to evaluate the magnitude of detections and associated risks at each facility, so that RI funding can be prioritized.
 - The RRSE process is a "worst first" process used to determine the order in which forthcoming RIs will be performed.
- The ARNG G-9 is currently ranking over 100 facilities with an estimate of over 140 RIs to be performed. Approximately three quarters of the RIs rank "High" under the RRSE process.
- The RRSE method is not meant to be a risk assessment, but it uses a screening tool with SI data to determine relative risk.
- The RRSE uses sources, pathways, and receptors as its fundamental information inputs, and is based on groundwater and surface soil data collected during the SIs.
- Groundwater and surface soil data were used in an example demonstration of the RRSE calculation for AOI 2.
- Three evaluation factors were presented:
 - The Contaminant Hazard Factor (CHF) was scored based on the ratio of maximum concentration to SL.
 - The Migration Pathway Factor (MPF) was determined based on the likelihood of contamination migrating to a point of exposure.
 - The Receptor Factor (RF) was determined based on the potential receptor exposure within 4-miles.
- Overall AOI ratings scored high for both AOIs at the facility, and the scores were primarily driven by groundwater and the potential receptor exposure for off-facility drinking water.

Open Discussion (Slide 35):

- Mr. Marc Chun (BWS) asked if drinking water sampling will be performed as a part of the future RI. Mr. Halla clarified that drinking water sampling will take place prior to the RI so that time critical actions (such as providing bottled drinking water) can be taken immediately.
- Mr. Usagawa asked if the military has plans to ban PFAS-containing materials in general or on the island. Ms. Sullivan noted that the DoD is in the process of phasing out PFAS-containing materials for firefighting and replacing them with Fluorine Free Foams, also known as F3
- Ms. Sullivan noted that information pertaining to permitting with the CWRM (including soil boring logs, construction forms, photos, and CWRM Well Completion Forms) for the Waiawa Training Site and UTES SI wells will be sent to Mr. Imata as previously discussed. Permitting information for the HIARNG Kalaeloa Army Aviation Support Facility will be transmitted separately.

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Attachment A – TPP 3 Briefing Slides

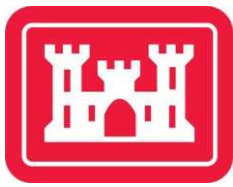


**Waiawa Gulch Training Site and Unit Training and
Equipment Site (UTES)
Oahu, HI
Site Inspection
Hawai'i Army National Guard**

Technical Project Planning (TPP) Meeting 3

**Site Inspection for Perfluorooctanoic acid (PFOA),
Perfluorooctanesulfonic acid (PFOS), Perfluorohexanesulfonic acid
(PFHxS), Perfluorononanoic acid (PFNA), Hexafluoropropylene
oxide dimer acid (HFPO-DA), and Perfluorobutanesulfonic acid
(PFBS) at ARNG Installations, Nationwide**

17 April 2023



Agenda

- Introductions
- Safety Moment
- TPP Meeting Goals
- Army National Guard (ARNG) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Process Overview
- Preliminary Assessment (PA) Overview
- SI Results
- Next Steps
- Relative Risk Site Evaluation (RRSE) Discussion
- Questions and Open Discussion



Introductions

ARNG G-9

- Jennifer Solomon, PFAS Program Manager
- Bonnie Packer, Nationwide Technical Lead
- Amanda Sullivan, SI Project Manager

U.S. Army Corp of Engineers (USACE)

- Emily Cline, Nationwide Program Manager
- Andrea Beausang, Project Manager, Alaska District

Hawai'i Army National Guard (HIARNG)

- Leslie Chau, Installation Restoration Program Manager
- Karl Motoyama, Environmental Protection Specialist

Honolulu Board of Water Supply (HBWS)

- Ernest Lau, Chief Engineer

Hawai'i Department of Health (HDOH)

- Sven Lindstrom, Site Discovery, Assessment, and Remediation, Hazard Evaluation and Emergency Response Office

Hawai'i Department of Land and Natural Resources, Commission on Water Resource Management

- Kaleo Manuel, Deputy Director
- Ryan Imata, Hydrologic Program Manager, Ground Water Regulation Branch

AECOM Technical Services, Inc.

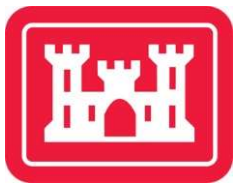
- Claire Mitchell, Project Manager
- Greg Burgess, SI Senior Lead
- Joe Witte, SI Task Manager



Safety Moment Road Glare

- **Cause:** low sun angle, dirty windshield
- **Helpful Tips:**
 - Wear sunglasses
 - Utilize the sun visor
 - Leave more following room
 - Keep your windshield clean, inside and out
 - Avoid storing items on the dashboard
 - If you can't see, don't drive!





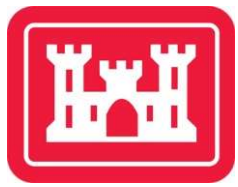
Meeting Goals

TPP 1/2 Review

- Provide and overview of ARNG PA/SI Program
- Define objectives for SI data collection
- Encourage stakeholder involvement
- Review project schedule
- Capture action items
- Discuss proposed SI approach

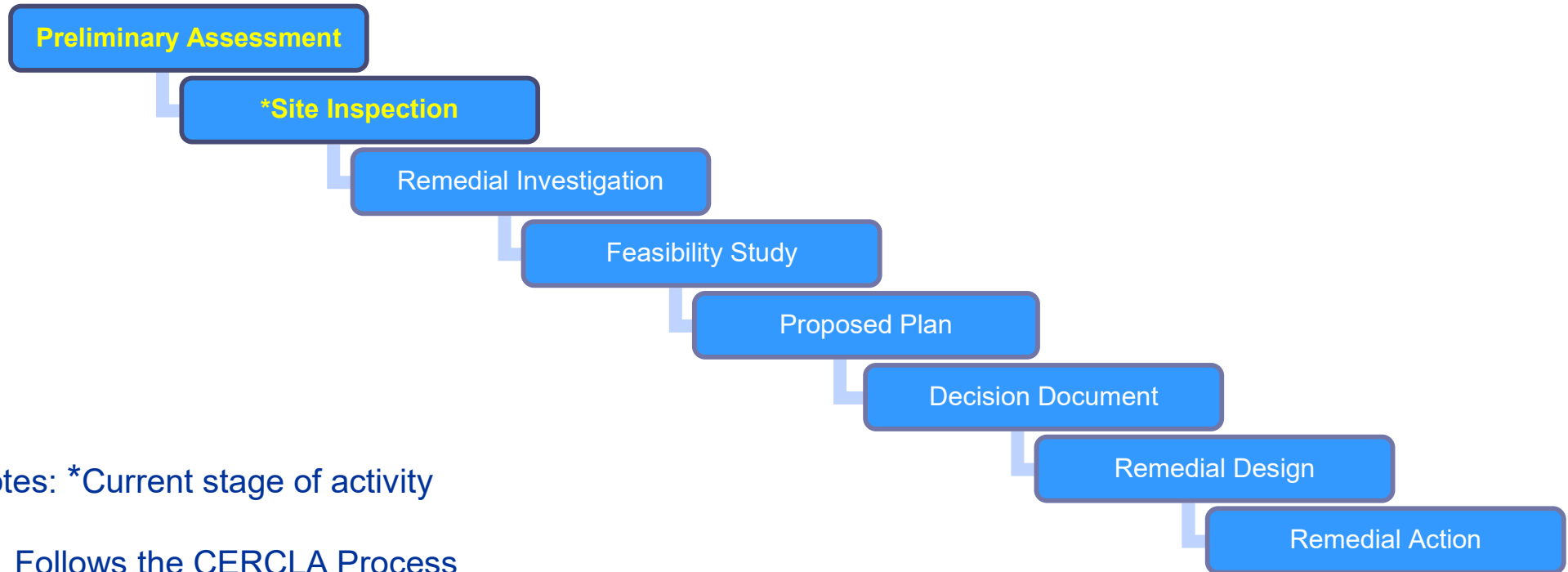
TPP 3

- ARNG CERCLA program overview
- Revisit the PA findings
- Present SI Results and revised conceptual site model (CSM)
- Resolve comments/concerns and gain concurrence on presentation of findings in Draft Final SI Report
- Discuss future actions at the site



ARNG PA/SI Overview

Work Phases



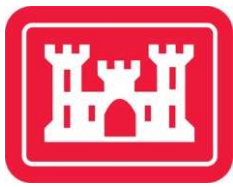
Notes: *Current stage of activity

- Follows the CERCLA Process
- An interim removal action can be conducted or a No Further Action determination can be made at any phase



ARNG CERCLA Status Overview

- PA for Waiawa Gulch Training Site and UTES was completed by ARNG in September 2020
- SI fieldwork completed in March-April 2022
- Draft Final SI Report provided to HDOH and HBWS in February 2023; results presented today



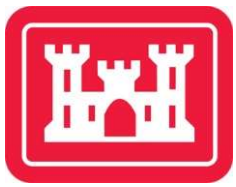
PA – Summary of Findings

- Potential PFAS (per- and polyfluoroalkyl substances)
Source Areas:
 - Five identified during the PA and grouped into two areas of interest (AOIs)
- PFAS releases attributed to:
 - Firetruck pump testing that potentially used aqueous film forming foam (AFFF)
 - Firetruck and AFFF storage
 - Uncertainty regarding history of Tri-Max™ fire extinguisher presence onsite



PA – Summary of Findings

- AOI 1 – Firetruck Pump Test Area
 - The facility firetruck is capable of discharging AFFF, and pump testing occurred once per month in the northern portion of the facility
 - Only water is known to have been used during testing since 2008, but the area was conservatively included as a potential release area based on data gaps.



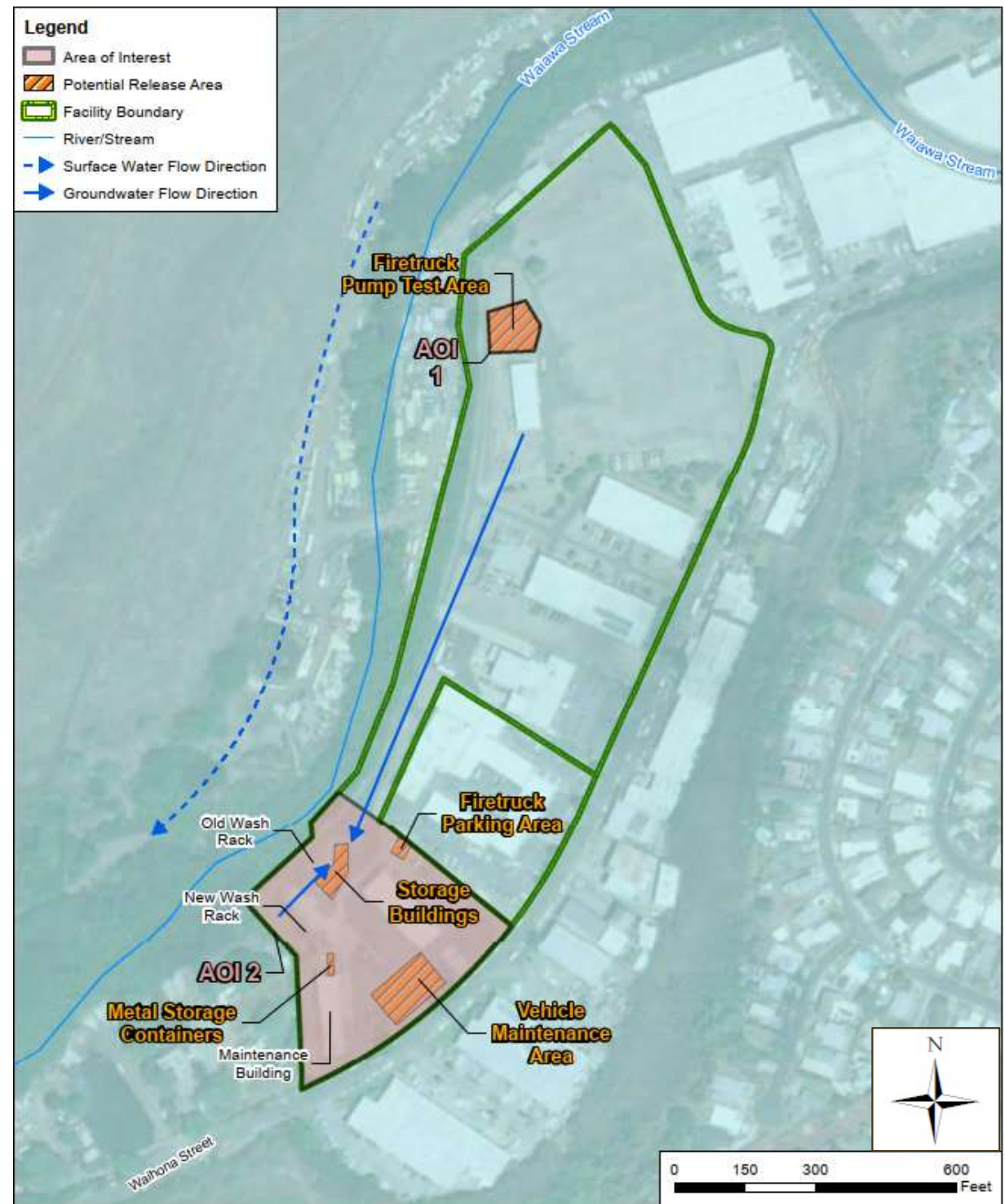
PA – Summary of Findings

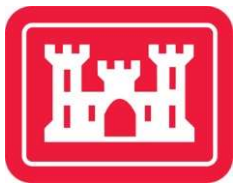
- AOI 2 – Vehicle Maintenance Area, Firetruck Parking Area, and Storage Buildings
 - Includes various AFFF storage areas (e.g. 55-gallon steel drum, 5-gallon pail, on the firetruck while parked):
 - Metal storage container area, hazardous materials storage building, firetruck parking area
 - Includes the vehicle maintenance area where:
 - A known AFFF release of unknown volume from the facility firetruck occurred in the early 2000s
 - There is uncertainty surrounding the historical presence of Tri-MaxTM units containing AFFF



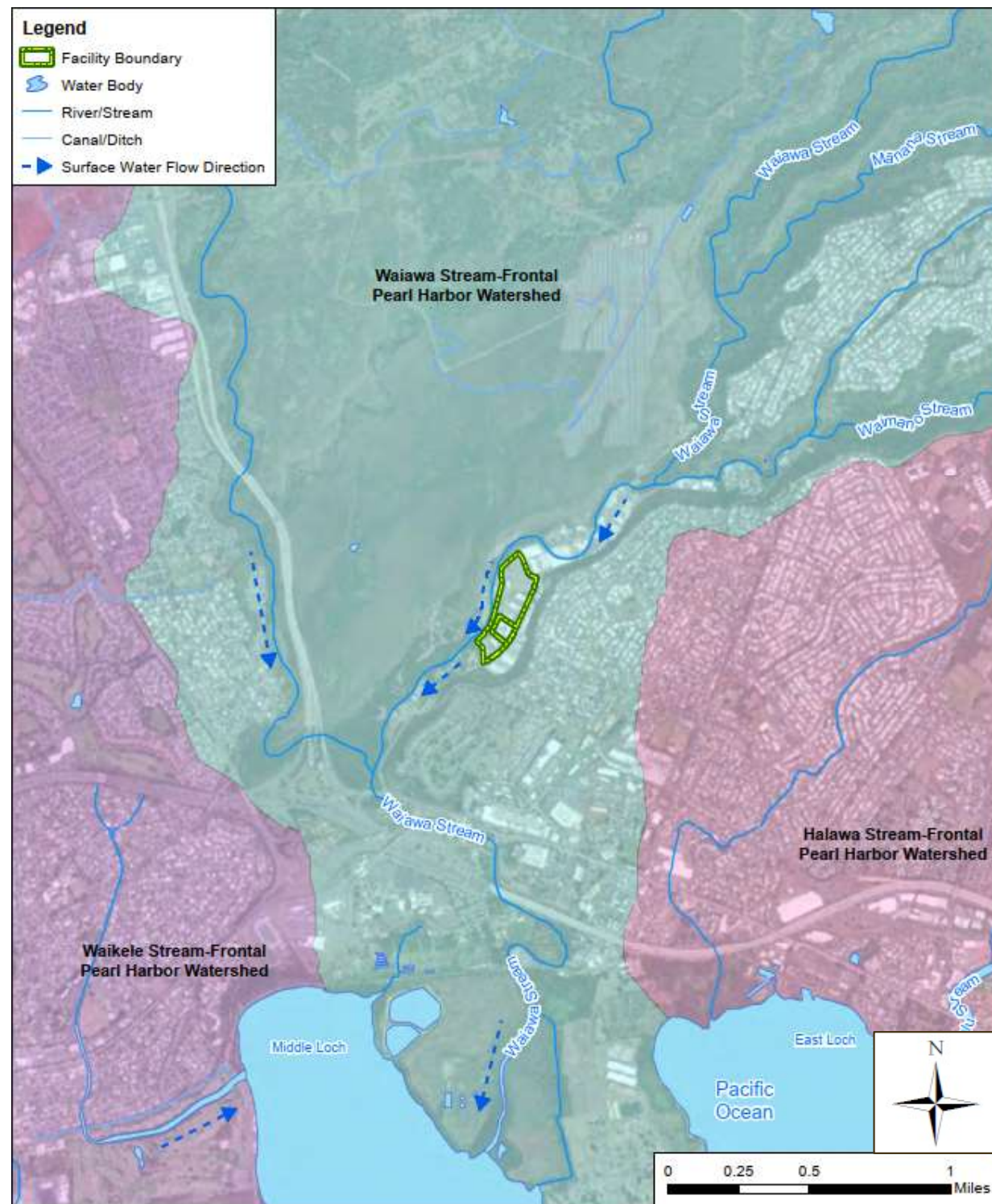
PA – Summary of Findings

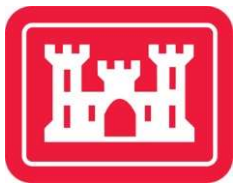
- Five potential PFAS release areas grouped into two AOIs





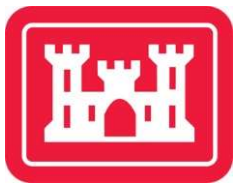
CSM – Surface Water Features





SI – Data Quality Objectives

- Primary SI Data Quality Objectives (DQOs)
 - Confirm the presence/absence of a release at a potential source area
 - Gather data for refinement of conceptual site model (CSM):
 - Source-Pathway-Receptor relationships
- Extended SI DQOs
 - Determine the presence/absence at facility boundary
 - Check for alternate sources
 - Measure PFAS at/near receptor, if warranted



SI – Screening Levels

- Results compared to Office of the Secretary of Defense (OSD) Screening Levels (SLs) for soil and groundwater
 - Memorandum from the OSD dated 6 July 2022
 - SLs for groundwater based on direct ingestion
 - SLs for soil based on incidental ingestion; 0-2 feet (ft) below ground surface (bgs) compared to Residential SL, 2-15 ft compared to Industrial SL, >15 ft not compared to either SL
- AOIs exceeding OSD SLs will proceed to the next phase under CERCLA (i.e., Remedial Investigation)

Analyte ^b	Residential (Soil) (µg/kg) ^a 0-2 feet bgs	Industrial/ Commercial Composite Worker (Soil) (µg/kg) ^a 2-15 feet bgs	Tap Water (Groundwater) (ng/L) ^a
PFOA	19	250	6
PFOS	13	160	4
PFBS	1,900	25,000	601
PFHxS	130	1,600	39
PFNA	19	250	6

Notes:

bgs = below ground surface; µg/kg = micrograms per kilogram; ng/L = nanograms per liter

- Assistant Secretary of Defense, 2022. Risk Based Screening Levels in Groundwater and Soil using United States Environmental Protection Agency's (USEPA's) Regional Screening Level Calculator. Hazard Quotient (HQ) = 0.1. 6 July 2022.
- Of the six PFAS compounds presented in the 6 July 2022 OSD memorandum, HFPO-DA (commonly referred to as GenX) was not included as an analyte at the time of this SI. Based on the CSM developed during the PA and revised based on SI findings, the presence of HFPO-DA is not anticipated at the facility because HFPO-DA is generally not a component of MIL-SPEC AFFF and based on its history including distribution limitations that restricted use of GenX, it is generally not a component of other products the military used. In addition, it is unlikely that GenX would be an individual chemical of concern in the absence of other PFAS.



SI – Summary of Approach

- Approach
 - Discrete bulk soil samples from each location: at source (0 to 2 ft) and above water table (approximately 16 to 45 ft bgs), where practicable
 - At three locations (AOI02-05, AOI02-06, and AOI02-07), only surface soil samples were collected
 - Bulk samples were subsampled and prepared by the laboratory using incremental sampling methodology (ISM)
 - Permanent monitoring wells for groundwater samples (ranging from 24 to 55 ft bgs total depth)
- Total Samples
 - 15 discrete bulk soil samples from 9 boring locations
 - 6 groundwater samples from 6 permanent monitoring wells



SI – Summary of Approach SI Investigation Locations





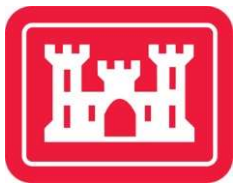
SI – Summary of Findings Groundwater Contours





SI – Summary of Findings

- Relevant PFAS compounds detected in soil and/or groundwater at source areas at both AOIs
- In soil:
 - PFOA, PFOS, PFBS, PFHxS, and PFNA detected at concentrations below their respective SLs.
- In groundwater:
 - PFOA detected above the SL (6 ng/L) at AOI 1 and AOI 2
 - Highest detection was 57.0 ng/L at AOI02-02
 - PFOS detected above the SL (4 ng/L) at AOI 1 and AOI 2
 - Highest detection was 271 ng/L at AOI02-02
 - PFHxS detected above the SL (39 ng/L) at AOI 1 and AOI 2
 - Highest detection was 1,110 ng/L at AOI02-02
 - PFBS and PFNA detected below their respective SLs at both AOIs



SI – Summary of Findings

PFOA in Soil





SI – Summary of Findings

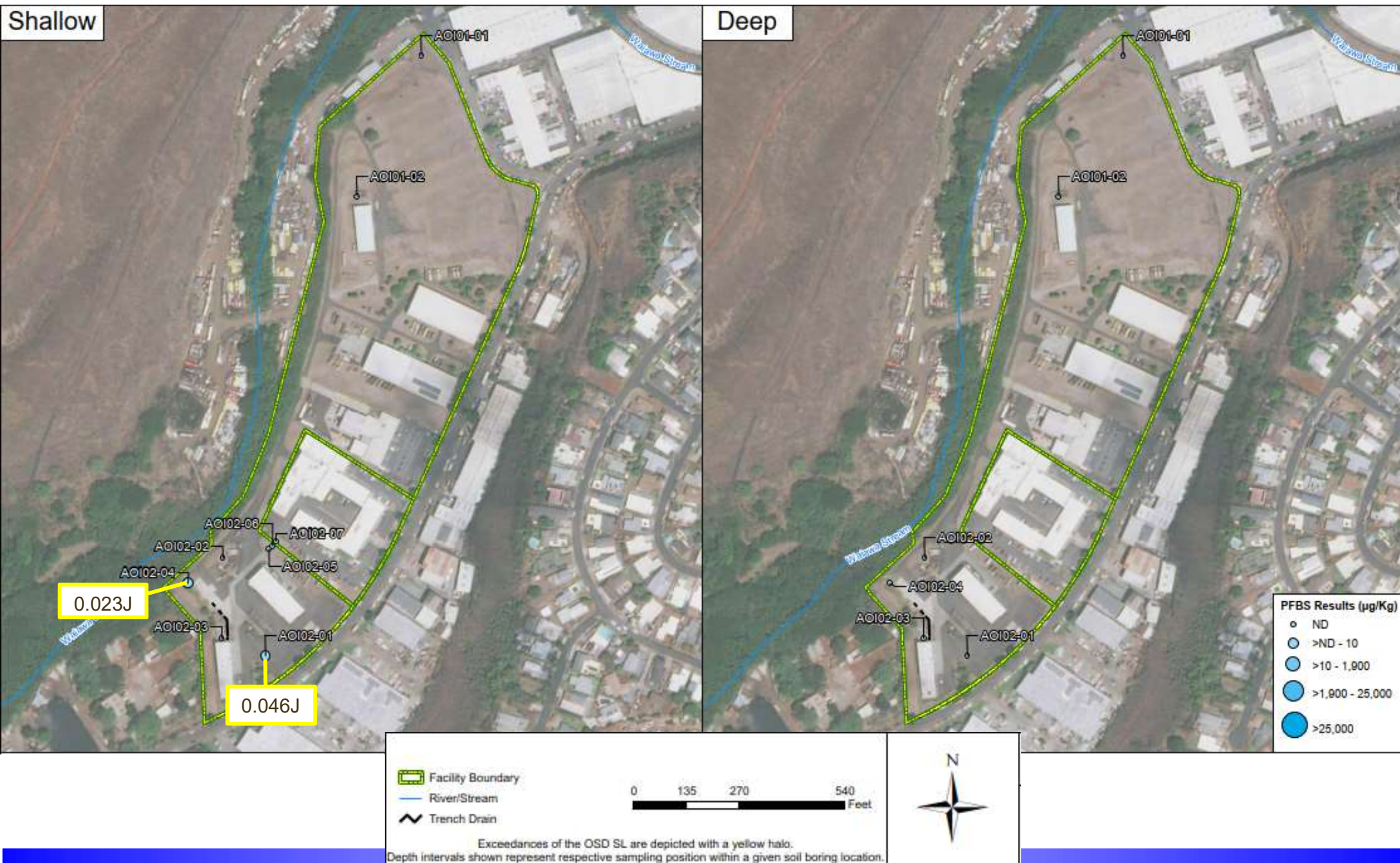
PFOS in Soil





SI – Summary of Findings

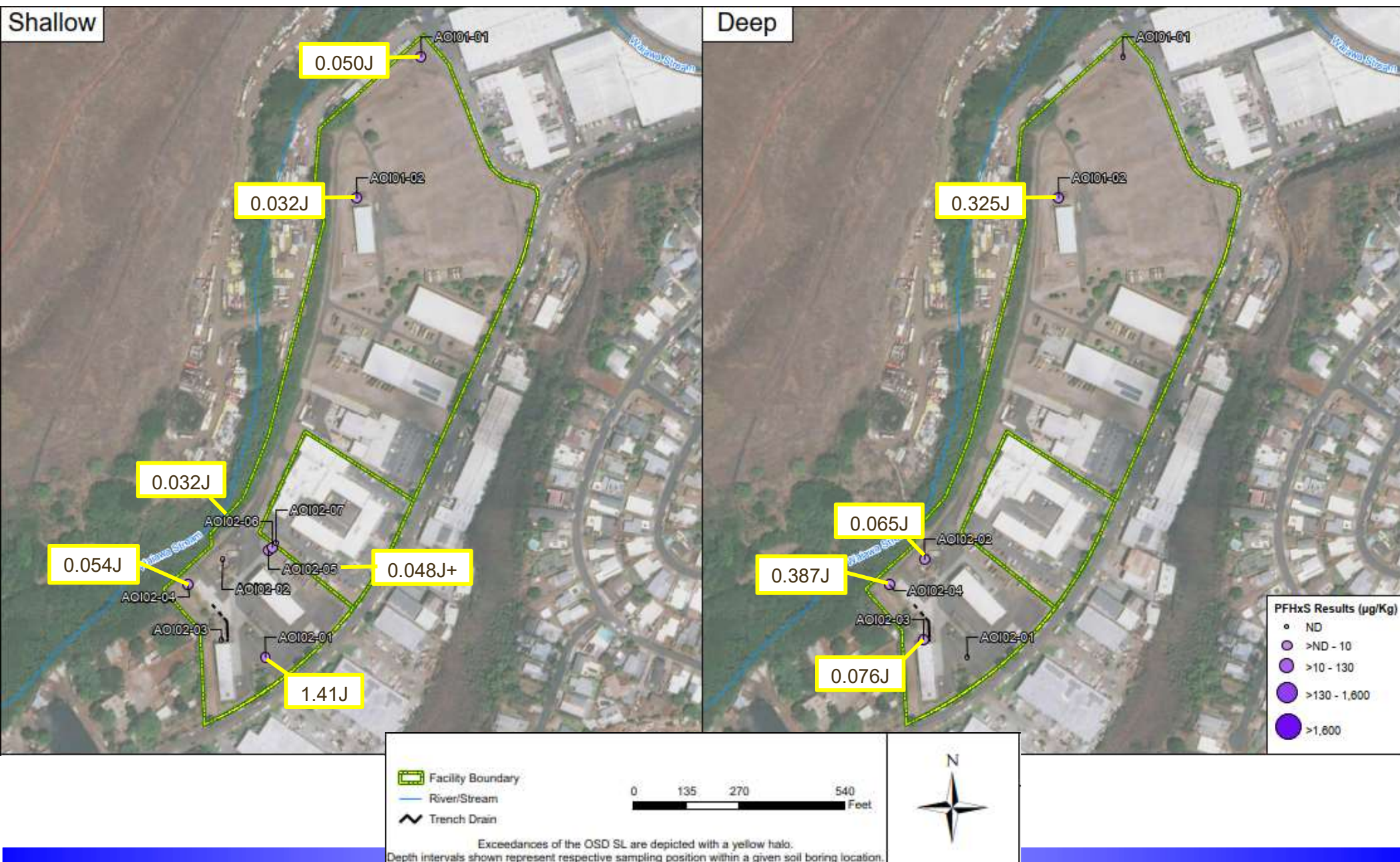
PFBS in Soil





SI – Summary of Findings

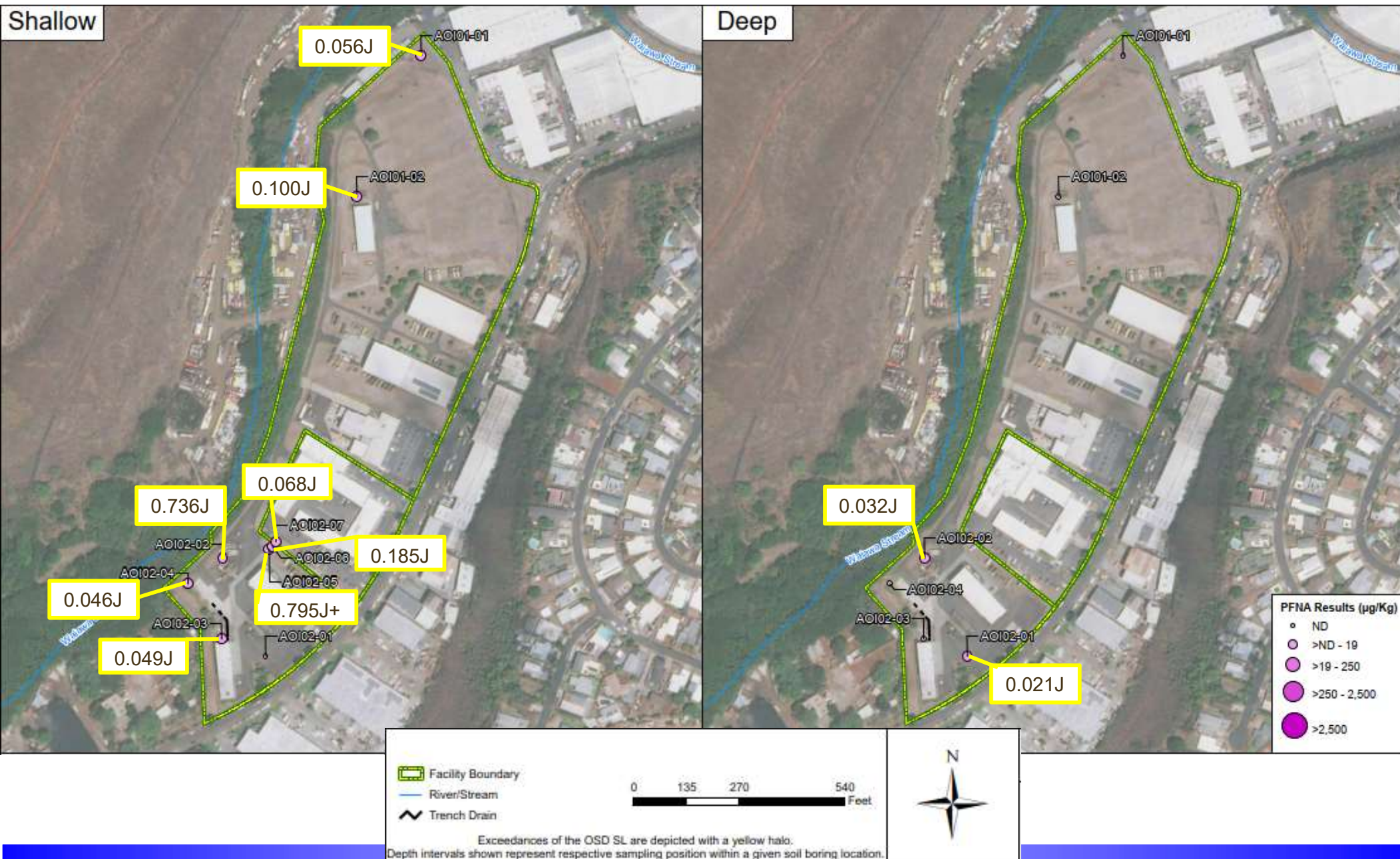
PFHxS in Soil





SI – Summary of Findings

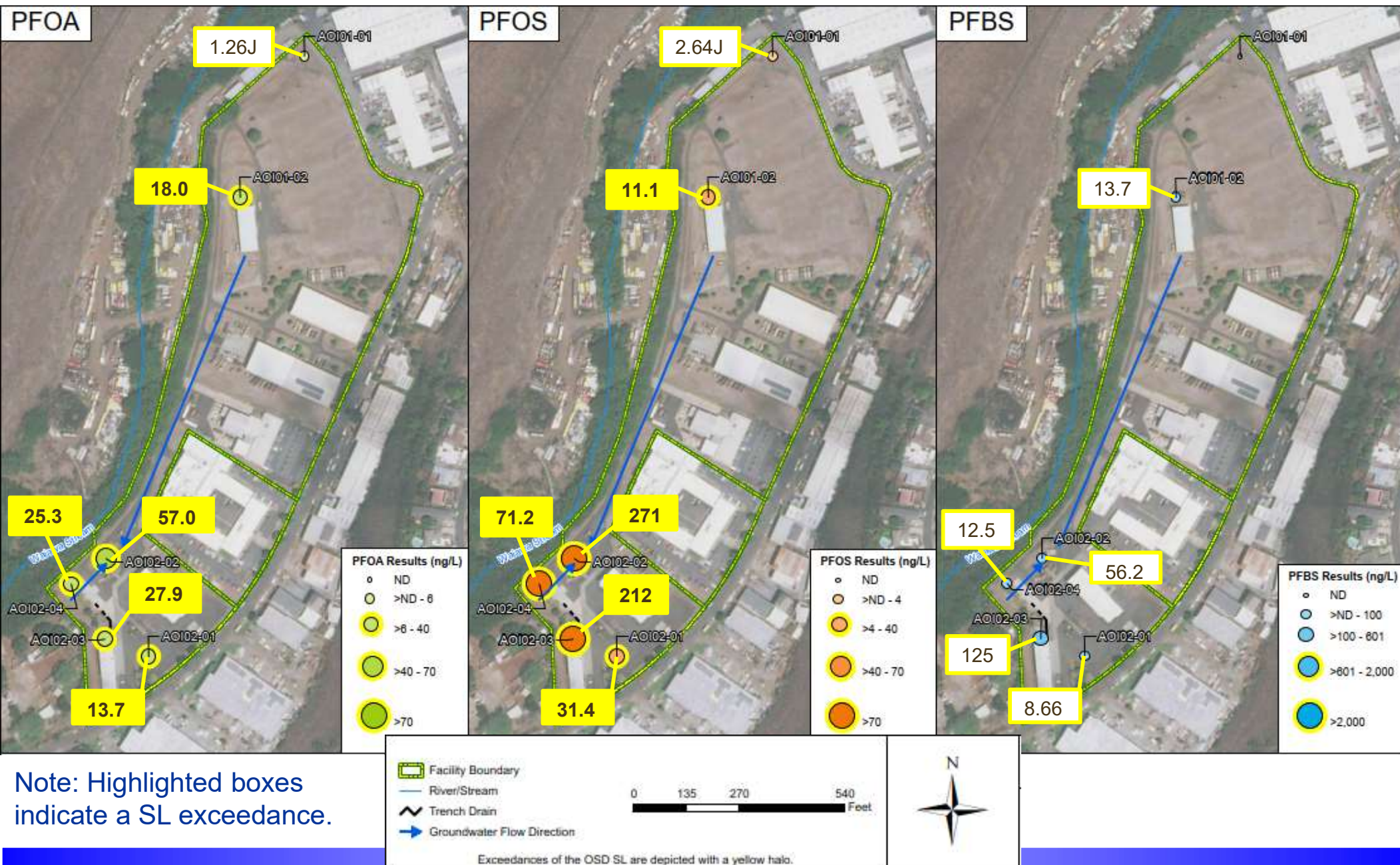
PFNA in Soil





SI – Summary of Findings

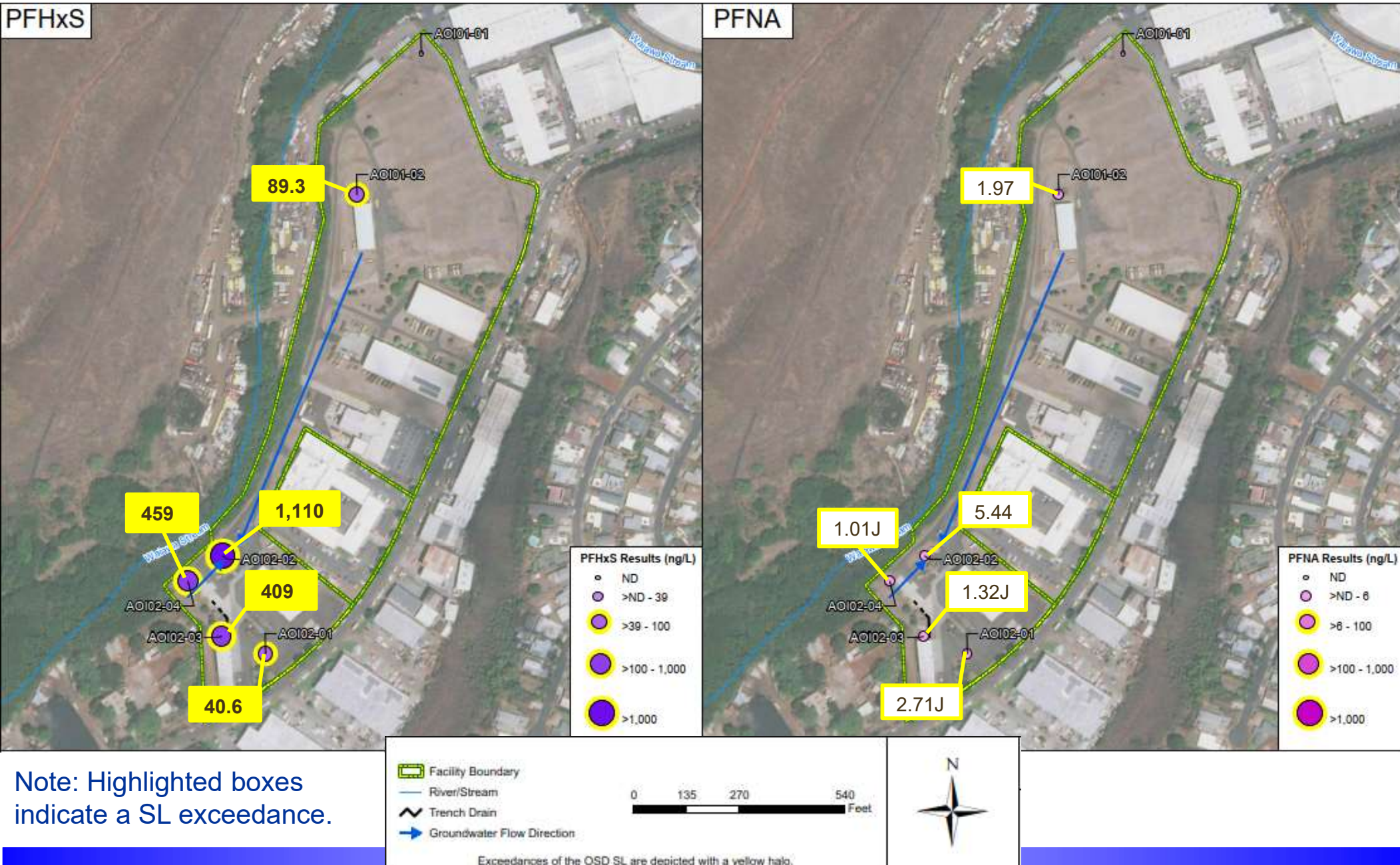
PFOA, PFOS, and PFBS in Groundwater





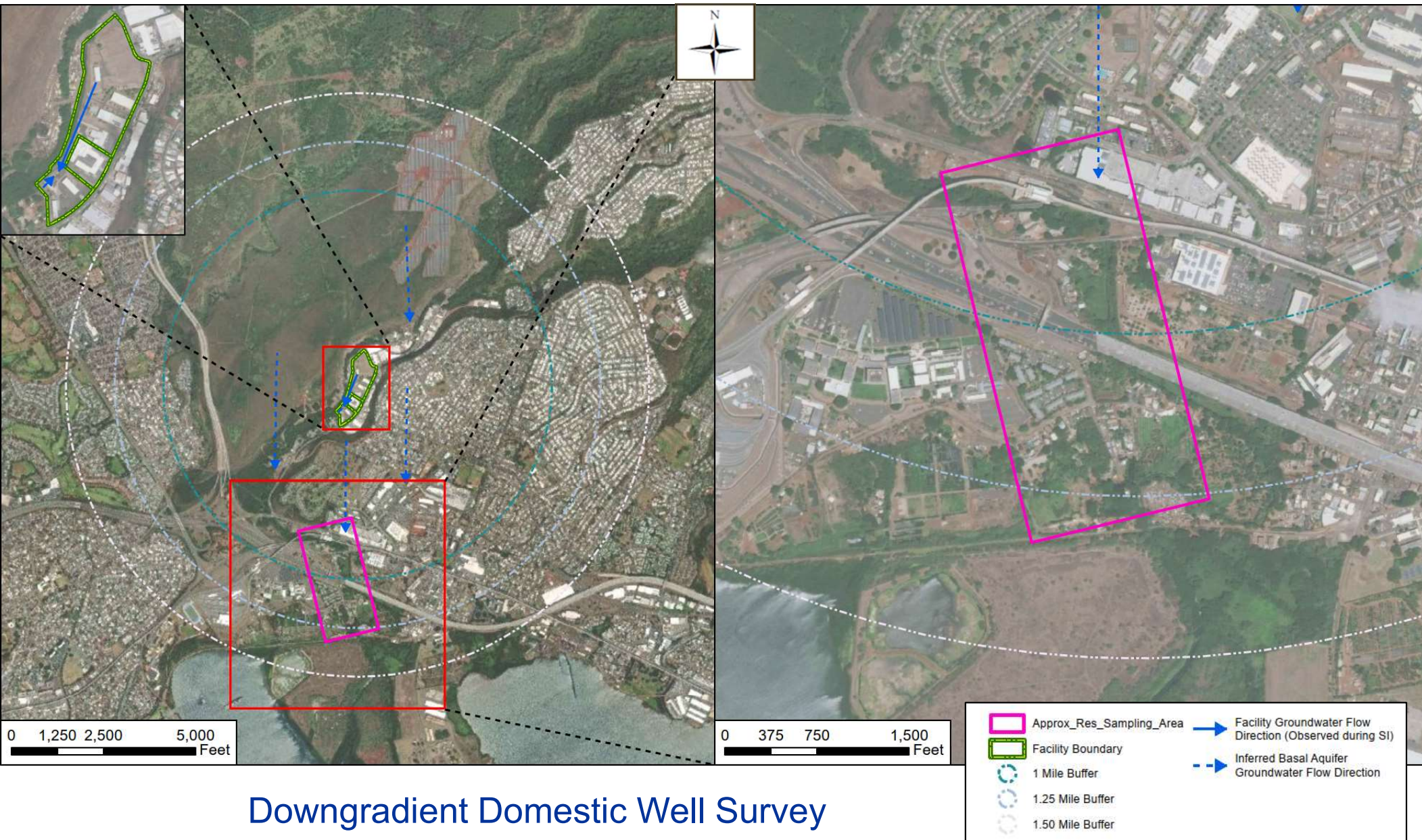
SI – Summary of Findings

PFHxS and PFNA in Groundwater





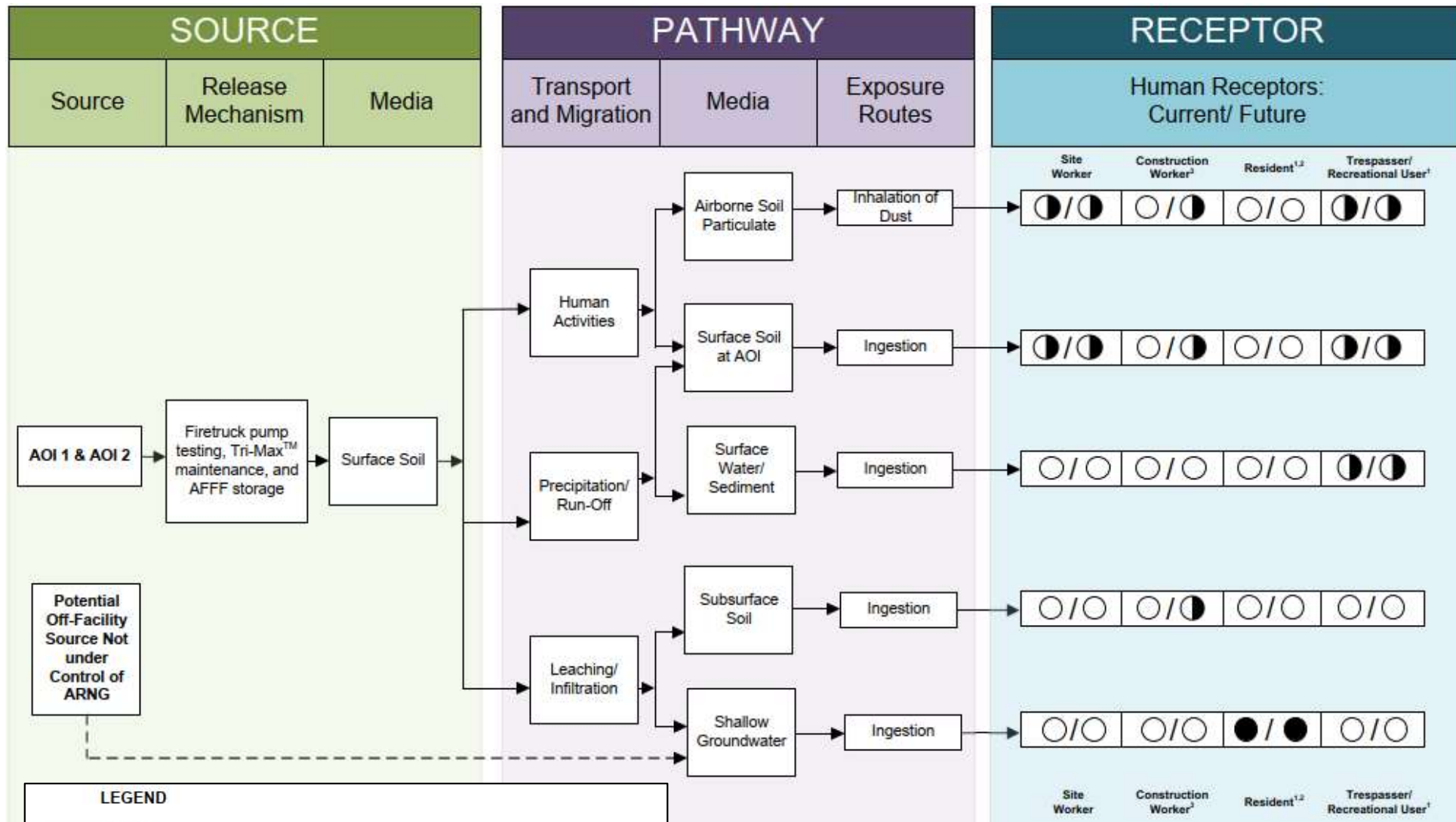
SI – Summary of Findings



Downgradient Domestic Well Survey



SI – Summary of Findings

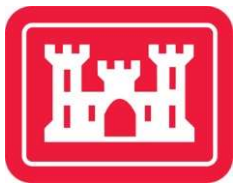


LEGEND

- Flow-Chart Stops
- Flow-Chart Continues
- - - → Partial / Possible Flow
- Incomplete Pathway
- ◐ Potentially Complete Pathway
- Potentially Complete Pathway with Exceedance of SL for PFOA, PFOS, PFBS, PFHxS, and/or PFNA

Notes:

- The resident and recreational users refer to off-site receptors.
- Inhalation of dust for off-site receptors is likely insignificant.
- No current active construction at the facility.

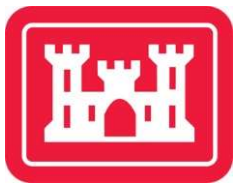


SI – Summary of Findings

AOI	Potential Release Area	Soil – Source Area	Groundwater – Source Area	Future Action
1	Firetruck Pump Test Area			Proceed to RI
2	Firetruck Parking Area, Vehicle Maintenance Area, and Storage Buildings			Proceed to RI

Legend:

- = detected; exceedance of the screening levels
- = detected; no exceedance of the screening levels
- = not detected



Next Steps

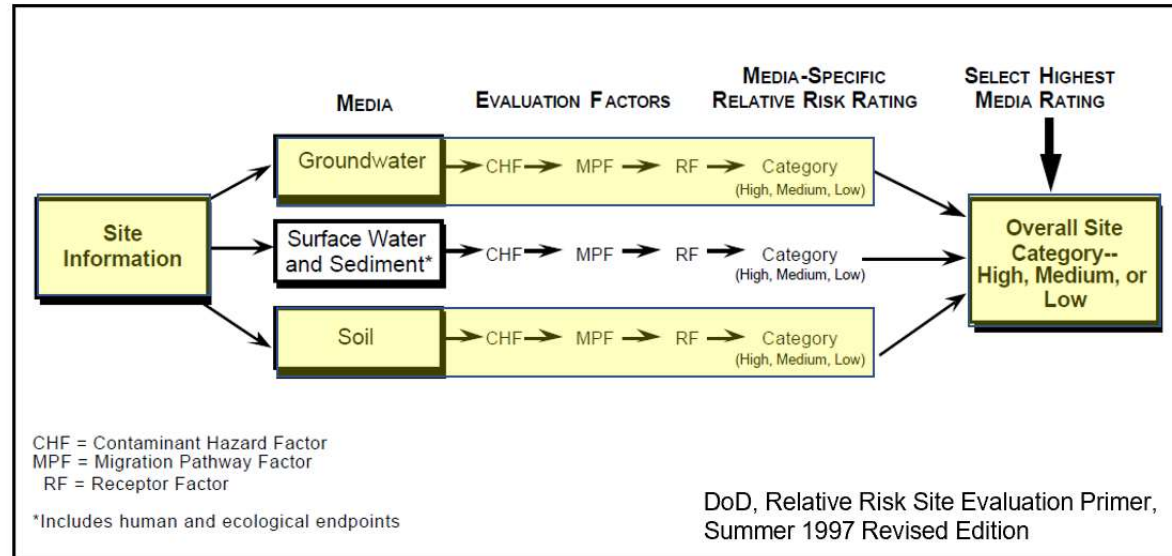
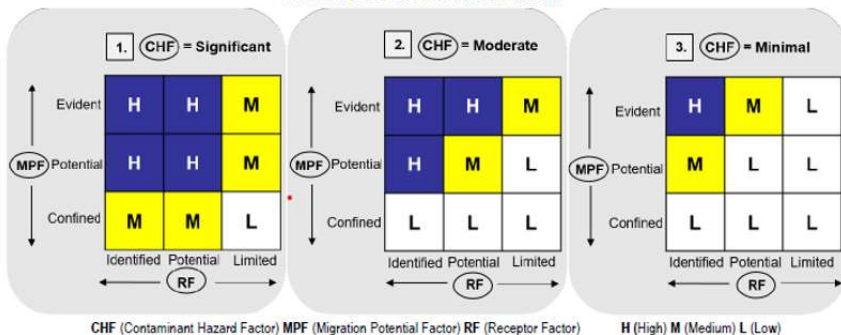
- Finalize SI Report
 - Address comments from HDOH and HBWS
 - Submit Final SI Report in April 2023
- Initiate next step in CERCLA process:
 - Remedial Investigation



Relative Risk Site Evaluation (RRSE)

- Used by the DoD as methodology to sequence environmental restoration work – Goal to address “worst first” – Used for RI funding order
- Based on information fundamental to risk assessment: sources, pathways, and receptors
- **NOT a risk assessment**
- Media: groundwater, surface soil
- SI data put into a screening tool to determine relative risk (ratio to SLs)
- Sum of ratios (highest groundwater/soil) compared to a specific comparison value
- Stakeholder feedback requested

Relative Risk Site Evaluation Matrix

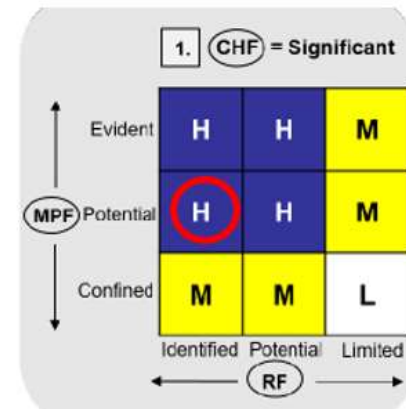




Groundwater – Highest Ranking (Example: AOI 2 - Vehicle Maintenance Area, Firetruck Parking, and Storage Buildings)

Contaminant	Maximum Conc. (µg/L)	Comparison Value (µg/L; DoD 2022 for PFOA, PFOS, PFBS, PFNA, PFHxS, & HFPO-DA)	Ratio Maximum Conc./ Comparison Value	Sum of All Ratios Check One Below
PFOS	0.271	0.004	67.75	Significant (>100) <input checked="" type="checkbox"/>
PFOA	0.057	0.006	9.50	Moderate (2–100) <input type="checkbox"/>
PFBS	0.125	0.6	0.21	Minimal (<2) <input type="checkbox"/>
PFNA	0.00544	0.006	0.91	
PFHxS	1.11	0.039	28.46	
HFPO-DA	NA	0.006	--	
Sum of all ratios ->			107	

← Contaminant Hazard Factor (CHF)

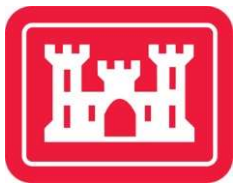


Migration Pathway Factor (MPF) →

<input type="checkbox"/>	Evident	<input type="checkbox"/>	Analytical data or direct observation indicates that contamination in the groundwater has moved to a point of exposure, such as a drinking water source.
<input checked="" type="checkbox"/>	Potential	<input checked="" type="checkbox"/>	Contamination in the groundwater has moved beyond the source, OR
		<input type="checkbox"/>	There is insufficient information available to make a determination of Evident or Confined.
<input type="checkbox"/>	Confined	<input type="checkbox"/>	Analytical data or direct observation indicates that the potential for contaminant migration from the source via groundwater is limited, possibly due to geological structures or physical controls; OR
		<input type="checkbox"/>	Is non-detect.

← Receptor Factor (RF)

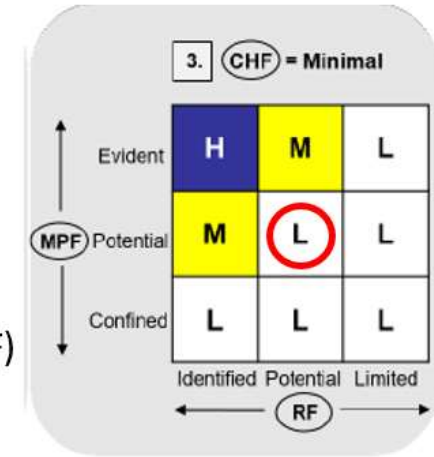
<input checked="" type="checkbox"/>	Identified	<input type="checkbox"/>	Impacted drinking water well with detected contaminants, OR
		<input checked="" type="checkbox"/>	Existing downgradient water supply well within 4 miles and groundwater is current source of drinking water (EPA Class I or IIa groundwater).
<input type="checkbox"/>	Potential	<input type="checkbox"/>	Existing downgradient drinking water well beyond 4 miles with no contaminant detection(s) OR
		<input type="checkbox"/>	No known drinking water wells downgradient and groundwater is currently or potentially usable for drinking water (i.e., EPA Class I or IIa groundwater) OR
		<input type="checkbox"/>	Is a source of water for other beneficial use (e.g., agricultural).
<input type="checkbox"/>	Limited	<input type="checkbox"/>	No known water supply wells downgradient OR
		<input type="checkbox"/>	Groundwater is not considered a potential drinking water source and is of limited beneficial use (EPA Class III).



Surface Soil – Highest Ranking (AOI 2 - Vehicle Maintenance Area, Firetruck Parking, and Storage Buildings)

Contaminant	Maximum Conc. (mg/kg)	Comparison Value (mg/kg; DoD 2022 for PFOA, PFOS, PFBS, PFNA, PFHxS, & HFPO-DA)	Ratio Maximum Conc./ Comparison Value	Sum of All Ratios Check One Below	
PFOS	0.0025	0.013	0.19	Significant (>100)	<input type="checkbox"/>
PFOA	0.000347	0.019	0.02	Moderate (2–100)	<input type="checkbox"/>
PFBS	0.000046	1.9	0.00	Minimal (<2)	<input checked="" type="checkbox"/>
PFNA	0.000795	0.019	0.04		
PFHxS	0.00141	0.13	0.01		
HFPO-DA	NA	0.023	–		
Sum of all ratios ->			0.26		

← Contaminant Hazard Factor (CHF)



Migration Pathway Factor (MPF) →

<input type="checkbox"/>	Evident	<i>Analytical data or observable evidence that contamination above the comparison value is present at a point of exposure.</i>
<input checked="" type="checkbox"/>	Potential	<i>Contamination is above the detection limit but below the comparison value and has either moved beyond the source or could move but is not moving appreciably, OR Information is not sufficient to make a determination of Evident or Confined.</i>
<input type="checkbox"/>	Confined	<i>Low possibility for contamination to be present at or migrate to a point of exposure due to barriers such as buildings, maintained berms, pavement, or caps; OR Is non-detect.</i>

<input type="checkbox"/>	Identified	<i>Receptors with unrestricted access to contaminated soil.</i>
<input checked="" type="checkbox"/>	Potential	<i>Receptors with controlled or restricted frequency of access to contaminated soil, such as commercial/industrial areas; OR Insufficient data exists to make a determination of Identified or Limited.</i>
<input type="checkbox"/>	Limited	<i>Receptors with limited access to contaminated soil, such as restricted access areas, fenced areas, or other controlled access areas; or migration pathway is Confined; OR Surface soil samples are non-detect.</i>

← Receptor Factor (RF)



Draft RRSE for Waiawa Gulch TS and UTES

Evaluation Factors:

- CHF: Contaminant Hazard Factor
 - Ratio of maximum concentration/screening level
- MPF: Migration Pathway Factor
 - Likelihood of contamination migrating to a point of exposure
- RF: Receptor Factor
 - Potential receptor exposure (within 4-miles)

Scores:

- H: High
 M: Medium
 L: Low

Feedback?

Media	Evaluation Factor	Score	Relative Risk Evaluation	Overall AOI Rating
AOI 1 - Firetruck Pump Test Area				
Groundwater	CHF	M	H	H
	MPF	M		
	RF	H		
Soil	CHF	L	L	
	MPF	M		
	RF	M		
AOI 2 - Vehicle Main. Area, Firetruck Parking, Storage Bld				
Groundwater	CHF	H	H	H
	MPF	M		
	RF	H		
Soil	CHF	L	L	
	MPF	M		
	RF	M		



Open Discussion





Acronyms

- $\mu\text{g}/\text{kg}$ – micrograms per kilogram
- AFFF – aqueous film forming foam
- AOI – area of interest
- ARNG – Army National Guard
- bgs – below ground surface
- CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
- CSM – conceptual site model
- DoD – US Department of Defense
- DQO – data quality objective
- ft – feet
- HFPO-DA – hexafluoropropylene oxide dimer acid
- HBWS – Honolulu Board of Water Supply
- HDOH – Hawai'i Department of Health
- HFPO-DA – hexafluoropropylene oxide dimer acid
- HIARNG – Hawai'i Army National Guard
- OSD – Office of the Secretary of Defense
- ng/L – nanograms per liter
- PA – Preliminary Assessment
- PFAS – per- and polyfluoroalkyl substances
- PFBS – perfluorobutanesulfonic acid
- PFOA – perfluorooctanoic acid
- PFOS – perfluorooctanesulfonic acid
- PFHxS – perfluorohexanesulfonic acid
- PFNA – perfluorononanoic acid
- RI – Remedial Investigation
- RRSE – Relative Risk Site Evaluation
- SI – Site Inspection
- SL – screening level
- TPP – Technical Project Planning
- UFP-QAPP – Uniform Federal Policy- Quality Assurance Project Plan
- US – United States
- USACE – U.S. Army Corp of Engineers
- UTES – Unit Training and Equipment Site

Appendix E

Boring Logs and Well Construction Forms

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CLIENT ARNG, USACE Baltimore District	PROJECT NAME Waiawa Gulch Training Site and UTES, HI
PROJECT NUMBER 60552172	SITE NAME AOI01-01
DATE STARTED 3/21/22 COMPLETED 3/29/22	EASTING 1648279.442 NORTHING 88555.233
DRILLING CONTRACTOR GeoTek Hawaii, Inc.	GROUND ELEVATION 89.7 ft HOLE SIZE 6 inches
DRILLING EQUIPMENT Geoprobe 7822DT	GROUND WATER LEVELS:
DRILLING METHOD Direct Push & Solid Flight Auger	▽ AT TIME OF DRILLING 39.00 ft / Elev 50.70 ft
LOGGED BY J. Wood CHECKED BY E. Belanger	▼ AT TIME OF SAMPLING 48.76 ft / Elev 40.94 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0.0							
0.0 - 2.5	AU 167	167	ML	[Brown cross-hatched pattern]	0.0 FILL, sampled as SANDY SILT, dry, dark brown (7.5YR 3/4), non-plastic, soft, weak, with 15% fine-grained sand, 5% angular fine-grained gravel, <5% clay, and scattered root fragments near surface. Contains trace plastic trash. 89.7	AOI01-01-SB-00-02	[Well diagram showing annular seal]
2.5 - 5.0	AU 0	0		[Gray cross-hatched pattern]	3.0 BASALT Rock Flour (likely boulder in valley fill deposit), dry, gray (2.5Y 6/1), with fine- to coarse-grained sand-sized pieces. 86.7		[Well diagram showing casing]
5.0 - 7.5	GMAC 100	100	SC	[Brown diagonal pattern]	6.0 CLAYEY SAND WITH GRAVEL, dry to slightly moist, brown (7.5YR 4/3) and gray (2.5Y 6/1), loose to dense, fine- to coarse-grained, well-graded, angular to subangular, with 25% fines and 15% fine- to coarse-grained angular to subangular gravel. 83.7		[Well diagram showing casing]
7.5 - 10.0	AU 0	0		[Gray cross-hatched pattern]	8.0 BASALT Rock Flour (likely boulder in valley fill deposit), gray (2.5YR 6/1), with fine- to coarse-grained sand-sized pieces. 81.7		[Well diagram showing casing]
10.0 - 12.5	GMAC 88	88	CL	[Brown diagonal pattern]	9.8 SANDY LEAN CLAY WITH GRAVEL, dry to slightly moist, brown (7.5YR 4/6) and dark gray (7.5YR 4/1) with some dark brown (7.5YR 3/2) mottling, with 25% fine- to coarse-grained, well-graded, angular to subangular sand, 20% low plasticity silt, and 15% fine-grained subangular gravel, moderately cemented. 79.9		[Well diagram showing casing]
12.5 - 15.0	GMAC 100	100		[Brown diagonal pattern]	14.0 75.7		[Well diagram showing casing]

Annular Seal
Type: 3/8" Bentonite Pellets
Top: 3 ft bgs
Bottom: 43 ft bgs

Well Casing
Type: Schedule 40 PVC
Diameter: 2 in
Top: 0.3 ft bgs
Bottom: 45 ft bgs

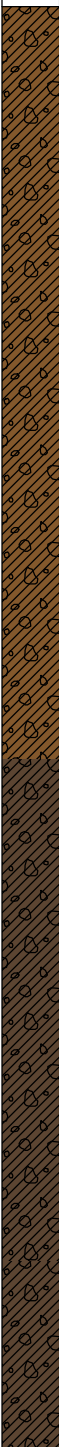
ARNG SMART LOG 8.5X11_V2 - - 12/29/22 14:20 - U:\DCS\PROJECTS\ENVI\GEARS\GEO\ARNG PFAS\900-CAD-GIS\930-OTHER\GINT\WAWA UTES BORING LOGS.GPJ

CLIENT ARNG, USACE Baltimore District

PROJECT NAME Waiawa Gulch Training Site and UTES, HI

PROJECT NUMBER 60552172

SITE NAME AOI01-01

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
15.0	AU	0			14.0 NO RECOVERY - Crushed liner from 14-15 ft bgs caused refusal with DPT. Used SFA from 15-16 ft bgs. From 16ft bgs switch to Dual-Tube (DT32) due to collapsing hole. <i>(continued)</i>		
16.0			CL		16.0 GRAVELLY LEAN CLAY, moist, strong brown (7.5YR 4/6 to 7.5YR 5/8), stiff, medium to high plasticity, weakly to moderately cemented, with 15% fine-grained angular gravel, 10% silt, and 5% fine-grained sand.		
17.5	GMAC 81						
20.0					20.0 Same as above (SAA) but wet and soft in thin 1-inch lenses at 21.7, 22.3, and 24.0 ft bgs. Silt content increases at bottom of sample to 20-25%, gravel changes to subangular to rounded.		
22.5	GMAC 100						
24.4					24.4 Color changes to dusky red (7.5YR 3/3 ?).		
25.0					25.0 SAA but becomes thinly bedded with GRAVELLY SILT (ML), moist, non-plastic, weak.		
27.5	GMAC 100						
30.0					30.0 SAA but dark brown (7.5YR 3/3) to strong brown (7.5YR 5/6), soft to hard, gravel changes to angular to subangular.		

Well Casing
Type: Schedule 40 PVC
Diameter: 2 in
Top: 0.3 ft bgs
Bottom: 45 ft bgs

CLIENT ARNG, USACE Baltimore District

PROJECT NAME Waiawa Gulch Training Site and UTES, HI


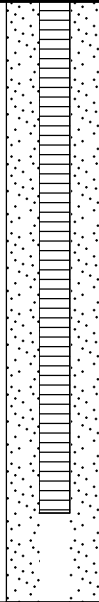
PROJECT NUMBER 60552172

SITE NAME AOI01-01

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
32.5	GMAC	100			30.0 SAA but dark brown (7.5YR 3/3) to strong brown (7.5YR 5/6), soft to hard, gravel changes to angular to subangular. (continued) 59.7		<p>Well Casing Type: Schedule 40 PVC Diameter: 2 in Top: 0.3 ft bgs Bottom: 45 ft bgs</p> <p>Filter Pack Type: #3 Filter Sand Top: 43 ft bgs Bottom: 56 ft bgs</p> <p>Well Screen Type: Schedule 40 PVC Slot Size: 0.01 in Top: 45 ft bgs Bottom: 55 ft bgs</p>
35.0			ML		34.5 Changes to SANDY SILT, moist, dusky red (10R 3/2), hard, non-plastic, weak, with fine- to coarse-grained, well-graded sand, with trace fine-grained angular gravel, and little (10%) clay. 55.2		
			CL		35.0 SANDY SILT, moist, strong brown (7.5YR 5/8), hard, non-plastic to low plasticity, weak, with 15% fine- to medium-grained well-graded sand, little (10%) clay, and trace fine-grained angular gravel. 54.7		
			CL		36.0 LEAN CLAY, moist, strong brown (7.5YR 5/8) with dusky red (10R 3/2) and dark gray (7.5YR 4/1) mottling, hard, with little (10%) fine- to coarse-grained sand and trace (<5%) fine-grained angular gravel. Contains some silt lenses at 37.3, 38.5, and 39 ft bgs, approx. 1- to 2-inches thick. 53.7		
37.5	GMAC	80			39.0 GRAVELLY LEAN CLAY, wet from 39-40.5 ft bgs, moist from 40.5-42 ft bgs, strong brown (7.5YR 5/8) with areas of dark gray (7.5YR 4/1), medium to high plasticity. With 20% fine-grained angular basalt gravel, little (10%) fine-grained sand, and little (10%) silt. Gravel content increases to 25% from 39-40.5 ft bgs and decreases to 15% from 40.5-42 ft bgs. 50.7	AOI01-01-SB-37-39	
40.0	GMAC	100			42.0 NO RECOVERY - SFA used to advance to 45 ft when DT32 encountered refusal. 47.7		
42.5	AU	0					
45.0			CL		45.0 LEAN CLAY, wet, strong brown (7.5YR 4/6) with some dark gray (7.5YR 4/1) mottling, high plasticity, soft, moderately strong, with trace (<5%) fine-grained sand and trace (<5%) fine-grained angular gravel. Contains some silt beds from 46.8-49 ft bgs, approx. 2-inches thick. 44.7		
47.5	GMAC	100					

ARNG SMART LOG 8.5X11_V2 - 12/29/22 14:20 - U:\DCS\PROJECTS\ENV\GEARS\GEO\ARNG PFAS\900-CAD-GIS\930-OTHER\GINT\WAIWA UTES BORING LOGS.GPJ

CLIENT ARNG, USACE Baltimore District PROJECT NAME Waiawa Gulch Training Site and UTES, HI
PROJECT NUMBER 60552172 SITE NAME AOI01-01

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
50.0			CL		45.0 ▼		 <p>Well Screen Type: Schedule 40 PVC Slot Size: 0.01 in Top: 45 ft bgs Bottom: 55 ft bgs</p>
	AU	0			50.0 NO RECOVERY - SFA used due to refusal with DT32. Auger cuttings appear SAA.	AOI01-01-GW	

Bottom of borehole at 56.0 feet.

Notes:

1. Headspace screening values represent total volatile organic vapors (referenced to an isobutylene standard) measured with a Photoionization Detector (PID) with 10.6 eV lamp.
2. Coordinates and elevation data in NAVD88 for vertical datum in US survey feet and NAD83 Hawai'i State Plane for horizontal datum in feet.
3. Top 5 Feet cleared with hand auger.
4. 78° F, clear, wind 6mph SE.

ARNG SMART LOG 8.5X11_V2 - - 12/29/22 14:20 - U:\DCS\PROJECTS\ENV\GEARS\GEO\ARNG PFAS\900-CAD-GIS\930-OTHER\GINT\WAIWAU UTES BORING LOGS.GPJ

CLIENT ARNG, USACE Baltimore District	PROJECT NAME Waiawa Gulch Training Site and UTES, HI
PROJECT NUMBER 60552172	SITE NAME AOI01-02
DATE STARTED 3/28/22 COMPLETED 3/29/22	EASTING 1648084.814 NORTHING 88135.588
DRILLING CONTRACTOR GeoTek Hawaii, Inc.	GROUND ELEVATION 83.5 ft HOLE SIZE 6 inches
DRILLING EQUIPMENT Geoprobe 7822DT	GROUND WATER LEVELS:
DRILLING METHOD Direct Push & Solid Flight Auger	▽ AT TIME OF DRILLING 27.50 ft / Elev 56.00 ft
LOGGED BY J. Wood CHECKED BY E. Belanger	▼ AT TIME OF SAMPLING 31.25 ft / Elev 52.25 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0.0							
0.0 - 0.3	AU		ML ML		TOPSOIL sampled as SILT, moist, dark brown (7.5YR 3/3), with 45% silt, 10% sand, 5% gravel, and abundant root fragments		
0.3 - 2.5	AU				SANDY SILT, dry to moist, dark brown (7.5YR 3/3), non-plastic to low plasticity, strong, with 30% fine- to coarse-grained, angular to subangular sand, little fine-grained angular basalt gravel, and 15% lenses of coarse-grained basalt gravel at 3.0 and 4.2 ft bgs. Clay content is trace to some (5-20%) at bottom.	AOI01-02-SB-00-02	
2.5 - 5.0	GMAC 78	78					Annular Seal Type: 3/8" Bentonite Pellets Top: 3 ft bgs Bottom: 35 ft bgs
5.0 - 7.5	GMAC 47	47	CH		FAT CLAY, moist, dark brown (7.5YR 3/3), high plasticity, hard, strong, with little (5-10%) fine-grained sand and little (10%) silt.		
7.5 - 10.0	GMAC 100		CL		SANDY LEAN CLAY, moist, dark brown (7.5YR 3/3), high plasticity, soft to hard, weak, with 30% fine- to coarse-grained, angular to subangular sand (mostly fine- to medium-grained), little (10-15%) silt, and trace fine-grained angular gravel		
10.0 - 13.5			GW		CLAYEY GRAVEL, dry, gray (GLE 1 5/1), dense, fine- to coarse-grained, angular to subangular, with		Well Casing Type: Schedule 40 PVC Diameter: 2 in Top: 0.37 ft bgs Bottom: 37 ft bgs

ARNG SMART LOG 8.5X11_V2 - - 12/29/22 14:20 - U:\DCS\PROJECTS\ENVI\GEARS\GEO\ARNG PFAS\900-CAD-GIS\930-OTHER\GINT\WAAWA UTES BORING LOGS.GPJ

CLIENT ARNG, USACE Baltimore District

PROJECT NAME Waiawa Gulch Training Site and UTES, HI

PROJECT NUMBER 60552172

SITE NAME AOI01-02

ARNG SMART LOG 8.5X11_V2 - 12/29/22 14:20 - U:\DCS\PROJECTS\ENVI\GEARS\GEO\ARNG PFAS\900-CAD-GIS\930-OTHER\GINT\WAIAWA UTES_BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
14.0	AU	0			clay infilling. Gravel observed to be vesicular basalt, weathered pahoehoe and a'a lava.		
15.0					NO RECOVERY - used SFA due to refusal with DT32.		
15.0	GMAC	100	GW		SANDY GRAVEL, dry, gray (GLEY 1 5/1), fine- to coarse-grained, angular to subrounded, with 40% fine- to coarse-grained, angular to subrounded sand, high plasticity clay, dark brown (7.5YR 3/3), weak, and trace (5%) silt. Weathered basalt with clay infilling.		
16.5					NO RECOVERY - used SFA due to refusal with DT32. Cuttings appear to be SAA.		
17.5	AU	0					
20.0							
20.0			ML		SANDY SILT, moist, strong brown to dark brown (7.5YR 5/6 to 3/4), non-plastic, weak, with 30-40% fine- to coarse-grained, angular to subrounded sand, little fine- to coarse-grained angular to rounded basalt gravel, and few (15-20%) high plasticity, weak clay.		
22.5	GMAC	100					
25.0							
25.0					SAA but color changes to gray (GLEY 1 6/1) at 25.9 ft bgs, and clay content increases from 26.8-27.6 ft bgs.		
27.5	GMAC	100	CL		SANDY CLAY WITH GRAVEL, wet, brown (7.5YR 4/2), high plasticity, soft, weak, with 30% fine- to coarse-grained, angular to subrounded sand (mostly fine- to medium-grained), and 10-15% fine-grained, angular basalt gravel.		
28.7			ML		SANDY SILT WITH GRAVEL, wet, dark brown (7.5YR 3/4), non-plastic, soft, weak, with 30% fine- to coarse-grained, angular to subrounded sand, 10-15% angular to rounded gravel, and little (10-15%) high plasticity clay, weak.		
30.0							

Well Casing
Type: Schedule 40 PVC
Diameter: 2 in
Top: 0.37 ft bgs
Bottom: 37 ft bgs

AOI01-02-SB-25.5-27.5

CLIENT ARNG, USACE Baltimore District

PROJECT NAME Waiawa Gulch Training Site and UTES, HI


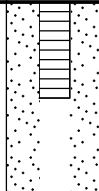
PROJECT NUMBER 60552172

SITE NAME AOI01-02

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
30.0			CL		30.0 SANDY CLAY WITH GRAVEL, wet, dark brown (7.5YR 3/3), high plasticity, weak, with 30% fine- to coarse-grained sand and 15-20% fine-grained, angular to rounded gravel. 53.5		
	GMAC	100	ML		31.2 SANDY SILT WITH GRAVEL, moist to wet, dark brown (7.5YR 3/4), non-plastic, soft, weak, with 30% fine- to coarse-grained sand and 15-20% fine- to coarse-grained, angular to rounded gravel. 52.3		
32.5			SM		32.2 SILTY SAND WITH GRAVEL, wet, gray (GLEYS 1 6/1), loose, fine- to coarse-grained, angular, with 35% soft, weak silt, and 20% fine- to coarse-grained, angular gravel. 51.3		
35.0	AU	0			33.7 NO RECOVERY - SFA used due to refusal with DT32. 49.8		
37.5			CL		38.0 SANDY CLAY WITH GRAVEL, wet, dark brown (7.5YR 3/3), high plasticity, soft, with 30% fine- to coarse-grained, angular to subangular sand, 10-15% fine- to coarse-grained gravel, and little (5-10%) silt. Contains some strong brown (7.5YR 3/8) mottles. 45.5		
40.0	GMAC	100				AOI01-02-GW	
42.5							
45.0	GMAC						

ARNG SMART LOG 8.5X11_V2 - - 12/29/22 14:20 - U:\DCS\PROJECTS\ENVI\GEARS\GEORNG PFAS\900-CAD-GIS\930-OTHER\GINT\WAIAWA UTES BORING LOGS.GPJ

CLIENT ARNG, USACE Baltimore District PROJECT NAME Waiawa Gulch Training Site and UTES, HI
PROJECT NUMBER 60552172 SITE NAME AOI01-02

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
47.5			CL		38.0 SANDY CLAY WITH GRAVEL, wet, dark brown (7.5YR 3/3), high plasticity, soft, with 30% fine- to coarse-grained, angular to subangular sand, 10-15% fine- to coarse-grained gravel, and little (5-10%) silt. Contains some strong brown (7.5YR 3/8) mottles. (continued)		

Bottom of borehole at 48.0 feet.

Notes:

1. Headspace screening values represent total volatile organic vapors (referenced to an isobutylene standard) measured with a Photoionization Detector (PID) with 10.6 eV lamp.
2. Coordinates and elevation data in NAVD88 for vertical datum in US survey feet and NAD83 Hawai'i State Plane for horizontal datum in feet.
3. Top 5 Feet cleared with hand auger.
4. 80° F, overcast.

ARNG SMART LOG 8.5X11_V2 - - 12/29/22 14:20 - U:\DCS\PROJECTS\ENV\GEARS\GEO\ARNG PFAS\900-CAD-GIS\930-OTHER\GINT\WAIAWA UTES BORING LOGS.GPJ

CLIENT ARNG, USACE Baltimore District	PROJECT NAME Waiawa Gulch Training Site and UTES, HI
PROJECT NUMBER 60552172	SITE NAME AOI02-01
DATE STARTED 3/24/22 COMPLETED 3/25/22	EASTING 1647803.608 NORTHING 86768.485
DRILLING CONTRACTOR GeoTek Hawaii, Inc.	GROUND ELEVATION 49.13 ft HOLE SIZE 6 inches
DRILLING EQUIPMENT Geoprobe 7822DT	GROUND WATER LEVELS:
DRILLING METHOD Direct Push & Solid Flight Auger	▽ AT TIME OF DRILLING 16.50 ft / Elev 32.63 ft
LOGGED BY J. Wood CHECKED BY E. Belanger	▼ AT TIME OF SAMPLING 16.09 ft / Elev 33.04 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0.0							
0.0			GW		ASPHALT, black (7.5YR 2.5/1), weathered. 49.1		
0.2					FILL sampled as WELL-GRADED GRAVEL, gray (7.5R 5/1), fine- to coarse-grained, angular to subangular, basalt. 48.9		
1.0			CL		LEAN CLAY, moist, dark brown (7.5YR 3/2), high plasticity, hard, strong, with little (10%) fine- to coarse-grained sand, little (10%) fine-grained angular gravel, and trace (<5%) silt. 48.1	AOI02-01-SB-00-02	
2.5	AU	100					Annular Seal Type: 3/8" Bentonite Pellets Top: 3 ft bgs Bottom: 13 ft bgs
5.0					Color changes to very dark gray (7.5YR 3/1) from 5-7.3 ft bgs. 44.1		
7.5	GMAC	70			Color grades to dark brown (7.5YR 3/4) from 7.3-8.3 ft bgs. 41.8		
8.3			CL		SANDY CLAY WITH GRAVEL, moist, dark brown (7.5YR 3/4), high plasticity, hard, strong to weak, with 30% fine- to coarse-grained, angular sand, fine-grained, angular gravel, and little (10-15%) silt. 40.8		
10.0					WEATHERED BASALT, light gray (GLEY 1 7/1), hard to weak, vesicular, with 30% rounded vesicles 1-3mm in diameter, heavily weathered from 10.8-11.2 ft bgs. 39.1		
11.2			SM		SILTY SAND, moist, dark brown (7.5YR 3/3), fine- to coarse-grained, well-graded, angular to subrounded, moderately dense, with little (10%) fine-grained angular gravel and 20% soft, weak silt. 37.9		
11.9					WEATHERED A'A BASALT, gray (GLEY 1 7/1), hard, massive with 2-5% vesicles, highly fractured with clay infilling. 37.2		
12.6	GMAC	80	SM		SILTY SAND, moist to wet at 16.5 ft bgs, dark brown (7.5YR 3/3), fine- to coarse-grained, well-graded, angular to subrounded, moderately dense. 36.5		
15.0						AOI02-01-SB-14.5-16.5	Filter Pack Type: #3 Filter Sand Top: 13 ft bgs Bottom: 25.25 ft bgs

CLIENT ARNG, USACE Baltimore District

PROJECT NAME Waiawa Gulch Training Site and UTES, HI

PROJECT NUMBER 60552172

SITE NAME AOI02-01

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
15.0							
12.6			SM		12.6 SILTY SAND, moist to wet at 16.5 ft bgs, dark brown (7.5YR 3/3), fine- to coarse-grained, well-graded, angular to subrounded, moderately dense. (continued)	36.5	<p>Well Screen Type: Schedule 40 PVC Slot Size: 0.01 in Top: 15 ft bgs Bottom: 25 ft bgs</p>
16.8	GMAC 52	52	GC		16.8 CLAYEY GRAVEL WITH SAND, wet, dark brown (7.5YR 3/3), fine- to coarse-grained, angular to rounded, dense, with 30% high plasticity, soft clay, with 35% fine- to coarse-grained, angular to rounded sand.	32.3	
20.0			CL		20.0 SANDY CLAY WITH GRAVEL, wet with moist intervals from 20-20.4 and 24-25 ft bgs, dark brown (7.5YR 3/3), strong brown (7.5YR 5/6), and brown (7.5YR 5/2), high plasticity, hard to soft, strong, with 30% fine- to coarse-grained, angular to subrounded sand, 10-15% fine-grained (with trace coarse-grained) angular to subrounded gravel. Thinly-bedded (2-6 inch) throughout with beds of clayey gravel and sands from 20-20.5, 22.1-22.4, and 23.5-23.6 ft bgs.	29.1	
22.5	GMAC 100	100				AOI02-01-GW	
25.0							

Bottom of borehole at 25.3 feet.

Notes:

1. Headspace screening values represent total volatile organic vapors (referenced to an isobutylene standard) measured with a Photoionization Detector (PID) with 10.6 eV lamp.
2. Coordinates and elevation data in NAVD88 for vertical datum in US survey feet and NAD83 Hawai'i State Plane for horizontal datum in feet.
3. Top 5 Feet cleared with hand auger.
4. 81° F, partly cloudy.

ARNG SMART LOG 8.5X11_V2 - -12/29/22 14:20 - U:\DCS\PROJECTS\ENVI\GEAR\ARNG PFAS\900-CAD-GIS\930-OTHER\GINT\WAIWA UTES BORING LOGS.GPJ

CLIENT ARNG, USACE Baltimore District
PROJECT NUMBER 60552172
DATE STARTED 3/23/22 **COMPLETED** 3/25/22
DRILLING CONTRACTOR GeoTek Hawaii, Inc.
DRILLING EQUIPMENT Geoprobe 7822DT
DRILLING METHOD Direct Push & Solid Flight Auger
LOGGED BY J. Wood **CHECKED BY** E. Belanger

PROJECT NAME Waiawa Gulch Training Site and UTES, HI
SITE NAME AOI02-02
EASTING 1647678.025 **NORTHING** 87060.938
GROUND ELEVATION 49.98 ft **HOLE SIZE** 6 inches
GROUND WATER LEVELS:
 ∇ **AT TIME OF DRILLING** 16.00 ft / Elev 33.98 ft
 ▼ **AT TIME OF SAMPLING** 18.00 ft / Elev 31.98 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0.0							
0.0 - 0.3	AU	100	ML GW SW		TOPSOIL sampled as SANDY SILT WITH GRAVEL, moist, dark brown (7.5YR 3/3), non-plastic, soft, with 35% fine-grained, poorly graded sand and 20% fine-grained angular gravel. Contains scattered organics.		
0.3 - 0.5					FILL composed of angular basalt gravel, fine- to coarse-grained.		
0.5 - 1.0			ML		FILL sampled as WELL-GRADED SAND, dry, fine- to coarse-grained, well-graded, angular to subrounded, loose, with little (10%) silt and 10% fine-grained angular gravel. Calcareous sand with coral fragments.	AOI02-02-SB-00-02	
1.0 - 4.5	GMAC	58			SANDY SILT, dry, dark brown (7.5YR 3/3), non-plastic, hard, weak, with 30% fine- to medium-grained, poorly graded, angular to subrounded sand.		Annular Seal Type: 3/8" Bentonite Pellets Top: 3 ft bgs Bottom: 13 ft bgs
4.5 - 5.0			GC		CLAYEY GRAVEL, dry, light gray (GLEYS 1 7/1), fine- to coarse-grained, subangular to subrounded, vesicular basalt gravel, with some rock flour and trace (5%) fine- to coarse-grained sand. Logged SFA cuttings, observed 25-30% clay infilling matrix, clay increasing with depth.		
5.0 - 7.5	GMAC	17					
7.5 - 11.0	AU	0					
11.0 - 12.4	GMAC	100	CL		SANDY LEAN CLAY, moist, strong brown (7.5YR 4/6) and dark gray (7.5YR 4/1), medium plasticity, hard, weak, with 25% fine-grained sand, some (25%) silt, and trace fine-grained subangular basalt gravel.		Well Casing Type: Schedule 40 PVC Diameter: 2 in Top: 0.37 ft bgs Bottom: 15 ft bgs
12.4 - 12.5			CL		GRAVELLY CLAY WITH SAND, moist, strong brown (7.5YR 4/6) to dark gray (7.5YR 4/1), medium to high plasticity, hard, weak, with 30% fine- to coarse-grained, angular to rounded basalt gravel, little (15%) fine- to medium-grained sand, some (15%) silt, and trace cobble-sized basalt gravel. Contains few 1-2 inch silt lenses at 16.4 and 17.5 ft bgs and moist in intervals.		Filter Pack Type: #3 Filter Sand Top: 13 ft bgs Bottom: 25.25 ft bgs
12.5 - 15.0	AU	100				AOI02-02-SB-14-16	

ARNG SMART LOG 8.5X11_V2 - - 12/29/22 14:21 - U:\DC\PROJECTS\ENVI\GEARS\GEO\ARNG PFAS\900-CAD-GIS\930-OTHER\GINT\WAWA UTES BORING LOGS.GPJ

CLIENT ARNG, USACE Baltimore District

PROJECT NAME Waiawa Gulch Training Site and UTES, HI

PROJECT NUMBER 60552172

SITE NAME AOI02-02

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
15.0							
17.5	GMAC	100	CL		12.4 GRAVELLY CLAY WITH SAND, moist, strong brown (7.5YR 4/6) to dark gray (7.5YR 4/1), medium to high plasticity, hard, weak, with 30% fine- to coarse-grained, angular to rounded basalt gravel, little (15%) fine- to medium-grained sand, some (15%) silt, and trace cobble-sized basalt gravel. Contains few 1-2 inch silt lenses at 16.4 and 17.5 ft bgs and moist in intervals. (continued) Becomes wet and soft.	37.6 AOI02-02-SB-14-16	
20.0	GMAC	100			20.0 SAA, with gravel content decreasing with depth to 10% at bottom.	34.0 AOI02-02-GW	
22.5	AU	0					
25.0							

Well Screen
Type: Schedule 40 PVC
Slot Size: 0.01 in
Top: 15 ft bgs
Bottom: 25 ft bgs

Bottom of borehole at 25.3 feet.

Notes:

1. Headspace screening values represent total volatile organic vapors (referenced to an isobutylene standard) measured with a Photoionization Detector (PID) with 10.6 eV lamp.
2. Coordinates and elevation data in NAVD88 for vertical datum in US survey feet and NAD83 Hawai'i State Plane for horizontal datum in feet.
3. Top 5 Feet cleared with hand auger.
4. 70-80° F, partly cloudy with intermittent showers.

ARNG SMART LOG 8.5X11_V2 - - 12/29/22 14:21 - U:\DCS\PROJECTS\ENVI\GEARS\GEO\ARNG PFAS\900-CAD-GIS\930-OTHER\GINT\WAIAWA UTES BORING LOGS.GPJ

CLIENT ARNG, USACE Baltimore District	PROJECT NAME Waiawa Gulch Training Site and UTES, HI
PROJECT NUMBER 60552172	SITE NAME AOI02-03
DATE STARTED 3/24/22 COMPLETED 3/25/22	EASTING 1647672.691 NORTHING 86821.463
DRILLING CONTRACTOR GeoTek Hawaii, Inc.	GROUND ELEVATION 50.75 ft HOLE SIZE 6 inches
DRILLING EQUIPMENT Geoprobe 7822DT	GROUND WATER LEVELS:
DRILLING METHOD Direct Push & Solid Flight Auger	▽ AT TIME OF DRILLING 18.50 ft / Elev 32.25 ft
LOGGED BY J. Wood CHECKED BY E. Belanger	▼ AT TIME OF SAMPLING 17.66 ft / Elev 33.09 ft

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0.0							
0.0 - 0.3	AU	100	ML GC		TOPSOIL sampled as SANDY SILT, wet to moist, very dark grayish brown (10YR 3/2), non-plastic, soft, with 30% fine- to coarse-grained, angular to subrounded sand and trace to little (5-10%) fine-grained angular gravel.		
0.3 - 2.0			CL		CLAYEY GRAVEL, moist, very dark grayish brown (10YR 3/2), fine- to coarse-grained, angular to subangular, loose to dense, weathered vesicular pahoehoe basalt.	AOI02-03-SB-00-02	
2.0 - 5.0	GMAC	100			LEAN CLAY WITH SAND, moist, dark brown (7.5YR 3/3), medium to high plasticity, soft to hard, weak, with 15% fine-grained sand, little (10%) silt, and trace fine-grained angular gravel.		
5.0 - 7.0					SAA with trace fine-grained subrounded gravel and beds of basalt gravel from 6.8-7.0 and 7.2-7.3 ft bgs.		
7.0 - 10.0	GMAC	57			Becomes moist to dry.		
10.0 - 12.5					SAA but moist, fine- to coarse-grained basalt gravel beds at 13.3 and 14.7 ft bgs. Contains a 5-inch basalt cobble at base.		
12.5 - 15.0	GMAC	97					

Annular Seal
Type: 3/8" Bentonite Pellets
Top: 3 ft bgs
Bottom: 13 ft bgs

Well Casing
Type: Schedule 40 PVC
Diameter: 2 in
Top: 0.4 ft bgs
Bottom: 15 ft bgs

Filter Pack
Type: #3 Filter Sand
Top: 13 ft bgs
Bottom: 25.25 ft bgs

ARNG SMART LOG 8.5X11_V2 - - 12/29/22 14:21 - U:\DCS\PROJECTS\ENVI\GEARS\GEO\ARNG PFAS\900-CAD-GIS\930-OTHER\GINT\WAIWAU UTES BORING LOGS.GPJ

CLIENT ARNG, USACE Baltimore District

PROJECT NAME Waiawa Gulch Training Site and UTES, HI

PROJECT NUMBER 60552172

SITE NAME AOI02-03

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
15.0					15.0 SAA (clay). 35.8		
17.5	GMAC	100	CL		15.5 SANDY CLAY WITH GRAVEL, moist to wet at 18.5 ft bgs, dark brown (7.5YR 3/3), medium to high plasticity, hard to soft, weak to moderately strong, with 30% fine- to coarse-grained, angular sand, and few (20%) gravel in concentrated areas from 16.5-17 and 17.5-19 ft bgs. 35.3	AOI02-03-SB-16.5-18.5	<p>Well Screen Type: Schedule 40 PVC Slot Size: 0.01 in Top: 15 ft bgs Bottom: 25 ft bgs</p>
20.0			GC		21.3 CLAYEY GRAVEL WITH SAND, wet, brown to strong brown (7.5YR 4/2 to 5/6), fine-grained with few coarse-grained, angular to subangular, basalt, loose to moderately dense, with 30% medium plasticity, soft, weak clay, and 25% fine- to coarse-grained, well-graded, angular to subangular sand. 29.5	AOI02-03-GW	
22.5	GMAC	55	CL		23.0 GRAVELLY CLAY WITH SAND, wet to moist at 24.7 ft bgs, brown to strong brown (7.5YR 4/2 to 5/6), high plasticity, moderately strong to strong, with fine- to coarse-grained, angular to rounded basalt gravel. Contains 15-20% fine- to coarse-grained, angular to subrounded sand and 30-35% gravel in beds from 23.1-23.2, 23.7-23.9, and 24.1-24.2 ft bgs. 27.8		
25.0							

Bottom of borehole at 25.3 feet.

Notes:

1. Headspace screening values represent total volatile organic vapors (referenced to an isobutylene standard) measured with a Photoionization Detector (PID) with 10.6 eV lamp.
2. Coordinates and elevation data in NAVD88 for vertical datum in US survey feet and NAD83 Hawai'i State Plane for horizontal datum in feet.
3. Top 5 Feet cleared with hand auger.
4. 76° F, partly cloudy.

ARNG SMART LOG 8.5X11_V2 - - 12/29/22 14:21 - U:\DCS\PROJECTS\ENVI\GEARS\GEO\ARNG PFAS\900-CAD-GIS\930-OTHER\GINT\WAIAWA UTES BORING LOGS.GPJ

CLIENT ARNG, USACE Baltimore District	PROJECT NAME Waiawa Gulch Training Site and UTES, HI
PROJECT NUMBER 60552172	SITE NAME AOI02-04
DATE STARTED 3/23/22 COMPLETED 3/25/22	EASTING 1647573.661 NORTHING 86986.207
DRILLING CONTRACTOR GeoTek Hawaii, Inc.	GROUND ELEVATION 50.76 ft HOLE SIZE 6 inches
DRILLING EQUIPMENT Geoprobe 7822DT	GROUND WATER LEVELS:
DRILLING METHOD Direct Push & Solid Flight Auger	▽ AT TIME OF DRILLING 16.00 ft / Elev 34.76 ft
LOGGED BY J. Wood CHECKED BY E. Belanger	▼ AT TIME OF SAMPLING 15.92 ft / Elev 34.84 ft


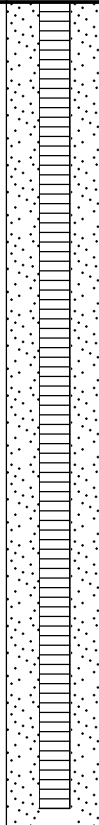
DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0.0							
0.0 - 0.3			ML		<p>TOPSOIL sampled as SANDY SILT WITH GRAVEL, moist, dark brown (7.5YR 3/3), non-plastic, weak, with 25% fine- to medium-grained sand, 20% fine-grained angular basalt, and scattered organics.</p> <p>FILL sampled as SANDY SILT, dry, dark brown (7.5YR 3/3), non-plastic, weak, with gravel content increasing with depth up to 20% at bottom. With burnt paper trash at 1.2 ft bgs 0.1 inch thick.</p>	AOI02-04-SB-00-02	
2.5	AU	68					
4.0					WEATHERED BASALT (pahoehoe and a'a), dry, gray (GLE Y 1 6/1), hard, highly vesicular to non-vesicular.		
5.2	GMAC	100	ML		SANDY SILT WITH GRAVEL, dry, dark brown (7.5YR 3/3), non-plastic, hard, weak, with 30% fine- to medium-grained, poorly graded sand, 30% fine-grained, angular to rounded basalt gravel, and little (10%) clay. Clay increasing with depth and silt content decreasing with depth.		
7.0	AU	100	CL		SANDY CLAY WITH GRAVEL, dry to wet, strong brown and brown (7.5YR 5/8 and 4/4), medium to high plasticity, hard to soft, weak to moderately strong, with 25% fine- to coarse-grained, well-graded, angular to subrounded sand, 25% fine-grained, angular to subrounded gravel, and few silt lenses up to 1-inch thick.		
13.0	AU	0			Becomes moist.		
15.0						AOI02-04-SB-14-16	<p>Annular Seal Type: 3/8" Bentonite Pellets Top: 3 ft bgs Bottom: 12 ft bgs</p> <p>Well Casing Type: Schedule 40 PVC Diameter: 2 in Top: 0.36 ft bgs Bottom: 14 ft bgs</p> <p>Filter Pack Type: #3 Filter Sand Top: 12 ft bgs Bottom: 24.25 ft bgs</p>

CLIENT ARNG, USACE Baltimore District

PROJECT NAME Waiawa Gulch Training Site and UTES, HI

PROJECT NUMBER 60552172

SITE NAME AOI02-04

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
15.0							
17.5	GMAC	100	CL		7.0 SANDY CLAY WITH GRAVEL, dry to wet, strong brown and brown (7.5YR 5/8 and 4/4), medium to high plasticity, hard to soft, weak to moderately strong, with 25% fine- to coarse-grained, well-graded, angular to subrounded sand, 25% fine-grained, angular to subrounded gravel, and few silt lenses up to 1-inch thick. (continued) Becomes wet. In saturated zone transitions to SANDY SILT or GRAVELLY SILT at 18.2-18.4, 18.8-19.2, and 21.1-21.3 ft bgs.	43.8 AOI02-04-SB-14-16 34.8	 Well Screen Type: Schedule 40 PVC Slot Size: 0.01 in Top: 14 ft bgs Bottom: 24 ft bgs
20.0						AOI02-04-GW	
22.5	GMAC	100			23.2 Becomes moist.	27.6	

Bottom of borehole at 24.3 feet.

Notes:

1. Headspace screening values represent total volatile organic vapors (referenced to an isobutylene standard) measured with a Photoionization Detector (PID) with 10.6 eV lamp.
2. Coordinates and elevation data in NAVD88 for vertical datum in US survey feet and NAD83 Hawai'i State Plane for horizontal datum in feet.
3. Top 5 Feet cleared with hand auger.
4. 82° F, cloudy.

ARNG SMART LOG 8.5X11_V2 - 12/29/22 14:21 - U:\DCS\PROJECTS\ENV\GEARS\GEO\ARNG PFAS\900-CAD-GIS\930-OTHER\GINT\WAIAWA UTES BORING LOGS.GPJ

WELL CONSTRUCTION LOG (FLUSH MOUNT COMPLETION)

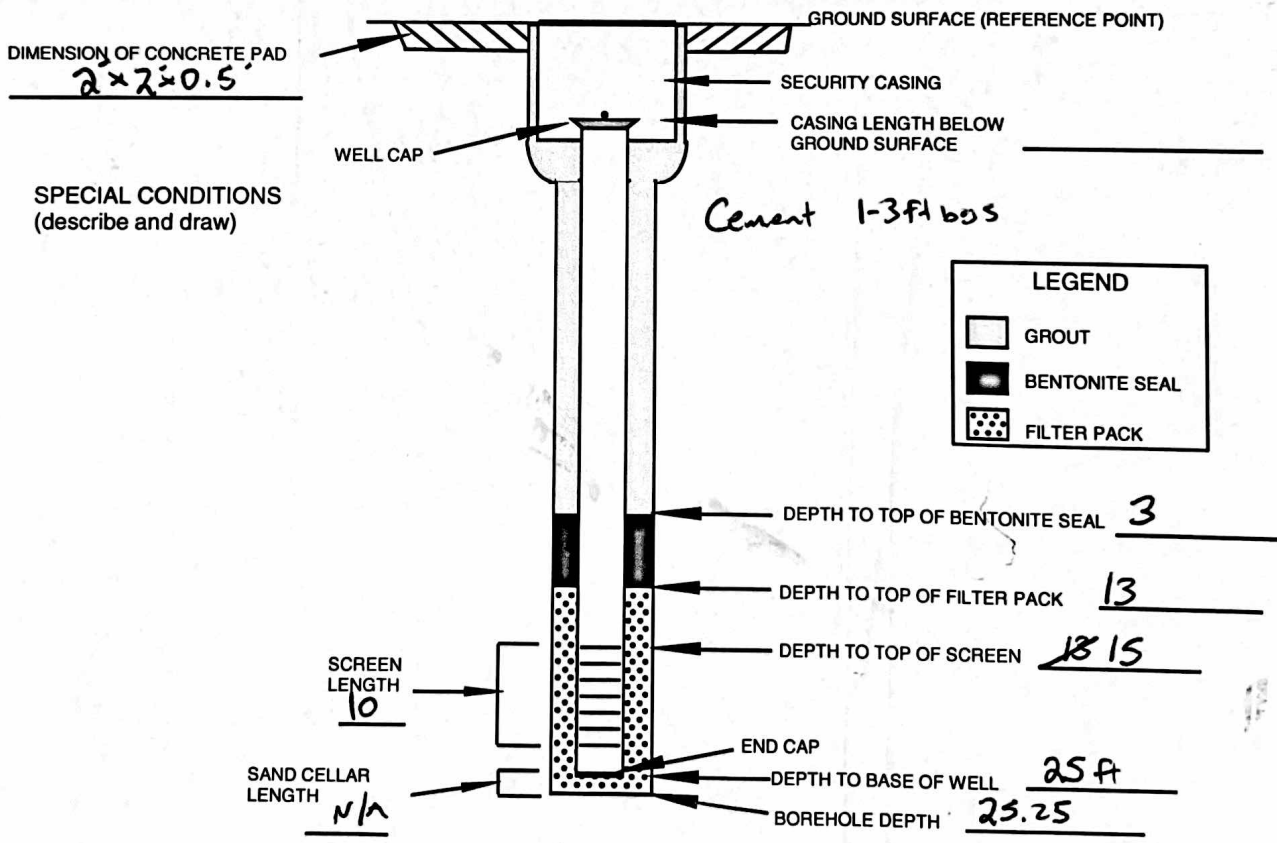
Site: Waiawa Gulch Training Site and UTES, HI	LocID: <u>AO102-01</u>	Date/Time Started: ¹⁴⁴⁵ 2905 <u>3/24/22</u>
Project Name: <u>ARNG PFAS SI</u>	Project Number: <u>60552172</u>	Date/Time Completed: <u>1450 3/25/22</u>
Drilling Contractor: <u>GeoTek HI</u>	Drilling Equipment: <u>GeoProbe 7822 DT</u>	Logged By: <u>J. Wood</u>
Driller: <u>J. Shjegstad</u>	Borehole Diameter (in.): <u>6"</u>	Checked By: _____

FILTER PACK	Type & Size of Filter Pack: <u>#3 Clean Graded, Kiln Dried Monterey Sand</u>	Filter Pack Manufacturer: <u>CEMEX</u>
	Amount of Filter Pack Used (lbs): <u>200</u>	

BENTONITE SEAL	Type & Size of Bentonite: <u>3/8" Chip pellets</u>	Bentonite Manufacturer: <u>Halliburton</u>
	Amount of Bentonite Used (lbs): <u>100</u>	

GROUT	Type of Cement: <u>Portland</u>	Bentonite Powder Type: _____
	Cement Manufacturer: <u>Quikrete</u>	Bentonite Powder Manufacturer: _____
	Amount of Cement Used (lbs): <u>50</u>	Amount of Bentonite Powder Used (lbs): _____

WELL DETAILS	Screen/Casing Diameter (in): <u>2"</u>	Casing Material/Manufacturer: <u>Sch 40 PVC / ESP</u>
	Screen Material/Manufacturer: <u>Sch 40 PVC, 0.010516T / ESP</u>	Type of Well Cap/Manufacturer: <u>Compression Cap / Test Well</u>
	Screened Interval (ft): <u>15-25</u> <u>Prepack</u>	Type of End Cap/Manufacturer: <u>3" threaded Sch 40 PVC / ESP</u>
	Depth to Water (ft): _____	Dimensions of Security Box: <u>8"</u>
	Water Added During Construction (gal): <u>5 gal</u>	



NOT TO SCALE

WELL CONSTRUCTION LOG (FLUSH MOUNT COMPLETION)

3/25/22
0910
3/25/22
M58

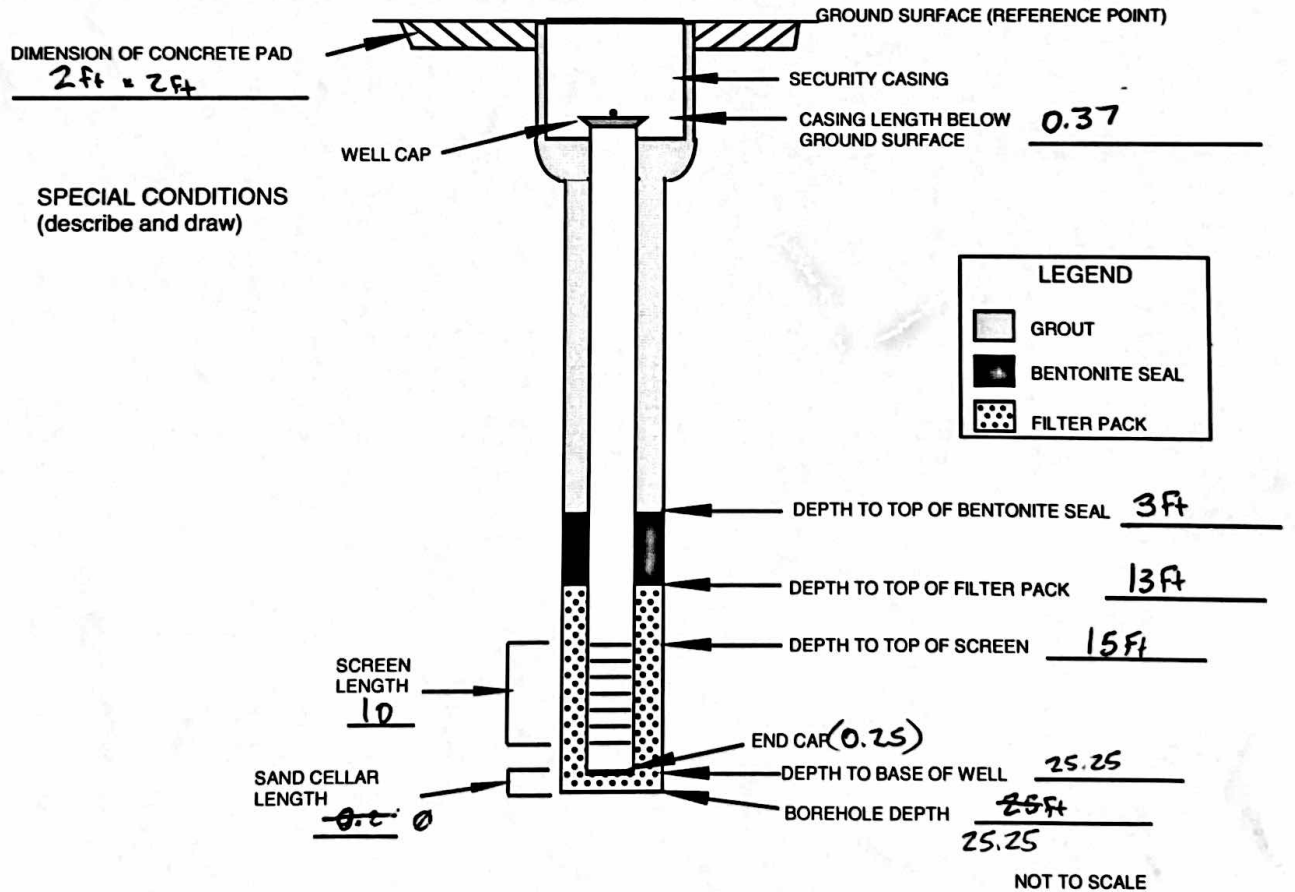
Site: Waiawa Gulch Training Site and UTES, HI	LocID: A01P2-02	Date/Time Started: 1000 3/25/22 0830
Project Name: ARNG PFAS SI	Project Number: 60552172	Date/Time Completed: 1250 3/27/22
Drilling Contractor: GeoTek HI	Drilling Equipment: Geo Probe 7822 BT	Logged By: Justin Well
Driller: John Shjegsted	Borehole Diameter (in.): 6"	Checked By:

FILTER PACK Type & Size of Filter Pack: #3 Clean graded, kiln dried Monterey sand Filter Pack Manufacturer: CEMEX
Amount of Filter Pack Used (lbs): 175

BENTONITE SEAL Type & Size of Bentonite: 3/8" Chip pellets Bentonite Manufacturer: Halliburton
Amount of Bentonite Used (lbs): 100

GROUT Type of Cement: Portland Cement Manufacturer: Quikrete
Amount of Cement Used (lbs): 50 lbs
Bentonite Powder Type: ~~_____~~
Bentonite Powder Manufacturer: ~~_____~~
Amount of Bentonite Powder Used (lbs): ~~_____~~

WELL DETAILS Screen/Casing Diameter (in): 2" Casing Material/Manufacturer: 2" sch 40 PVC
Screen Material/Manufacturer: 2" sch 40 0.010 slot Prefech Type of Well Cap/Manufacturer: Compression / Test well
Screened Interval (ft): 15-25 ft Type of End Cap/Manufacturer: 3" Sch 40 threaded / ESP
Depth to Water (ft): 17.60 (4/1/22 17.20) Dimensions of Security Box: 8" inch
Water Added During Construction (gal): 3 gal



WELL CONSTRUCTION LOG (FLUSH MOUNT COMPLETION)

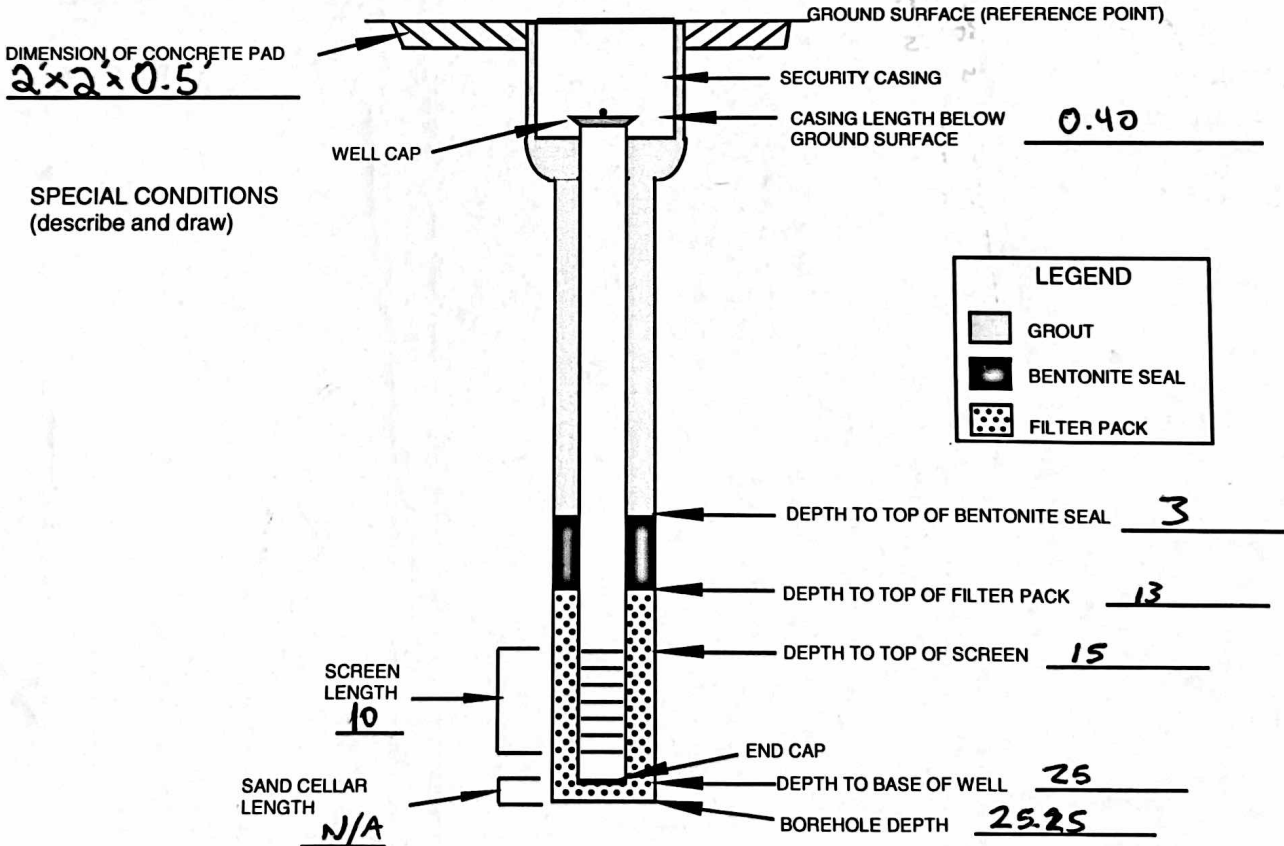
Site: Waiawa Gulch Training Site and UTES, HI	LocID: <u>AOI02-03</u>	Date/Time Started: <u>3/23/22 111</u>
Project Name: <u>ARNG PFAS SI</u>	Project Number: <u>60552172</u>	Date/Time Completed: <u>3/25/22 1500</u>
Drilling Contractor: <u>GeoTek HI</u>	Drilling Equipment: <u>Gco Probe 7822DT</u>	Logged By: <u>Justin Wood</u>
Driller: <u>John Shjegstad</u>	Borehole Diameter (in.): <u>6"</u>	Checked By: _____

FILTER PACK	Type & Size of Filter Pack: <u>#3 Clean, kiln, dried, graded Monterey Sands</u>	Filter Pack Manufacturer: <u>CEMEX</u>
	Amount of Filter Pack Used (lbs): <u>150</u>	

BENTONITE SEAL	Type & Size of Bentonite: <u>3/8" chip pellets</u>	Bentonite Manufacturer: <u>Halliburton</u>
	Amount of Bentonite Used (lbs): <u>100</u>	

GROUT	Type of Cement: <u>Portland</u>	Bentonite Powder Type: _____
	Cement Manufacturer: <u>Quikrete</u>	Bentonite Powder Manufacturer: _____
	Amount of Cement Used (lbs): <u>50</u>	Amount of Bentonite Powder Used (lbs): _____

WELL DETAILS	Screen/Casing Diameter (in): <u>2"</u>	Casing Material/Manufacturer: <u>Sch 40 PVC / ESP</u>
	Screen Material/Manufacturer: <u>Prepact Sch 40 PVC 0.010 slot / ESP</u>	Type of Well Cap/Manufacturer: <u>Compression Test Well</u>
	Screened Interval (ft): <u>15-25</u>	Type of End Cap/Manufacturer: <u>3" threaded sch 40 PVC / ESP</u>
	Depth to Water (ft): <u>17.26</u>	Dimensions of Security Box: <u>8"</u>
	Water Added During Construction (gal): <u>4</u>	



NOT TO SCALE

WELL CONSTRUCTION LOG (FLUSH MOUNT COMPLETION)

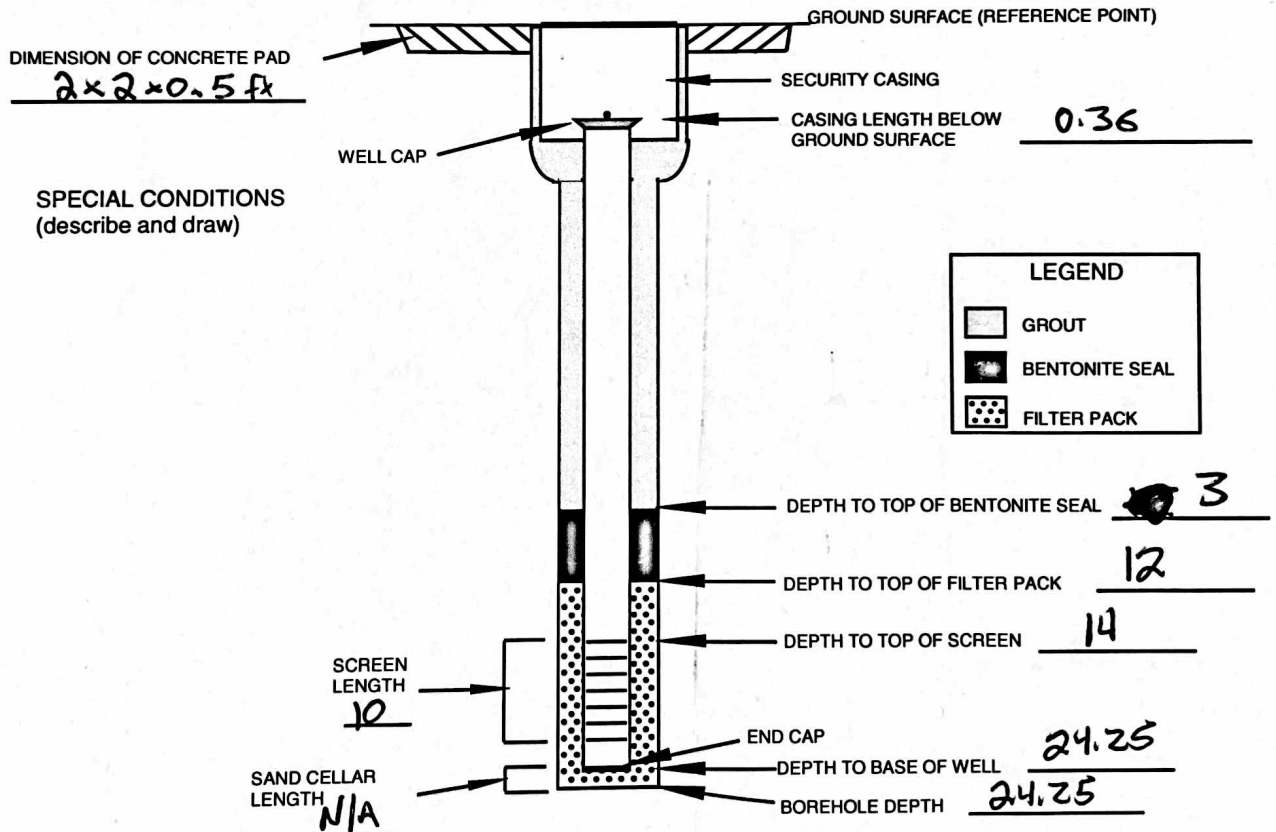
Site: Waiawa Gulch Training Site and UTES, HI	LocID: A0102-04	Date/Time Started: 1600 3/23/22
Project Name: ARNG PFAS SI	Project Number: 60552172	Date/Time Completed: 1515 3/25/22
Drilling Contractor: Geotek #	Drilling Equipment: GeoProbe 7822DT	Logged By: J. Wood
Driller: J. Shjegstad	Borehole Diameter (in.): 6"	Checked By:

FILTER PACK	Type & Size of Filter Pack: #3 Clean, Graded, Kiln Dried Monterey Sand	Filter Pack Manufacturer: CEMEX
	Amount of Filter Pack Used (lbs): 125	

BENTONITE SEAL	Type & Size of Bentonite: 3/8" chip pellets	Bentonite Manufacturer: Halliburton
	Amount of Bentonite Used (lbs): 100	

GROUT	Type of Cement: Portland	Bentonite Powder Type:
	Cement Manufacturer: Quikrete	Bentonite Powder Manufacturer:
	Amount of Cement Used (lbs): 50	Amount of Bentonite Powder Used (lbs):

WELL DETAILS	Screen/Casing Diameter (in.): 2"	Casing Material/Manufacturer: Sch40 PVC / ESP
	Screen Material/Manufacturer: Sch40 PVC 0.010 slot prepack	Type of Well Cap/Manufacturer: Compression / Test Well
	Screened Interval (ft): 14-24 FT	Type of End Cap/Manufacturer: 3" threaded Sch40 PVC / ESP
	Depth to Water (ft): 13.21	Dimensions of Security Box: 8"
	Water Added During Construction (gal): 3.5	



NOT TO SCALE

WELL CONSTRUCTION LOG (FLUSH MOUNT COMPLETION)

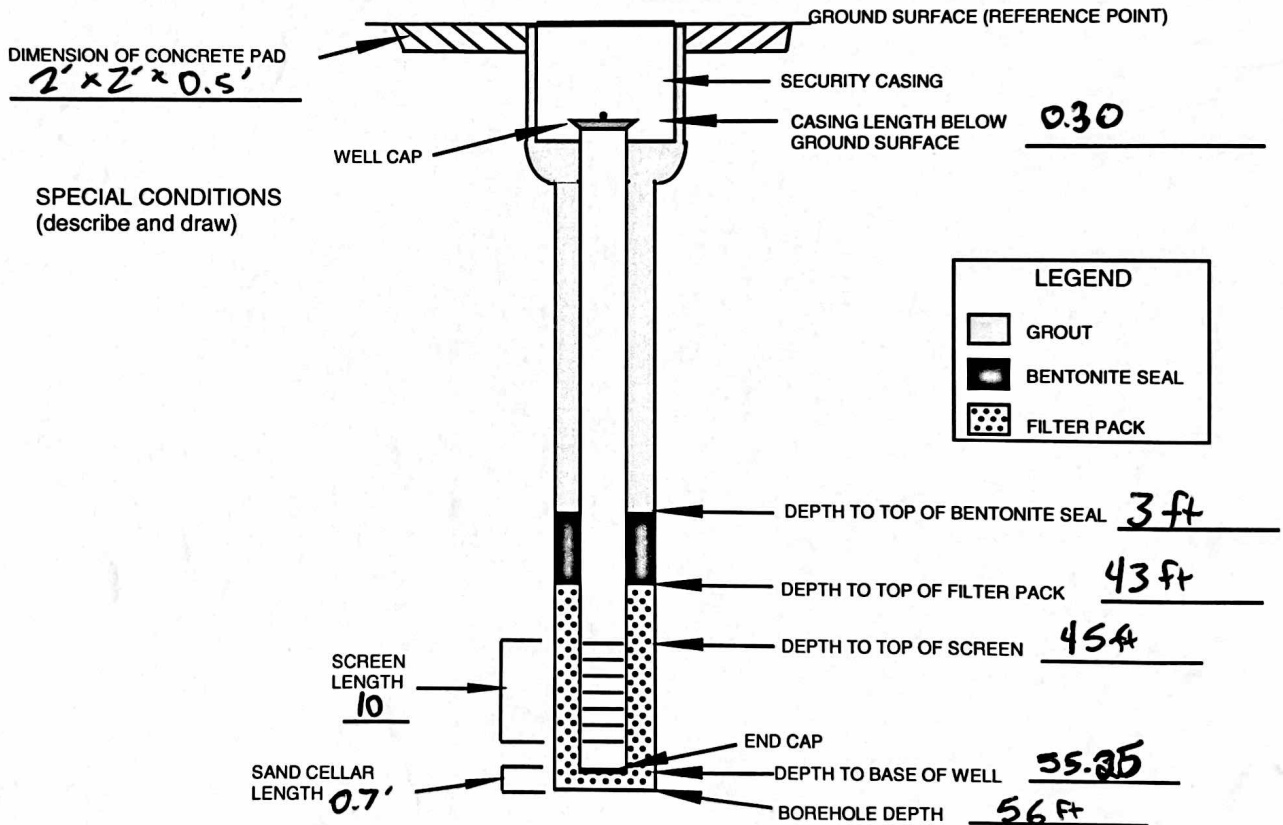
Site: <u>Waiawa Gulch Training Site and UTES, HI</u>	LocID: <u>A0101-01</u>	Date/Time Started: <u>0900 3/29/22</u>
Project Name: <u>ARNG PFAS SI</u>	Project Number: <u>60552172</u>	Date/Time Completed: <u>13:30 3/29/22</u>
Drilling Contractor: <u>GeoTek HI</u>	Drilling Equipment: <u>Geo Probe 7822DT</u>	Logged By: <u>Justin Wood</u>
Driller: <u>John Skjegstad</u>	Borehole Diameter (in.): <u>6"</u>	Checked By: _____

FILTER PACK	Type & Size of Filter Pack: <u>#3 Clean, graded, kiln dried Monterey Sand</u>	Filter Pack Manufacturer: <u>CEMEX</u>
	Amount of Filter Pack Used (lbs): <u>200</u>	

BENTONITE SEAL	Type & Size of Bentonite: <u>3/8" chip pellets</u>	Bentonite Manufacturer: <u>Hullburton</u>
	Amount of Bentonite Used (lbs): <u>200 350</u>	

GROUT	Type of Cement: <u>portland</u>	Bentonite Powder Type: _____
	Cement Manufacturer: <u>Quikrete</u>	Bentonite Powder Manufacturer: _____
	Amount of Cement Used (lbs): <u>50</u>	Amount of Bentonite Powder Used (lbs): _____

WELL DETAILS	Screen/Casing Diameter (in): <u>2"</u>	Casing Material/Manufacturer: <u>2" Sch 40 PVC / ESP</u>
	Screen Material/Manufacturer: <u>Sch 40 PVC 0.010 slot / ESP</u>	Type of Well Cap/Manufacturer: <u>Compression / Test well</u>
	Screened Interval (ft): <u>45-55 ft</u> <u>Prepack</u>	Type of End Cap/Manufacturer: <u>3" sch 40 threaded / ESP</u>
	Depth to Water (ft): <u>49.50</u>	Dimensions of Security Box: <u>2' x 2' x 0.5' 8"</u>
	Water Added During Construction (gal): <u>15</u>	



NOT TO SCALE

WELL CONSTRUCTION LOG (FLUSH MOUNT COMPLETION)

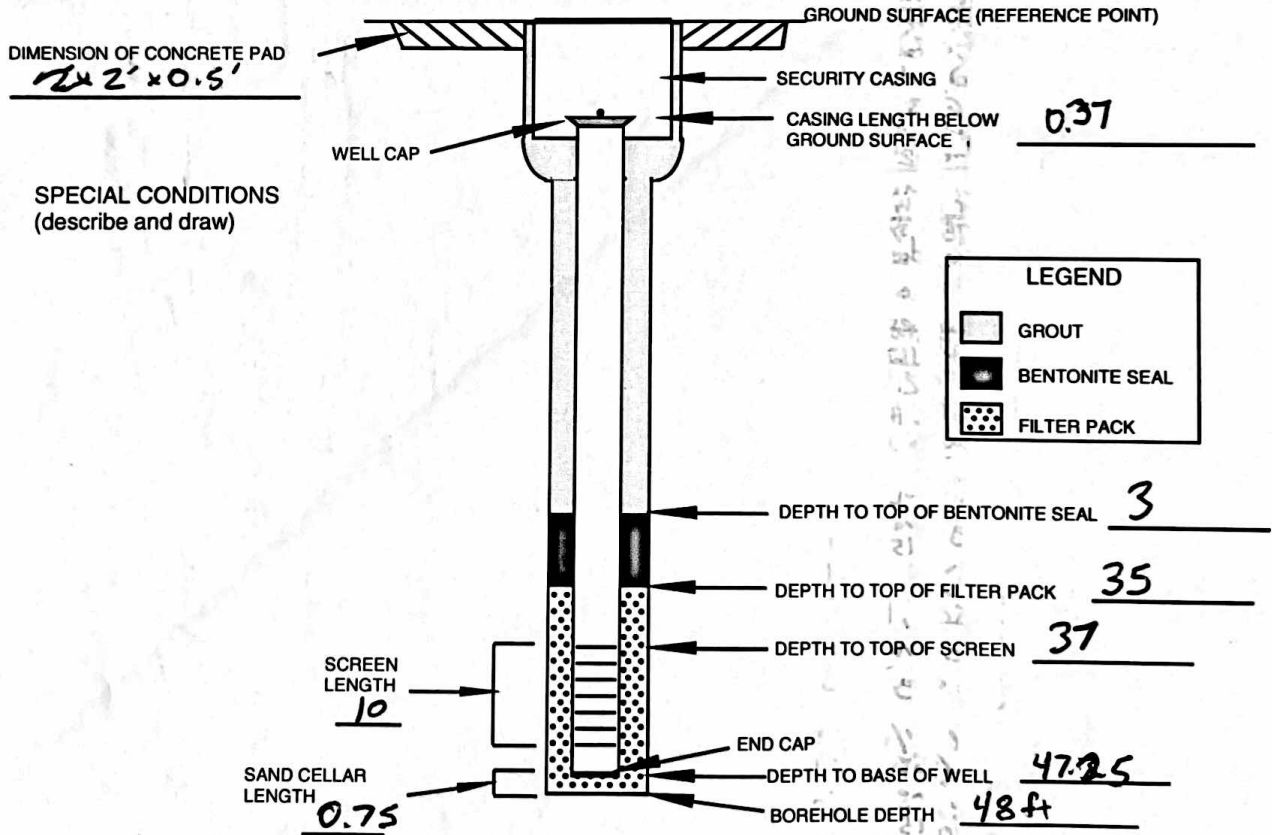
Site: Waiawa Gulch Training Site and UTES, HI	LocID: A0501-02	Date/Time Started: 1230 3/28/22
Project Name: ARNG PFAS SI	Project Number: 60552172	Date/Time Completed: 1240 3/29/22
Drilling Contractor: GeoTek HI	Drilling Equipment: Geoprobe 7822 DT	Logged By: Justin Wood
Driller: John Shierstad	Borehole Diameter (in.): 2"	Checked By:

FILTER PACK	Type & Size of Filter Pack: #3 Clean, graded, Rip dried Monterey Sand	Filter Pack Manufacturer: CEMEX
	Amount of Filter Pack Used (lbs): 225	

BENTONITE SEAL	Type & Size of Bentonite: 3/8" Chip pellets	Bentonite Manufacturer: Halliburton
	Amount of Bentonite Used (lbs): 200	

GROUT	Type of Cement: Portland	Bentonite Powder Type:
	Cement Manufacturer: Quikrete	Bentonite Powder Manufacturer:
	Amount of Cement Used (lbs): 50	Amount of Bentonite Powder Used (lbs):

WELL DETAILS	Screen/Casing Diameter (in): 2"	Casing Material/Manufacturer: 2" Sch 40 PVC / ESP
	Screen Material/Manufacturer: Sch 40 PVC, 0.010 slot / ESP	Type of Well Cap/Manufacturer: Compression Test well
	Screened Interval (ft): 37-47 Prepack	Type of End Cap/Manufacturer: 2" Sch 40 threaded / ESP
	Depth to Water (ft): 43g. 30.80	Dimensions of Security Box: 8"
	Water Added During Construction (gal): 13.0 gal	



NOT TO SCALE

Appendix F Analytical Results

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**Appendix F Laboratory Data
Surface Soil
Site Inspection Report, Waiawa Gulch Training Site and UTES**

Area of Interest	AOI01												AOI02																
	AOI01-02-SB-0.0-1.0				AOI01-02-SB-0.0-1.0-D				AOI02-01-SB-0.0-2.0				AOI02-03-SB-0.0-2.0				AOI02-05-SB-0.0-0.5				AOI02-06-SB-0.0-0.5				AOI02-07-SB-0.0-2.0				
	Sample ID				Sample Date				Sample ID				Sample Date				Sample ID				Sample Date								
	03/28/2022				03/28/2022				03/24/2022				03/24/2022				03/29/2022				03/29/2022								
Analyte	OSD Screening Level ^a	0-1 ft				0-1 ft				0-2 ft				0-2 ft				0-0.5 ft				0-0.5 ft				0-2 ft			
		Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual
Soil, LCMSMS compliant with QSM 5.3 Table B-15 (µg/kg)																													
6:2 FTS	-	<	0.222	1.11	U	<	0.221	1.11	U	<	0.273	1.37	U	<	0.238	1.19	U	<	0.216	1.08	UJ	<	0.209	1.04	U	<	0.206	1.03	U
8:2 FTS	-	<	0.111	1.11	U	<	0.111	1.11	U	<	0.137	1.37	U	<	0.119	1.19	U	0.050	0.108	1.08	J+	0.040	0.104	1.04	J	<	0.103	1.03	U
NEtFOSAA	-	<	0.111	1.11	UJ	<	0.111	1.11	U	<	0.137	1.37	UJ	<	0.119	1.19	U	0.041	0.108	1.08	J+	<	0.104	1.04	UJ	<	0.103	1.03	U
NMeFOSAA	-	<	0.055	1.11	UJ	<	0.055	1.11	U	<	0.068	1.37	UJ	<	0.060	1.19	U	<	0.054	1.08	UJ	<	0.052	1.04	UJ	<	0.052	1.03	U
PFBA	-	0.181	0.111	1.11	J	0.189	0.111	1.11	J	0.068	0.137	1.37	J	<	0.119	1.19	U	<	0.108	1.08	UJ	0.159	0.104	1.04	J+	0.083	0.103	1.03	J
PFBS	1900	<	0.055	1.11	U	<	0.055	1.11	U	0.056	0.068	1.37	J	<	0.060	1.19	U	<	0.054	1.08	UJ	0.033	0.052	1.04	J	0.029	0.052	1.03	J
PFDA	-	0.195	0.111	1.11	J	0.281	0.111	1.11	J	<	0.137	1.37	U	0.067	0.119	1.19	J	0.853	0.108	1.08	J+	0.527	0.104	1.04	J	0.152	0.103	1.03	J
PFDoA	-	0.093	0.055	1.11	J	0.137	0.055	1.11	J	<	0.068	1.37	U	0.037	0.060	1.19	J	0.284	0.054	1.08	J+	0.232	0.052	1.04	J	0.064	0.052	1.03	J
PFHpA	-	0.084	0.055	1.11	J	0.094	0.055	1.11	J	0.050	0.068	1.37	J	0.026	0.060	1.19	J	0.077	0.054	1.08	J+	0.138	0.052	1.04	J	0.108	0.052	1.03	J
PFHxA	-	0.112	0.055	1.11	J	0.118	0.055	1.11	J	0.259	0.068	1.37	J	0.050	0.060	1.19	J	0.038	0.054	1.08	J+	0.088	0.052	1.04	J	0.088	0.052	1.03	J
PFHxS	130	0.054	0.111	1.11	J	0.058	0.111	1.11	J	1.39	0.137	1.37	<	<	0.119	1.19	U	<	0.108	1.08	UJ	0.050	0.104	1.04	J	0.057	0.103	1.03	J
PFNA	19	0.135	0.055	1.11	J	0.134	0.055	1.11	J	<	0.068	1.37	U	<	0.060	1.19	U	0.588	0.054	1.08	J+	0.265	0.052	1.04	J	0.120	0.052	1.03	J
PFOA	19	<	0.222	1.11	UJ	0.092	0.221	1.11	J	<	0.273	1.37	U	<	0.238	1.19	U	0.227	0.216	1.08	J+	0.213	0.209	1.04	J	0.178	0.206	1.03	J
PFOS	13	1.05	0.222	1.11	J	1.49	0.221	1.11	J	4.89	0.273	1.37	<	0.148	0.238	1.19	J	2.22	0.216	1.08	J+	1.49	0.209	1.04	J	0.922	0.206	1.03	J
PFPeA	-	0.321	0.055	1.11	J	0.316	0.055	1.11	J	0.170	0.068	1.37	J	0.049	0.060	1.19	J	0.036	0.054	1.08	J+	0.114	0.052	1.04	J	0.093	0.052	1.03	J
PFTeDA	-	0.037	0.055	1.11	J	0.052	0.055	1.11	J	<	0.068	1.37	U	0.026	0.060	1.19	J	0.099	0.054	1.08	J+	0.086	0.052	1.04	J	0.025	0.052	1.03	J
PFTrDA	-	<	0.111	1.11	UJ	0.040	0.111	1.11	J	<	0.137	1.37	U	<	0.119	1.19	U	0.084	0.108	1.08	J+	0.052	0.104	1.04	J	<	0.103	1.03	U
PFUnDA	-	0.080	0.055	1.11	J	0.120	0.055	1.11	J	<	0.068	1.37	U	0.029	0.060	1.19	J	0.439	0.054	1.08	J+	0.207	0.052	1.04	J	0.058	0.052	1.03	J

Grey Fill Detected concentration exceeded OSD Screening Levels

References
a. Assistant Secretary of Defense, July 2022. Risk Based Screening Levels Calculated for PFOA, PFOS, PFBS, PFHxS, and PFNA in Groundwater or Soil using USEPA's Regional Screening Level Calculator. HQ=0.1, May 2022. Soil screening levels based on residential scenario for incidental ingestion of contaminated soil.

Interpreted Qualifiers
J = Estimated concentration
J+ = Estimated concentration, biased high
U = The analyte was not detected at a level greater than or equal to the adjusted DL
UJ = The analyte was not detected at a level greater than or equal to the adjusted DL. However, the reported adjusted DL is approximate and may be inaccurate or imprecise.

Chemical Abbreviations

6:2 FTS	6:2 fluorotelomer sulfonate
8:2 FTS	8:2 fluorotelomer sulfonate
NEtFOSAA	N-ethyl perfluorooctane- sulfonamidoacetic acid
NMeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid
PFBA	perfluorobutanoic acid
PFBS	perfluorobutanesulfonic acid
PFDA	perfluorodecanoic acid
PFDoA	perfluorododecanoic acid
PFHpA	perfluoroheptanoic acid
PFHxA	perfluorohexanoic acid
PFHxS	perfluorohexanesulfonic acid
PFNA	perfluorononanoic acid
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
PFPeA	perfluoropentanoic acid
PFTeDA	perfluorotetradecanoic acid
PFTrDA	perfluorotridecanoic acid
PFUnDA	perfluoro-n-undecanoic acid

Acronyms and Abbreviations

AOI	Area of Interest
D	duplicate
DL	detection limit
ft	feet
HQ	hazard quotient
ID	identification
LCMSMS	liquid chromatography with tandem mass spectrometry
LOD	limit of detection
LOQ	limit of quantitation
OSD	Office of the Secretary of Defense
PFAS	per- and polyfluoroalkyl substances
QSM	Quality Systems Manual
Qual	interpreted qualifier
SB	soil boring
USEPA	United States Environmental Protection Agency
UTES	Unit Training and Equipment Site
µg/kg	micrograms per kilogram
-	not applicable
<	analyte not detected above the LOD

**Appendix F ISM Laboratory Data
Surface Soil
Site Inspection Report, Waiawa Gulch Training Site and UTES**

Area of Interest	AOI01																								AOI02											
	AOI01-01-SB-0.0-0.2-0						AOI01-01-SB-0.0-0.2-0-D						AOI01-02-SB-0.0-1.0-0						AOI01-02-SB-0.0-1.0-D						AOI02-01-SB-0.0-0.2-0				AOI02-02-SB-0.0-0.2-0				AOI02-03-SB-0.0-0.2-0			
	Sample ID						Sample Date						Sample Date						Sample Date						Sample Date				Sample Date				Sample Date			
	03/21/2022						03/21/2022						03/28/2022						03/28/2022						03/24/2022				03/23/2022				03/24/2022			
Analyte	OSD Screening Level #	Depth				Depth				Depth				Depth				Depth				Depth				Depth										
		0-2 ft	LOD	LOQ	Qual	0-2 ft	LOD	LOQ	Qual	0-1 ft	LOD	LOQ	Qual	0-1 ft	LOD	LOQ	Qual	0-2 ft	LOD	LOQ	Qual	0-2 ft	LOD	LOQ	Qual	0-2 ft	LOD	LOQ	Qual							
Soil, LCMSMS compliant with QSM 5.3 Table B-15 (µg/kg)																																				
6:2 FTS	-	<	0.218	1.09	UJ	<	0.215	1.07	UJ	<	0.182	0.911	UJ	<	0.186	0.928	UJ	<	0.183	0.914	UJ	0.165	0.241	1.20	J	<	0.189	0.945	UJ							
8:2 FTS	-	<	0.109	1.09	UJ	<	0.107	1.07	UJ	<	0.091	0.911	UJ	<	0.094	0.938	UJ	<	0.091	0.914	UJ	0.097	0.120	1.20	J	<	0.095	0.945	UJ							
NEFOSAA	-	<	0.109	1.09	UJ	<	0.107	1.07	UJ	<	0.091	0.911	UJ	<	0.094	0.938	UJ	<	0.091	0.914	UJ	<	0.120	1.20	UJ	<	0.095	0.945	UJ							
NMeFOSAA	-	<	0.054	1.09	UJ	<	0.054	1.07	UJ	<	0.046	0.911	UJ	<	0.047	0.938	UJ	<	0.046	0.914	UJ	<	0.060	1.20	UJ	<	0.047	0.945	UJ							
PFBA	-	<	0.109	1.09	UJ	<	0.107	1.07	UJ	0.104	0.091	0.911	J	0.147	0.094	0.938	J	0.067	0.091	0.914	J	0.078	0.120	1.20	J	<	0.095	0.945	UJ							
PFBS	1900	<	0.054	1.09	UJ	<	0.054	1.07	UJ	<	0.046	0.911	UJ	<	0.047	0.938	UJ	0.046	0.046	0.914	J	<	0.060	1.20	UJ	<	0.047	0.945	UJ							
PFDA	-	0.200	0.109	1.09	J	0.185	0.107	1.07	J	0.090	0.091	0.911	J	0.123	0.094	0.938	J	<	0.091	0.914	UJ	2.12	0.120	1.20	J	0.077	0.095	0.945	J							
PFDoA	-	0.058	0.054	1.09	J	0.079	0.054	1.07	J	0.036	0.046	0.911	J	0.052	0.047	0.938	J	<	0.046	0.914	UJ	0.608	0.060	1.20	J	<	0.047	0.945	UJ							
PFHpA	-	<	0.054	1.09	UJ	<	0.054	1.07	UJ	0.051	0.046	0.911	J	0.069	0.047	0.938	J	0.047	0.046	0.914	J	0.122	0.060	1.20	J	0.034	0.047	0.945	J							
PFHxA	-	0.023	0.054	1.09	J	<	0.054	1.07	UJ	0.063	0.046	0.911	J	0.086	0.047	0.938	J	0.238	0.046	0.914	J	0.136	0.060	1.20	J	0.069	0.047	0.945	J							
PFHxS	130	0.050	0.109	1.09	J	0.042	0.107	1.07	J	<	0.091	0.911	UJ	0.032	0.094	0.938	J	1.41	0.091	0.914	J	<	0.120	1.20	UJ	<	0.095	0.945	UJ							
PFNA	19	0.053	0.054	1.09	J	0.056	0.054	1.07	J	0.081	0.046	0.911	J	0.100	0.047	0.938	J	<	0.046	0.914	UJ	0.736	0.060	1.20	J	0.049	0.047	0.945	J							
PFOA	19	<	0.218	1.09	UJ	<	0.215	1.07	UJ	<	0.182	0.911	UJ	<	0.188	0.938	UJ	<	0.183	0.914	UJ	0.271	0.241	1.20	J	<	0.189	0.945	UJ							
PFOS	13	1.73	0.218	1.09	J	1.65	0.215	1.07	J	0.547	0.182	0.911	J	0.675	0.188	0.938	J	2.48	0.183	0.914	J	0.735	0.241	1.20	J	0.223	0.189	0.945	J							
PFPeA	-	0.028	0.054	1.09	J	<	0.054	1.07	UJ	0.172	0.046	0.911	J	0.219	0.047	0.938	J	0.147	0.046	0.914	J	0.158	0.060	1.20	J	0.089	0.047	0.945	J							
PFTeDA	-	0.023	0.054	1.09	J	0.032	0.054	1.07	J	0.018	0.046	0.911	J	0.027	0.047	0.938	J	<	0.046	0.914	UJ	0.167	0.060	1.20	J	<	0.047	0.945	UJ							
PFTrDA	-	<	0.109	1.09	UJ	<	0.107	1.07	UJ	<	0.091	0.911	UJ	<	0.094	0.938	UJ	<	0.091	0.914	UJ	0.122	0.120	1.20	J	<	0.095	0.945	UJ							
PFUnDA	-	0.047	0.054	1.09	J	0.058	0.054	1.07	J	0.033	0.046	0.911	J	0.041	0.047	0.938	J	<	0.046	0.914	UJ	0.515	0.060	1.20	J	<	0.047	0.945	UJ							

Grey Fill Detected concentration exceeded OSD Screening Levels

Chemical Abbreviations

6:2 FTS	6:2 fluorotelomer sulfonate
8:2 FTS	8:2 fluorotelomer sulfonate
NEFOSAA	N-ethyl perfluorooctane- sulfonamidoacetic acid
NMeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid
PFBA	perfluorobutanoic acid
PFBS	perfluorobutanesulfonic acid
PFDA	perfluorodecanoic acid
PFDoA	perfluorododecanoic acid
PFHpA	perfluoroheptanoic acid
PFHxA	perfluorohexanoic acid
PFHxS	perfluorohexanesulfonic acid
PFNA	perfluorononanoic acid
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
PFPeA	perfluoropentanoic acid
PFTeDA	perfluorotetradecanoic acid
PFTrDA	perfluorotridecanoic acid
PFUnDA	perfluoro-n-undecanoic acid

References
a. Assistant Secretary of Defense, July 2022. Risk Based Screening Levels Calculated for PFOA, PFOS, PFBS, PFHxS, and PFNA in Groundwater or Soil using USEPA's Regional Screening Level Calculator. HQ=0.1, May 2022. Soil screening levels based on residential scenario for incidental ingestion of contaminated soil.

Interpreted Qualifiers
J = Estimated concentration
J+ = Estimated concentration, biased high
U = The analyte was not detected at a level greater than or equal to the adjusted DL
UJ = The analyte was not detected at a level greater than or equal to the adjusted DL. However, the reported adjusted DL is approximate and may be inaccurate or imprecise.

Acronyms and Abbreviations

AOI	Area of Interest
D	duplicate
DL	detection limit
ft	feet
HQ	hazard quotient
ID	identification
ISM	Incremental Sampling Methodology
LCMSMS	liquid chromatography with tandem mass spectrometry
LOD	limit of detection
LOQ	limit of quantitation
OSD	Office of the Secretary of Defense
PFAS	per- and polyfluoroalkyl substances
QSM	Quality Systems Manual
Qual	interpreted qualifier
SB	soil boring
USEPA	United States Environmental Protection Agency
UTES	Unit Training and Equipment Site
µg/kg	micrograms per kilogram
-	not applicable
<	analyte not detected above the LOD

**Appendix F ISM Laboratory Data
Surface Soil
Site Inspection Report, Waiawa Gulch Training Site and UTES**

Area of Interest	AOI02																
	Sample ID	AOI02-04-SB-0.0-2.0				AOI02-05-SB-0.0-0.5				AOI02-06-SB-0.0-0.5				AOI02-07-SB-0.0-2.0			
	Sample Date	03/23/2022				03/29/2022				03/29/2022				03/29/2022			
	Depth	0-2 ft				0-0.5 ft				0-0.5 ft				0-2 ft			
Analyte	OSD Screening Level #	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual
Soil, LCMSMS compliant with QSM 5.3 Table B-15 (µg/kg)																	
6:2 FTS	-	<	0.206	1.03	UJ	<	0.183	0.914	UJ	<	0.183	0.914	UJ	<	0.183	0.917	UJ
8:2 FTS	-	<	0.103	1.03	UJ	0.073	0.091	0.914	J+	<	0.091	0.914	UJ	<	0.092	0.917	UJ
NEtFOSAA	-	<	0.103	1.03	UJ	0.051	0.091	0.914	J+	<	0.091	0.914	UJ	<	0.092	0.917	UJ
NMeFOSAA	-	<	0.051	1.03	UJ	<	0.046	0.914	UJ	<	0.046	0.914	UJ	<	0.046	0.917	UJ
PFBA	-	0.043	0.103	1.03	J	0.078	0.091	0.914	J+	0.132	0.091	0.914	J+	0.042	0.092	0.917	J
PFBS	1900	0.023	0.051	1.03	J	<	0.046	0.914	UJ	<	0.046	0.914	UJ	<	0.046	0.917	UJ
PFDA	-	0.133	0.103	1.03	J	0.831	0.091	0.914	J+	0.317	0.091	0.914	J	0.081	0.092	0.917	J
PFDoA	-	0.075	0.051	1.03	J	0.237	0.046	0.914	J+	0.125	0.046	0.914	J	0.030	0.046	0.917	J
PFHpA	-	0.045	0.051	1.03	J	0.132	0.046	0.914	J+	0.112	0.046	0.914	J	0.051	0.046	0.917	J
PFHxA	-	0.138	0.051	1.03	J	0.073	0.046	0.914	J+	0.070	0.046	0.914	J	0.042	0.046	0.917	J
PFHxS	130	0.054	0.103	1.03	J	0.048	0.091	0.914	J+	0.032	0.091	0.914	J	<	0.092	0.917	UJ
PFNA	19	0.046	0.051	1.03	J	0.795	0.046	0.914	J+	0.185	0.046	0.914	J	0.068	0.046	0.917	J
PFOA	19	0.127	0.206	1.03	J	0.347	0.183	0.914	J+	0.166	0.183	0.914	J	0.099	0.183	0.917	J
PFOS	13	0.498	0.206	1.03	J	2.50	0.183	0.914	J+	0.944	0.183	0.914	J	0.455	0.183	0.917	J
PFPeA	-	0.076	0.051	1.03	J	0.069	0.046	0.914	J+	0.103	0.046	0.914	J	0.044	0.046	0.917	J
PFTeDA	-	0.045	0.051	1.03	J	0.099	0.046	0.914	J+	0.055	0.046	0.914	J	<	0.046	0.917	UJ
PFTrDA	-	<	0.103	1.03	UJ	0.073	0.091	0.914	J+	0.033	0.091	0.914	J	<	0.092	0.917	UJ
PFUnDA	-	0.033	0.051	1.03	J	0.343	0.046	0.914	J+	0.104	0.046	0.914	J	0.031	0.046	0.917	J

Grey Fill Detected concentration exceeded OSD Screening Levels

References
a. Assistant Secretary of Defense, July 2022. Risk Based Screening Levels Calculated for PFOA, PFOS, PFBS, PFHxS, and PFNA in Groundwater or Soil using USEPA's Regional Screening Level Calculator. HQ=0.1, May 2022. Soil screening levels based on residential scenario for incidental ingestion of contaminated soil.

Interpreted Qualifiers
J = Estimated concentration
J+ = Estimated concentration, biased high
U = The analyte was not detected at a level greater than or equal to the adjusted DL
UJ = The analyte was not detected at a level greater than or equal to the adjusted DL. However, the reported adjusted DL is approximate and may be inaccurate or imprecise.

Chemical Abbreviations
6:2 FTS 6:2 fluorotelomer sulfonate
8:2 FTS 8:2 fluorotelomer sulfonate
NEtFOSAA N-ethyl perfluorooctane- sulfonamidoacetic acid
NMeFOSAA N-methyl perfluorooctanesulfonamidoacetic acid
PFBA perfluorobutanoic acid
PFBS perfluorobutanesulfonic acid
PFDA perfluorodecanoic acid
PFDoA perfluorododecanoic acid
PFHpA perfluoroheptanoic acid
PFHxA perfluorohexanoic acid
PFHxS perfluorohexanesulfonic acid
PFNA perfluorononanoic acid
PFOA perfluorooctanoic acid
PFOS perfluorooctanesulfonic acid
PFPeA perfluoropentanoic acid
PFTeDA perfluorotetradecanoic acid
PFTrDA perfluorotridecanoic acid
PFUnDA perfluoro-n-undecanoic acid

Acronyms and Abbreviations
AOI Area of Interest
D duplicate
DL detection limit
ft feet
HQ hazard quotient
ID identification
ISM Incremental Sampling Methodology
LCMSMS liquid chromatography with tandem mass spectrometry
LOD limit of detection
LOQ limit of quantitation
OSD Office of the Secretary of Defense
PFAS per- and polyfluoroalkyl substances
QSM Quality Systems Manual
Qual interpreted qualifier
SB soil boring
USEPA United States Environmental Protection Agency
UTES Unit Training and Equipment Site
µg/kg micrograms per kilogram
- not applicable
< analyte not detected above the LOD

**Appendix F Laboratory Data
Shallow Subsurface Soil
Site Inspection Report, Waiawa Gulch Training Site and UTES**

Area of Interest		AOI02				
Sample ID		AOI02-01-SB-14.5-16.5				
Sample Date		03/24/2022				
Depth		14.5-16.5 ft				
Analyte	OSD Screening Level ^a	Result	LOD	LOQ	Qual	
Soil, LCMSMS compliant with QSM 5.3 Table B-15 (µg/kg)						
6:2 FTS	-	<	0.242	1.21	U	
8:2 FTS	-	<	0.121	1.21	U	
NEtFOSAA	-	<	0.121	1.21	U	
NMeFOSAA	-	<	0.061	1.21	UJ	
PFBA	-	<	0.121	1.21	U	
PFBS	25000	<	0.061	1.21	U	
PFDA	-	<	0.121	1.21	U	
PFDoA	-	<	0.061	1.21	U	
PFHpA	-	<	0.061	1.21	U	
PFHxA	-	0.034	0.061	1.21	J	
PFHxS	1600	<	0.121	1.21	U	
PFNA	250	<	0.061	1.21	U	
PFOA	250	<	0.242	1.21	U	
PFOS	160	0.088	0.242	1.21	J	
PFPeA	-	<	0.061	1.21	U	
PFTeDA	-	<	0.061	1.21	U	
PFTrDA	-	<	0.121	1.21	U	
PFUnDA	-	<	0.061	1.21	U	

Grey Fill Detected concentration exceeded OSD Screening Levels

References

a. Assistant Secretary of Defense, July 2022. Risk Based Screening Levels Calculated for PFOA, PFOS, PFBS, PFHxS, and PFNA in Groundwater or Soil using USEPA's Regional Screening Level Calculator. HQ=0.1, May 2022. Soil screening levels based on industrial/commercial composite worker scenario for incidental ingestion of contaminated soil.

Interpreted Qualifiers

J = Estimated concentration

U = The analyte was not detected at a level greater than or equal to the adjusted DL

UJ = The analyte was not detected at a level greater than or equal to the adjusted DL. However, the reported adjusted DL is approximate and may be inaccurate or imprecise.

Chemical Abbreviations

6:2 FTS	6:2 fluorotelomer sulfonate
8:2 FTS	8:2 fluorotelomer sulfonate
NEtFOSAA	N-ethyl perfluorooctane- sulfonamidoacetic acid
NMeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid
PFBA	perfluorobutanoic acid
PFBS	perfluorobutanesulfonic acid
PFDA	perfluorodecanoic acid
PFDoA	perfluorododecanoic acid
PFHpA	perfluoroheptanoic acid
PFHxA	perfluorohexanoic acid
PFHxS	perfluorohexanesulfonic acid
PFNA	perfluorononanoic acid
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
PFPeA	perfluoropentanoic acid
PFTeDA	perfluorotetradecanoic acid
PFTrDA	perfluorotridecanoic acid
PFUnDA	perfluoro-n-undecanoic acid

Acronyms and Abbreviations

AOI	Area of Interest
DL	detection limit
ft	feet
HQ	hazard quotient
ID	identification
LCMSMS	liquid chromatography with tandem mass spectrometry
LOD	limit of detection
LOQ	limit of quantitation
OSD	Office of the Secretary of Defense
PFAS	per- and polyfluoroalkyl substances
QSM	Quality Systems Manual
Qual	interpreted qualifier
SB	soil boring
USEPA	United States Environmental Protection Agency
UTES	Unit Training and Equipment Site
µg/kg	micrograms per kilogram
-	not applicable
<	analyte not detected above the LOD

Appendix F ISM Laboratory Data
Shallow Subsurface Soil
Site Inspection Report, Waiawa Gulch Training Site and UTES

Area of Interest		AOI02											
		AOI02-01-SB-14.5-16.5				AOI02-02-SB-14.0-16.0				AOI02-04-SB-14.0-16.0			
Sample ID		03/24/2022				03/23/2022				03/23/2022			
Sample Date		14.5-16.5 ft				14-16 ft				14-16 ft			
Depth													
Analyte	OSD Screening Level ^a	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual
Soil, LCMSMS compliant with QSM 5.3 Table B-15 (ug/kg)													
6:2 FTS	-	<	0.194	0.969	UJ	<	0.257	1.29	UJ	<	0.235	1.17	UJ
8:2 FTS	-	<	0.097	0.969	UJ	<	0.129	1.29	UJ	<	0.117	1.17	UJ
NEtFOSAA	-	<	0.097	0.969	UJ	<	0.129	1.29	UJ	<	0.117	1.17	UJ
NMeFOSAA	-	<	0.048	0.969	UJ	<	0.064	1.29	UJ	<	0.059	1.17	UJ
PFBA	-	0.047	0.097	0.969	J	0.087	0.129	1.29	J	<	0.117	1.17	UJ
PFBS	25000	<	0.048	0.969	UJ	<	0.064	1.29	UJ	<	0.059	1.17	UJ
PFDA	-	<	0.097	0.969	UJ	<	0.129	1.29	UJ	<	0.117	1.17	UJ
PFDoA	-	<	0.048	0.969	UJ	<	0.064	1.29	UJ	<	0.059	1.17	UJ
PFHpA	-	0.021	0.048	0.969	J	0.130	0.064	1.29	J	<	0.059	1.17	UJ
PFHxA	-	0.058	0.048	0.969	J	0.177	0.064	1.29	J	0.032	0.059	1.17	J
PFHxS	1600	<	0.097	0.969	UJ	0.065	0.129	1.29	J	0.387	0.117	1.17	J
PFNA	250	0.021	0.048	0.969	J	0.032	0.064	1.29	J	<	0.059	1.17	UJ
PFOA	250	<	0.194	0.969	UJ	<	0.257	1.29	UJ	<	0.235	1.17	UJ
PFOS	160	0.132	0.194	0.969	J	0.162	0.257	1.29	J	<	0.235	1.17	UJ
PFPeA	-	0.044	0.048	0.969	J	0.146	0.064	1.29	J	<	0.059	1.17	UJ
PFTeDA	-	<	0.048	0.969	UJ	<	0.064	1.29	UJ	<	0.059	1.17	UJ
PFTrDA	-	<	0.097	0.969	UJ	<	0.129	1.29	UJ	<	0.117	1.17	UJ
PFUnDA	-	<	0.048	0.969	UJ	<	0.064	1.29	UJ	<	0.059	1.17	UJ

Grey Fill Detected concentration exceeded OSD Screening Levels

References

a. Assistant Secretary of Defense, July 2022. Risk Based Screening Levels Calculated for PFOA, PFOS, PFBS, PFHxS, and PFNA in Groundwater or Soil using USEPA's Regional Screening Level Calculator. HQ=0.1, May 2022. Soil screening levels based on industrial/commercial composite worker scenario for incidental ingestion of contaminated soil.

Interpreted Qualifiers

J = Estimated concentration

UJ = The analyte was not detected at a level greater than or equal to the adjusted DL. However, the reported adjusted DL is approximate and may be inaccurate or imprecise.

Chemical Abbreviations

6:2 FTS	6:2 fluorotelomer sulfonate
8:2 FTS	8:2 fluorotelomer sulfonate
NEtFOSAA	N-ethyl perfluorooctane- sulfonamidoacetic acid
NMeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid
PFBA	perfluorobutanoic acid
PFBS	perfluorobutanesulfonic acid
PFDA	perfluorodecanoic acid
PFDoA	perfluorododecanoic acid
PFHpA	perfluoroheptanoic acid
PFHxA	perfluorohexanoic acid
PFHxS	perfluorohexanesulfonic acid
PFNA	perfluorononanoic acid
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
PFPeA	perfluoropentanoic acid
PFTeDA	perfluorotetradecanoic acid
PFTrDA	perfluorotridecanoic acid
PFUnDA	perfluoro-n-undecanoic acid

Acronyms and Abbreviations

AOI	Area of Interest
DL	detection limit
ft	feet
HQ	hazard quotient
ID	identification
ISM	Incremental Sampling Methodology
LCMSMS	liquid chromatography with tandem mass spectrometry
LOD	limit of detection
LOQ	limit of quantitation
OSD	Office of the Secretary of Defense
PFAS	per- and polyfluoroalkyl substances
QSM	Quality Systems Manual
Qual	interpreted qualifier
SB	soil boring
USEPA	United States Environmental Protection Agency
UTES	Unit Training and Equipment Site
µg/kg	micrograms per kilogram
-	not applicable
<	analyte not detected above the LOD

**Appendix F Laboratory Data
Deep Subsurface Soil
Site Inspection Report, Waiawa Gulch Training Site and UTES**

Area of Interest	AOI01				AOI02			
	Sample ID				Sample ID			
	Sample Date				Sample Date			
Depth		25.5-27.5 ft		16.5-18.5 ft				
Analyte	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual
Soil, LCMSMS compliant with QSM 5.3 Table B-15 (µg/kg)								
6:2 FTS	<	0.278	1.39	U	<	0.269	1.34	UJ
8:2 FTS	<	0.139	1.39	U	<	0.134	1.34	U
NEtFOSAA	<	0.139	1.39	UJ	<	0.134	1.34	UJ
NMeFOSAA	<	0.070	1.39	UJ	<	0.067	1.34	UJ
PFBA	<	0.139	1.39	U	<	0.134	1.34	U
PFBS	<	0.070	1.39	U	<	0.067	1.34	U
PFDA	<	0.139	1.39	U	<	0.134	1.34	U
PFDoA	<	0.070	1.39	U	<	0.067	1.34	U
PFHpA	<	0.070	1.39	U	<	0.067	1.34	U
PFHxA	<	0.070	1.39	U	<	0.067	1.34	U
PFHxS	<	0.139	1.39	U	<	0.134	1.34	U
PFNA	<	0.070	1.39	U	<	0.067	1.34	U
PFOA	<	0.278	1.39	U	<	0.269	1.34	U
PFOS	<	0.278	1.39	U	0.067	0.269	1.34	J
PFPeA	<	0.070	1.39	U	<	0.067	1.34	U
PFTeDA	<	0.070	1.39	UJ	<	0.067	1.34	UJ
PFTrDA	<	0.139	1.39	UJ	<	0.134	1.34	UJ
PFUnDA	<	0.070	1.39	U	<	0.067	1.34	U

Interpreted Qualifiers

J = Estimated concentration

U = The analyte was not detected at a level greater than or equal to the adjusted DL

UJ = The analyte was not detected at a level greater than or equal to the adjusted DL. However, the reported adjusted DL is approximate and may be inaccurate or imprecise.

Chemical Abbreviations

6:2 FTS	6:2 fluorotelomer sulfonate
8:2 FTS	8:2 fluorotelomer sulfonate
NEtFOSAA	N-ethyl perfluorooctane- sulfonamidoacetic acid
NMeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid
PFBA	perfluorobutanoic acid
PFBS	perfluorobutanesulfonic acid
PFDA	perfluorodecanoic acid
PFDoA	perfluorododecanoic acid
PFHpA	perfluoroheptanoic acid
PFHxA	perfluorohexanoic acid
PFHxS	perfluorohexanesulfonic acid
PFNA	perfluorononanoic acid
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
PFPeA	perfluoropentanoic acid
PFTeDA	perfluorotetradecanoic acid
PFTrDA	perfluorotridecanoic acid
PFUnDA	perfluoro-n-undecanoic acid

Acronyms and Abbreviations

AOI	Area of Interest
DL	detection limit
ft	feet
ID	identification
LCMSMS	liquid chromatography with tandem mass spectrometry
LOD	limit of detection
LOQ	limit of quantitation
PFAS	per- and polyfluoroalkyl substances
QSM	Quality Systems Manual
Qual	interpreted qualifier
SB	soil boring
UTES	Unit Training and Equipment Site
µg/kg	micrograms per kilogram
<	analyte not detected above the LOD

**Appendix F ISM Laboratory Data
Deep Subsurface Soil
Site Inspection Report, Waiawa Gulch Training Site and UTES**

Area of Interest Sample ID Sample Date Depth	AOI01						AOI02					
	AOI01-01-SB-37.0-39.0			AOI01-02-SB-25.5-27.5			AOI02-03-SB-16.5-18.5					
	03/22/2022			03/28/2022			03/24/2022					
	37-39 ft			25.5-27.5 ft			16.5-18.5 ft					
Analyte	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual
Soil, LCMSMS compliant with QSM 5.3 Table B-15 (µg/kg)												
6:2 FTS	<	0.281	1.40	UJ	<	0.183	0.916	UJ	<	0.187	0.936	UJ
8:2 FTS	<	0.140	1.40	UJ	<	0.092	0.916	UJ	<	0.094	0.936	UJ
NEtFOSAA	<	0.140	1.40	UJ	<	0.092	0.916	UJ	<	0.094	0.936	UJ
NMeFOSAA	<	0.070	1.40	UJ	<	0.046	0.916	UJ	<	0.047	0.936	UJ
PFBA	<	0.140	1.40	UJ	0.039	0.092	0.916	J	<	0.094	0.936	UJ
PFBS	<	0.070	1.40	UJ	<	0.046	0.916	UJ	<	0.047	0.936	UJ
PFDA	<	0.140	1.40	UJ	<	0.092	0.916	UJ	<	0.094	0.936	UJ
PFDAoA	<	0.070	1.40	UJ	<	0.046	0.916	UJ	<	0.047	0.936	UJ
PFHpA	<	0.070	1.40	UJ	<	0.046	0.916	UJ	<	0.047	0.936	UJ
PFHxA	<	0.070	1.40	UJ	0.071	0.046	0.916	J	0.029	0.047	0.936	J
PFHxS	<	0.140	1.40	UJ	0.325	0.092	0.916	J	0.076	0.094	0.936	J
PFNA	<	0.070	1.40	UJ	<	0.046	0.916	UJ	<	0.047	0.936	UJ
PFOA	<	0.281	1.40	UJ	<	0.183	0.916	UJ	<	0.187	0.936	UJ
PFOS	<	0.281	1.40	UJ	0.524	0.183	0.916	J	0.125	0.187	0.936	J
PFPeA	<	0.070	1.40	UJ	0.049	0.046	0.916	J	<	0.047	0.936	UJ
PFTeDA	<	0.070	1.40	UJ	<	0.046	0.916	UJ	<	0.047	0.936	UJ
PFTrDA	<	0.140	1.40	UJ	<	0.092	0.916	UJ	<	0.094	0.936	UJ
PFUnDA	<	0.070	1.40	UJ	<	0.046	0.916	UJ	<	0.047	0.936	UJ

Interpreted Qualifiers

J = Estimated concentration

UJ = The analyte was not detected at a level greater than or equal to the adjusted DL. However, the reported adjusted DL is approximate and may be inaccurate or imprecise.

Chemical Abbreviations

6:2 FTS	6:2 fluorotelomer sulfonate
8:2 FTS	8:2 fluorotelomer sulfonate
NEtFOSAA	N-ethyl perfluorooctane- sulfonamidoacetic acid
NMeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid
PFBA	perfluorobutanoic acid
PFBS	perfluorobutanesulfonic acid
PFDA	perfluorodecanoic acid
PFDAoA	perfluorododecanoic acid
PFHpA	perfluoroheptanoic acid
PFHxA	perfluorohexanoic acid
PFHxS	perfluorohexanesulfonic acid
PFNA	perfluorononanoic acid
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
PFPeA	perfluoropentanoic acid
PFTeDA	perfluorotetradecanoic acid
PFTrDA	perfluorotridecanoic acid
PFUnDA	perfluoro-n-undecanoic acid

Acronyms and Abbreviations

AOI	Area of Interest
DL	detection limit
ft	feet
ID	identification
ISM	Incremental Sampling Methodology
LCMSMS	liquid chromatography with tandem mass spectrometry
LOD	limit of detection
LOQ	limit of quantitation
PFAS	per- and polyfluoroalkyl substances
QSM	Quality Systems Manual
Qual	interpreted qualifier
SB	soil boring
UTES	Unit Training and Equipment Site
µg/kg	micrograms per kilogram
<	analyte not detected above the LOD

**Appendix F Laboratory Data
Groundwater
Site Inspection Report, Waiawa Gulch Training Site and UTES**

Area of Interest	Sample ID	Sample Date	AOI01												AOI02															
			AOI01-01-GW				AOI01-02-GW				AOI02-01-GW				AOI02-01-GW-D				AOI02-02-GW				AOI02-03-GW				AOI02-04-GW			
			04/05/2022				04/05/2022				04/04/2022				04/04/2022				04/05/2022				04/05/2022							
Analyte	OSD Screening Level ^a	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	
Water, LCMSMS compliant with QSM 5.3 Table B-15 (ng/l)																														
6:2 FTS	-	5.38	3.00	4.00		6.87	3.05	4.07	<	3.00	4.00	U	<	3.00	4.00	U	<	24.0	2.95	3.94		<	3.00	4.00	U	4.51	1.50	2.00		
8:2 FTS	-	<	3.00	4.00	U	<	3.05	4.07	U	<	3.00	4.00	U	<	3.00	4.00	U	<	2.95	3.94	U	<	3.00	4.00	U	<	1.50	2.00	U	
NEtFOSAA	-	<	4.00	8.00	U	<	4.07	8.13	U	<	4.00	8.00	U	<	4.00	8.00	U	<	3.94	7.87	U	<	4.00	8.00	U	<	2.00	4.00	U	
NMeFOSAA	-	<	4.00	8.00	U	<	4.07	8.13	U	<	4.00	8.00	U	<	4.00	8.00	U	<	3.94	7.87	U	<	4.00	8.00	U	<	2.00	4.00	U	
PFBA	-	<	3.50	4.00	U	113	3.56	4.07		22.5	3.50	4.00		22.8	3.50	4.00		101	3.44	3.94		37.6	3.50	4.00		13.8	1.75	2.00		
PFBS	601	<	2.00	4.00	U	13.7	2.03	4.07		8.00	2.00	4.00		8.66	2.00	4.00		56.2	1.97	3.94		125	2.00	4.00		12.5	1.00	2.00		
PFDA	-	<	3.00	4.00	U	<	3.05	4.07	U	<	3.00	4.00	U	<	3.00	4.00	U	1.65	2.95	3.94	J	<	3.00	4.00	U	<	1.50	2.00	U	
PFDoA	-	<	3.00	4.00	U	<	3.05	4.07	U	<	3.00	4.00	U	<	3.00	4.00	U	<	2.95	3.94	U	<	3.00	4.00	U	<	1.50	2.00	U	
PFHpA	-	<	3.00	4.00	U	80.9	3.05	4.07		13.3	3.00	4.00		13.6	3.00	4.00		102	2.95	3.94		27.1	3.00	4.00		11.5	1.50	2.00		
PFHxA	-	1.49	2.00	4.00	J	174	2.03	4.07		27.2	2.00	4.00		27.2	2.00	4.00		236	1.97	3.94		112	2.00	4.00		49.7	1.00	2.00		
PFHxS	39	<	3.00	4.00	U	89.3	3.05	4.07		39.7	3.00	4.00		40.6	3.00	4.00		1110	2.95	3.94		409	3.00	4.00		459	1.50	2.00		
PFNA	6	<	2.00	4.00	U	1.97	2.03	4.07	J	2.71	2.00	4.00	J	2.68	2.00	4.00	J	5.44	1.97	3.94		1.32	2.00	4.00	J	1.01	1.00	2.00	J	
PFOA	6	1.26	2.00	4.00	J	18.0	2.03	4.07		13.3	2.00	4.00		13.7	2.00	4.00		57.0	1.97	3.94		27.9	2.00	4.00		25.3	1.00	2.00		
PFOS	4	2.64	2.00	4.00	J	11.1	2.03	4.07		31.4	2.00	4.00		31.2	2.00	4.00		271	1.97	3.94		212	2.00	4.00		71.2	1.00	2.00		
PFPeA	-	<	2.00	4.00	U	264	2.03	4.07		35.5	2.00	4.00		36.5	2.00	4.00		297	1.97	3.94		100.0	2.00	4.00		22.0	1.00	2.00		
PFTeDA	-	<	3.00	4.00	U	<	3.05	4.07	U	<	3.00	4.00	U	<	3.00	4.00	U	<	2.95	3.94	U	<	3.00	4.00	U	<	1.50	2.00	U	
PFTDA	-	<	3.00	4.00	U	<	3.05	4.07	U	<	3.00	4.00	U	<	3.00	4.00	U	<	2.95	3.94	U	<	3.00	4.00	U	<	1.50	2.00	U	
PFUnDA	-	<	3.00	4.00	U	<	3.05	4.07	U	<	3.00	4.00	U	<	3.00	4.00	U	<	2.95	3.94	U	<	3.00	4.00	U	<	1.50	2.00	U	

Grey Fill Detected concentration exceeded OSD Screening Levels

References
a. Assistant Secretary of Defense, July 2022. Risk Based Screening Levels Calculated for PFOA, PFOS, PFBS, PFHxS, and PFNA in Groundwater or Soil using USEPA's Regional Screening Level Calculator. HQ=0.1, May 2022. Groundwater screening levels based on residential scenario for direct ingestion of groundwater.

Interpreted Qualifiers
J = Estimated concentration
U = The analyte was not detected at a level greater than or equal to the adjusted DL

Chemical Abbreviations

6:2 FTS	6:2 fluorotelomer sulfonate
8:2 FTS	8:2 fluorotelomer sulfonate
NEtFOSAA	N-ethyl perfluorooctane- sulfonamidoacetic acid
NMeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid
PFBA	perfluorobutanoic acid
PFBS	perfluorobutanesulfonic acid
PFDA	perfluorodecanoic acid
PFDoA	perfluorododecanoic acid
PFHpA	perfluoroheptanoic acid
PFHxA	perfluorohexanoic acid
PFHxS	perfluorohexanesulfonic acid
PFNA	perfluorononanoic acid
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
PFPeA	perfluoropentanoic acid
PFTeDA	perfluorotetradecanoic acid
PFTDA	perfluorotridecanoic acid
PFUnDA	perfluoro-n-undecanoic acid

Acronyms and Abbreviations

AOI	Area of Interest
D	duplicate
DL	detection limit
GW	groundwater
HQ	hazard quotient
ID	identification
LCMSMS	liquid chromatography with tandem mass spectrometry
LOD	limit of detection
LOQ	limit of quantitation
OSD	Office of the Secretary of Defense
PFAS	per- and polyfluoroalkyl substances
QSM	Quality Systems Manual
Qual	interpreted qualifier
USEPA	United States Environmental Protection Agency
UTES	Unit Training and Equipment Site
ng/l	nanogram per liter
-	not applicable
<	analyte not detected above the LOD

**Appendix F Laboratory Data
Decontamination Water and Quality Control Samples
Site Inspection Report, Waiawa Gulch Training Site and UTES**

Area of Interest Sample ID Sample Date Analyte	DECON SOURCE												FIELD QC															
	WU-DECON-01				WU-DECON-02				WU-DECON-03				WU-ERB-01				WU-ERB-03				WU-ERB-04				WU-ERB-05			
	08/09/2021				08/09/2021				03/29/2022				03/21/2022				03/28/2022				03/28/2022				03/28/2022			
	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual
Water, LCMSMS compliant with QSM 5.3 Table B-15 (ng/l)																												
6:2 FTS	<	3.00	4.00	U	<	3.00	4.00	U	<	3.05	4.07	U	<	3.13	4.17	U	<	2.98	3.97	U	<	3.05	4.07	U	<	2.98	3.97	U
8:2 FTS	<	3.00	4.00	U	<	3.00	4.00	U	<	3.05	4.07	U	<	3.13	4.17	U	<	2.98	3.97	U	<	3.05	4.07	U	<	2.98	3.97	U
NEIFOSAA	<	4.00	8.00	U	<	4.00	8.00	U	<	4.07	8.13	U	<	4.17	8.33	U	<	3.97	7.94	U	<	4.07	8.13	U	<	3.97	7.94	U
NMeFOSAA	<	4.00	8.00	U	<	4.00	8.00	U	<	4.07	8.13	U	<	4.17	8.33	U	<	3.97	7.94	U	<	4.07	8.13	U	<	3.97	7.94	U
PFBA	<	3.50	4.00	U	<	3.50	4.00	U	<	3.56	4.07	U	<	3.65	4.17	U	<	3.47	3.97	U	<	3.56	4.07	U	<	3.47	3.97	U
PFBS	<	2.00	4.00	U	<	2.00	4.00	U	<	2.03	4.07	U	<	2.08	4.17	U	<	1.98	3.97	U	<	2.03	4.07	U	<	1.98	3.97	U
PFDA	<	3.00	4.00	U	<	3.00	4.00	U	<	3.05	4.07	U	<	3.13	4.17	U	<	2.98	3.97	U	<	3.05	4.07	U	<	2.98	3.97	U
PFDoA	<	3.00	4.00	U	<	3.00	4.00	U	<	3.05	4.07	U	<	3.13	4.17	U	<	2.98	3.97	U	<	3.05	4.07	U	<	2.98	3.97	U
PFHpA	<	3.00	4.00	U	<	3.00	4.00	U	<	3.05	4.07	U	<	3.13	4.17	U	<	2.98	3.97	U	<	3.05	4.07	U	<	2.98	3.97	U
PFHxA	<	2.00	4.00	U	<	2.00	4.00	U	<	2.03	4.07	U	<	2.08	4.17	U	<	1.98	3.97	U	<	2.03	4.07	U	<	1.98	3.97	U
PFHxS	<	3.00	4.00	U	<	3.00	4.00	U	<	3.05	4.07	U	<	3.13	4.17	U	<	2.98	3.97	U	<	3.05	4.07	U	<	2.98	3.97	U
PFNA	<	2.00	4.00	U	<	2.00	4.00	U	<	2.03	4.07	U	<	2.08	4.17	U	<	1.98	3.97	U	<	2.03	4.07	U	<	1.98	3.97	U
PFOA	<	2.00	4.00	U	<	2.00	4.00	U	<	2.03	4.07	U	<	2.08	4.17	U	<	1.98	3.97	U	<	2.03	4.07	U	<	1.98	3.97	U
PFOS	<	2.00	4.00	U	<	2.00	4.00	U	<	2.03	4.07	U	<	2.08	4.17	U	<	1.98	3.97	U	<	2.03	4.07	U	<	1.98	3.97	U
PFPeA	<	2.00	4.00	U	<	2.00	4.00	U	<	2.03	4.07	U	<	2.08	4.17	U	<	1.98	3.97	U	<	2.03	4.07	U	<	1.98	3.97	U
PFTeDA	<	3.00	4.00	U	<	3.00	4.00	U	<	3.05	4.07	U	<	3.13	4.17	U	<	2.98	3.97	U	<	3.05	4.07	U	<	2.98	3.97	U
PFTrDA	<	3.00	4.00	U	<	3.00	4.00	U	<	3.05	4.07	U	<	3.13	4.17	U	<	2.98	3.97	U	<	3.05	4.07	U	<	2.98	3.97	U
PFUnDA	<	3.00	4.00	U	<	3.00	4.00	U	<	3.05	4.07	U	<	3.13	4.17	U	<	2.98	3.97	U	<	3.05	4.07	U	<	2.98	3.97	U

Interpreted Qualifiers

U = The analyte was not detected at a level greater than or equal to the adjusted DL

UJ = The analyte was not detected at a level greater than or equal to the adjusted DL. However, the reported adjusted DL is approximate and may be inaccurate or imprecise.

Chemical Abbreviations

6:2 FTS	6:2 fluorotelomer sulfonate
8:2 FTS	8:2 fluorotelomer sulfonate
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NMeFOSAA	N-methyl perfluorooctanesulfonamidoacetic acid
PFBA	perfluorobutanoic acid
PFBS	perfluorobutanesulfonic acid
PFDA	perfluorodecanoic acid
PFDoA	perfluorododecanoic acid
PFHpA	perfluoroheptanoic acid
PFHxA	perfluorohexanoic acid
PFHxS	perfluorohexanesulfonic acid
PFNA	perfluorononanoic acid
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
PFPeA	perfluoropentanoic acid
PFTeDA	perfluorotetradecanoic acid
PFTrDA	perfluorotridecanoic acid
PFUnDA	perfluoro-n-undecanoic acid

Acronyms and Abbreviations

AOI	Area of Interest
DL	detection limit
ERB	equipment rinseate blank
FRB	field reagent blank
ID	identification
LCMSMS	liquid chromatography with tandem mass spectrometry
LOD	limit of detection
LOQ	limit of quantitation
QC	quality control
QSM	Quality Systems Manual
Qual	interpreted qualifier
UTES	Unit Training and Equipment Site
WU	Waiawa Gulch Training Site and UTES
ng/l	nanogram per liter
<	analyte not detected above the LOD

**Appendix F Laboratory Data
Decontamination Water and Quality Control Samples
Site Inspection Report, Waiawa Gulch Training Site and UTES**

Area of Interest Sample ID Sample Date Analyte	FIELD QC																			
	WU-ERB-06				WU-ERB-07				WU-ERB-08				WU-FRB-01				WU-FRB-02			
	03/28/2022				04/05/2022				04/06/2022				03/21/2022				04/01/2022			
	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual
Water, LCMSMS compliant with QSM 5.3 Table B-15 (ng/l)																				
6:2 FTS	<	3.00	4.00	U	<	3.00	4.00	U	<	3.00	4.00	U	<	0.189	0.947	UJ	<	3.13	4.17	U
8:2 FTS	<	3.00	4.00	U	<	3.00	4.00	U	<	3.00	4.00	U	<	0.095	0.947	UJ	<	3.13	4.17	U
NEtFOSAA	<	4.00	8.00	U	<	4.00	8.00	U	<	4.00	8.00	U	<	0.095	0.947	UJ	<	4.17	8.33	U
NMeFOSAA	<	4.00	8.00	U	<	4.00	8.00	U	<	4.00	8.00	U	<	0.047	0.947	UJ	<	4.17	8.33	U
PFBA	<	3.50	4.00	U	<	3.50	4.00	U	<	3.50	4.00	U	<	0.095	0.947	UJ	<	3.65	4.17	U
PFBS	<	2.00	4.00	U	<	2.00	4.00	U	<	2.00	4.00	U	<	0.047	0.947	UJ	<	2.08	4.17	U
PFDA	<	3.00	4.00	U	<	3.00	4.00	U	<	3.00	4.00	U	<	0.095	0.947	UJ	<	3.13	4.17	U
PFDoA	<	3.00	4.00	U	<	3.00	4.00	U	<	3.00	4.00	U	<	0.047	0.947	UJ	<	3.13	4.17	U
PFHpA	<	3.00	4.00	U	<	3.00	4.00	U	<	3.00	4.00	U	<	0.047	0.947	UJ	<	3.13	4.17	U
PFHxA	<	2.00	4.00	U	<	2.00	4.00	U	<	2.00	4.00	U	<	0.047	0.947	UJ	<	2.08	4.17	U
PFHxS	<	3.00	4.00	U	<	3.00	4.00	U	<	3.00	4.00	U	<	0.095	0.947	UJ	<	3.13	4.17	U
PFNA	<	2.00	4.00	U	<	2.00	4.00	U	<	2.00	4.00	U	<	0.047	0.947	UJ	<	2.08	4.17	U
PFOA	<	2.00	4.00	U	<	2.00	4.00	U	<	2.00	4.00	U	<	0.189	0.947	UJ	<	2.08	4.17	U
PFOS	<	2.00	4.00	U	<	2.00	4.00	U	<	2.00	4.00	U	<	0.189	0.947	UJ	<	2.08	4.17	U
PFPeA	<	2.00	4.00	U	<	2.00	4.00	U	<	2.00	4.00	U	<	0.047	0.947	UJ	<	2.08	4.17	U
PFTeDA	<	3.00	4.00	U	<	3.00	4.00	U	<	3.00	4.00	U	<	0.047	0.947	UJ	<	3.13	4.17	U
PFTrDA	<	3.00	4.00	U	<	3.00	4.00	U	<	3.00	4.00	U	<	0.095	0.947	UJ	<	3.13	4.17	U
PFUnDA	<	3.00	4.00	U	<	3.00	4.00	U	<	3.00	4.00	U	<	0.047	0.947	UJ	<	3.13	4.17	U

Interpreted Qualifiers

U = The analyte was not detected at a level greater than or equal to the adjusted DL

UJ = The analyte was not detected at a level greater than or equal to the adjusted DL. However, the reported adjusted DL is approximate and may be inaccurate or imprecise.

Chemical Abbreviations

6:2 FTS	6:2 fluorotelomer sulfonate
8:2 FTS	8:2 fluorotelomer sulfonate
NEtFOSAA	N-ethyl perfluorooctane- sulfonamidoacetic acid
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PFBA	perfluorobutanoic acid
PFBS	perfluorobutanesulfonic acid
PFDA	perfluorodecanoic acid
PFDoA	perfluorododecanoic acid
PFHpA	perfluoroheptanoic acid
PFHxA	perfluorohexanoic acid
PFHxS	perfluorohexanesulfonic acid
PFNA	perfluorononanoic acid
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
PFPeA	perfluoropentanoic acid
PFTeDA	perfluorotetradecanoic acid
PFTrDA	perfluorotridecanoic acid
PFUnDA	perfluoro-n-undecanoic acid

Acronyms and Abbreviations

AOI	Area of Interest
DL	detection limit
ERB	equipment rinseate blank
FRB	field reagent blank
ID	identification
LCMSMS	liquid chromatography with tandem mass spectrometry
LOD	limit of detection
LOQ	limit of quantitation
QC	quality control
QSM	Quality Systems Manual
Qual	interpreted qualifier
UTES	Unit Training and Equipment Site
WU	Waiawa Gulch Training Site and UTES
ng/l	nanogram per liter
<	analyte not detected above the LOD

Appendix F Laboratory Data
TOC and pH
Site Inspection Report, Waiawa Gulch Training Site and UTES

Area of Interest	AOI01				AOI02							
	Sample ID				Sample ID				Sample ID			
Sample Date	03/28/2022				03/24/2022				03/24/2022			
Depth	0-1 ft				14.5-16.5 ft				14.5-16.5 ft			
Analyte	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual
pH	8.10	1.00	1.00	J	7.98	1.00	1.00	J	-	-	-	-
Total Organic Carbon (mg/kg)	6290	350	500		176	350	500	J	346	350	500	J

Acronyms and Abbreviations

AOI Area of Interest
D duplicate
ft feet
ID identification
LOD limit of detection
LOQ limit of quantitation
Qual interpreted qualifier
mg/kg milligram per kilogram
SB soil boring
TOC total organic carbon
UTES Unit Training and Equipment Site
- not applicable

Interpreted Qualifiers

J = Estimated concentration

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Appendix G

Laboratory Reports

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Due to file size, laboratory reports are provided electronically (CD) or can be requested.

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