NORTH Dakota | Environmental Quality
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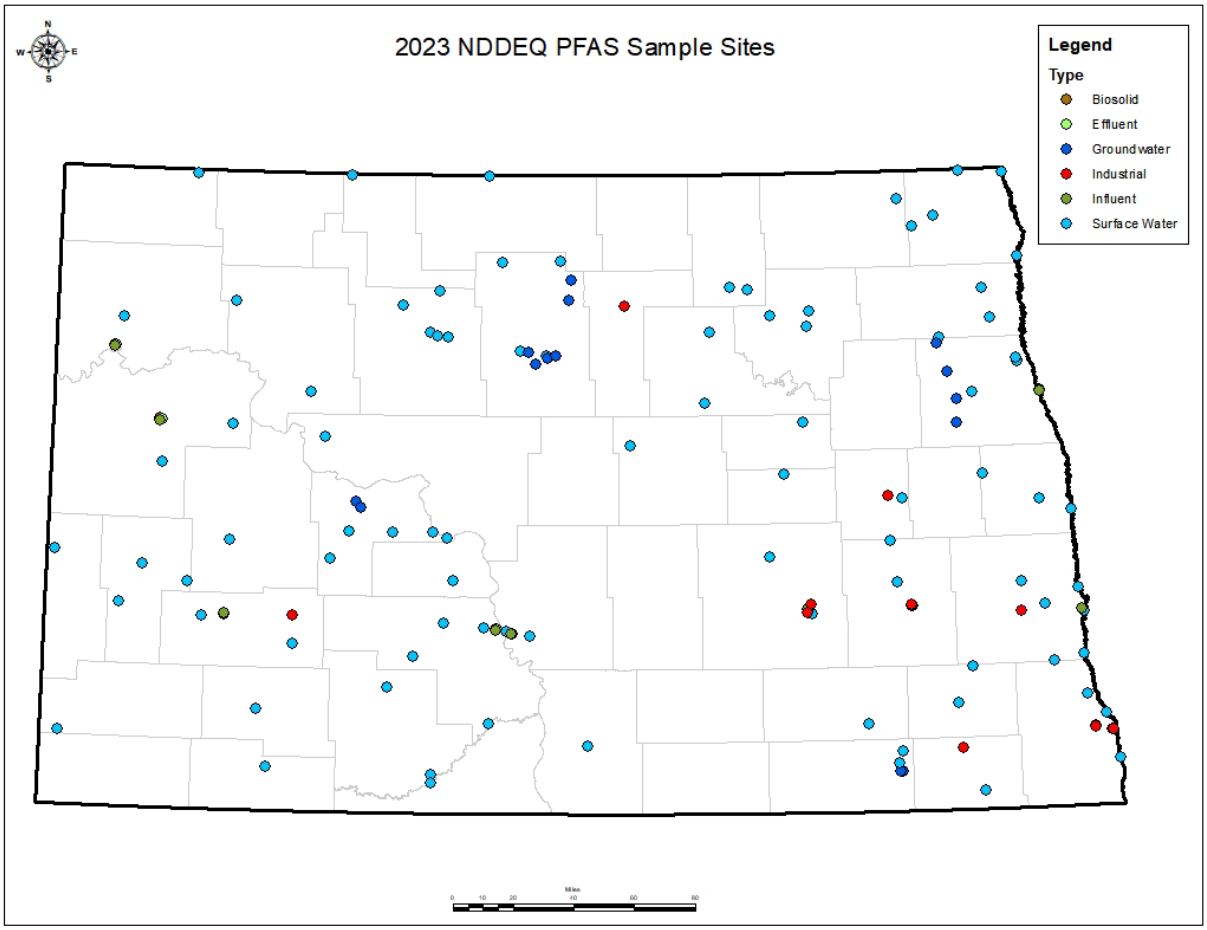
North Dakota Statewide 2023 Per- and Polyfluoroalkyl Substances (PFAS) Presence/Absence Survey



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Abbreviations and Acronyms

Aqueous Film Forming Foam	AFFF
Fifth Unregulated Contaminated Monitoring Rule	UCMR5
Health Advisory Level	HAL
Interstate Technology Regulatory Council	ITRC
Maximum Contaminant Level	MCL
Nanograms per liter	ng/l
North Dakota Department of Environmental Quality	NDDEQ
Parts Per Trillion	ppt
Per -and Polyfluoroalkyl Substances	PFAS
Quality Assurance/Quality Control	QA/QC
U.S Environmental Protection Agency	EPA

Executive Summary

The North Dakota Department of Environmental Quality (NDDEQ) created a workgroup in 2018 tasked with conducting baseline assessments to determine the presence/absence of Per- and Polyfluoroalkyl Substances (PFAS) in North Dakota. Further assessments were completed in 2020, 2021 and 2022. The 2023 assessment survey continues this study with additional sampling across the media listed below. For comparison purposes all aqueous samples will be assessed against the EPA's maximum contaminant levels for drinking water established in April 2024.

AMBIENT SURFACE WATER SAMPLES

Ambient surface water samples were collected across the state from sources including rivers, lakes, and dams. PFAS chemicals were detected in a majority of the samples with common detections including PFOA, PFHxA, PFPeA, and PFHpA. However, only six (6) samples exceeded the EPA's maximum contaminant levels for drinking water established in April 2024. The exceedances were of PFOA.

FISH TISSUE SAMPLES

Fish samples were collected from two areas in Lake Sakakawea. Whole fish analysis was selected for this assessment. PFAS chemicals were detected in all fish tissue samples. PFOS was a commonly detected. There are no PFAS federal, or state regulatory levels established for fish tissue.

LANDFILL AND INDUSTRIAL SAMPLES

Aqueous samples were collected from fourteen (14) industrial sites and seven (7) landfill sites. Soil samples were collected from two industrial sites. The industrial sampling sites, landfill leachate, and soil samples had detections of PFAS chemicals. Aqueous sample common detections were PFOS, PFOA, PFBS, and PFHxA. Only one aqueous sample exceeded the EPA's maximum contaminant levels for drinking water established in April 2024. The exceedance was PFOS. Two (2) leachate samples exceeded the EPA's maximum contaminant levels for drinking water established in April 2024. The leachate exceedances were in PFOS, PFOA and the Hazard Index of 1. The two (2) soil samples had minor detections of PFOS. There are no PFAS federal, or state regulatory levels established for soil.

AMBIENT GROUNDWATER SAMPLES

Ambient groundwater samples were collected from five aquifers across the state. PFAS chemicals were detected in three (3) samples. PFHxA was the most common analyte detected in all three samples. No samples exceeded the EPA's maximum contaminant levels established in April 2024.

WASTEWATER TREATMENT PLANT SAMPLES

Samples were collected from seven (7) wastewater treatment plants. The samples included influent, effluent, and biosolids. The samples had detections of PFAS chemicals with some aqueous samples exceeding the EPA's maximum contaminant levels for drinking water established in April 2024. There are no PFAS federal, or North Dakota state regulatory levels established for biosolids.

NON-POTABLE FIELD AND EQUIPMENT BLANK SAMPLES

Quality assurance field and equipment blank samples were collected to ensure quality control for non-potable water samples. Laboratory analytical results show no detections, indicating that there were no field or equipment cross-contamination issues during the sample collection and transport processes.

1.0 Introduction

Per- and Polyfluoroalkyl Substances (PFAS) are a group of chemicals that have been manufactured and used in a variety of industries in the United States since the 1940s. These chemicals have been shown to be persistent in the environment and the human body. The North Dakota Department of Environmental Quality (NDDEQ) created a workgroup in 2018 tasked with conducting a baseline survey to determine the presence/absence of Per- and Polyfluoroalkyl Substances (PFAS) in North Dakota. The first survey was completed in 2018 and focused on landfills, drinking water treatment plants, wastewater treatment plants, and fire training areas. Since 2018, the NDDEQ PFAS workgroup has published a number of surveys, expanding assessments into ambient groundwater, ambient surface water, biosolids, industrial facilities and fish tissue. These surveys are available on the NDDEQ website at https://deq.nd.gov/MF/PFAS/.

1.1 Background

PFAS are a large, complex group of manufactured fluorinated organic compounds that were discovered in 1938 and have been mass produced since 1947 (Prevedouros et al, 2006; Griffith, 2017). More than 6,000 PFAS compounds are known to exist, although not all are in current use or production. PFAS are made when the hydrogen ions on a carbon chain are either completely or partially replaced with fluorine ions, resulting in a carbon-fluorine bond that makes these compounds resistant to most degradation processes including microorganisms, direct light, atmospheric photo-oxidation, and hydrolysis (Haley Aldrich, 2018).

PFAS compounds have become essential in a variety of industries due to their useful and unique properties. They are chemically stable, reduce surface tension to a much lower state than other surfactants, repel water and oil, possess friction-reducing properties, and function in environments where other products would degrade (3M, 1999). These properties have given rise to a variety of industrial and commercial products that are resistant to oil, grease, water, soil, and stains. The PFAS compounds are used in effective firefighting foams, metal plating and coating formulations, polyurethane production, inks, varnishes, and lubricants (3M, 1999; Prevedouros et al, 2006). Additionally, they are considered vital in the aviation, mining and gas, photographic imaging, semiconductor, automotive, construction, and electronics industries (ITRC, 2023).

2.0 Survey

The NDDEQ assembled a workgroup with the purpose of determining whether or not PFAS are present in North Dakota. Research conducted by federal, state, and private entities has shown that PFAS contamination is likely found in landfills, drinking water treatment plants, wastewater treatment plants, industrial areas, military bases, and firefighting training areas.

Commercial and industrial products that contain PFAS or are the result of PFAS production often end up in landfills. As the products break down, the compounds will slowly work their way through the soil until they are dissolved in water and transported to a leachate pond or into the underlying groundwater.

Wastewater treatment plants tend to contain elevated levels of PFAS compounds that are the result of discharges from landfills, firefighting activities, and manufacturing/

industrial facilities. Nearly half of the sludge produced by wastewater treatment plants is applied as a biosolid to agricultural land. If the effluent contains PFAS, the biosolid will potentially contain PFAS as well. Research has shown that land treated with PFAS-impacted biosolids for an extended time period can result in elevated concentrations in the adjacent groundwater and surface water (ITRC, 2023).

Aqueous film forming foam (AFFF) is a PFAS-based foam developed in the 1960s and used by both military and civilian firefighting departments to extinguish fires at military bases, airports, refineries, and firefighting training facilities. While the use of AFFF is transitioning out with alternative foams, many entities still have it on hand for emergency use and training purposes. However, best management practices for their use and evaluations for the use of alternative PFAS-free foams have become practice since 2001 (Antea Group, 2018; ITRC, 2023).

2.1 Site Selection

Landfills were selected based on the type of landfill, waste accepted, and age.

Industrial sites were selected based on their processes and for the potential of those processes to utilize PFAS chemicals.

Wastewater treatment plants were selected based on facilities that serve a large population (greater than 20,000), may accept landfill leachate as part of the influent, and process biosolids.

Ambient groundwater sampling sites were selected based on availability of monitoring wells located near industrial processes or areas with potential PFAS generating activities.

Ambient surface water sampling sites were selected to collect a representative sample set across streams, rivers, dams and lakes spatially across North Dakota.

Due to limited fish tissue sample collection, two sites within Lake Sakakawea were selected due to the large recreational activity associated with the lake.

Table 1 lists the sample's identification, location, and type of sample collected.

Table 1: PFAS Sample Identification

Sample ID	Location	Sample Type
Mandan WWTP	Mandan City of	Biosolids
Grand Forks WWTP	Grand Forks City of	Biosolids
Dickinson WWTP	Dickinson City of	Biosolids
Bismarck WWTP	Bismarck City of	Biosolids
Fargo WWTP	Fargo City of	Biosolids
Jamestown WWTP	Jamestown City of	Biosolids
Watford City WWTP	Watford City City of	Biosolids
Mandan WWTP (Effluent)	Mandan City of	Effluent
Grand Forks WWTP (Effluent)	Grand Forks City of	Effluent
Dickinson WWTP (Effluent)	Dickinson City of	Effluent
Bismarck WWTP (Effluent)	Bismarck City of	Effluent
Fargo WWTP (Effluent)	Fargo City of	Effluent
Jamestown WWTP (Effluent)	Jamestown City of	Effluent
Watford City WWTP (Effluent)	Watford City City of	Effluent
Douglas Creek Bay	Douglas Creek Bay-Sakakawea Walleye	Fish Tissue
Lake Sakakawea	Lake Sakakawea-Smelt	Fish Tissue
5D Well	PDI Well 5D	Groundwater
Marathon	Marathon	Groundwater
Flying JL	Flying J	Groundwater
Flying JU	Flying J	Groundwater
Flying JB	Flying J	Groundwater
OML LW2	Minot Landfill 2	Groundwater
Elk Valley 1	Elk Valley Aquifer	Groundwater
Elk Valley 2	Elk Valley Aquifer	Groundwater
Elk Valley 3	Elk Valley Aquifer	Groundwater
Elk Valley 4	Elk Valley Aquifer	Groundwater
Karlsruhe 1	Karlsruhe Aquifer	Groundwater
Karlsruhe 2	Karlsruhe Aquifer	Groundwater
Karlsruhe 3	Karlsruhe Aquifer	Groundwater
Lake Souris 1	Lake Souris Aquifer	Groundwater
Lake Souris 2	Lake Souris Aquifer	Groundwater
Lake Souris 3	Lake Souris Aquifer	Groundwater
14608827CCD3	DGC	Groundwater
14508811ABA2	DGC	Groundwater
Oakes East	Oakes Aquifer-13105928DCC	Groundwater
Oakes West	Oakes Aquifer-13105929DCD2	Groundwater
North Valley 1	North Valley Aquifer	Groundwater
North Valley 2	North Valley Aquifer	Groundwater

Sample ID	Location	Sample Type
Mandan WWTP (Influent)	Mandan City of	Influent
Grand Forks WWTP (Influent)	Grand Forks City of	Influent
Dickinson WWTP (Influent)	Dickinson City of	Influent
Bismarck WWTP (Influent)	Bismarck City of	Influent
Fargo WWTP (Influent)	Fargo City of	Influent
Jamestown WWTP (Influent)	Jamestown City of	Influent
Watford City WWTP (Influent)	Watford City City of	Influent
Industrial Plating	Wahpeton Industrial Plating	Soil
Red River Supply	Red River Supply	Soil
NDDEQ 385055	Bois de Sioux River near Doran, MN	Surface Water
NDDEQ 380083	Red River at Brushville, MN	Surface Water
NDDEQ 380009	Sheyenne River near Cooperstown, ND	Surface Water
NDDEQ 380153	Sheyenne River below Baldhill Dam, ND	Surface Water
NDDEQ 385169	Sheyenne River at Lisbon, ND	Surface Water
NDDEQ 380022	Little Missouri River at Medora, ND	Surface Water
NDDEQ 380059	Little Missouri River nr Watford City, ND	Surface Water
NDDEQ 384131	Knife River nr Golden Valley, ND	Surface Water
NDDEQ 380087	Knife River at Hazen, ND	Surface Water
NDDEQ 380160	Heart River nr Richardton, ND	Surface Water
NDDEQ 380151	Heart River nr Mandan, ND	Surface Water
NDDEQ 380105	Cannonball River nr Raleigh, ND	Surface Water
NDDEQ 380077	Cedar Creek nr Raleigh, ND	Surface Water
NDDEQ 380067	Cannonball River at Breien, ND	Surface Water
NDDEQ 384130	James River nr Grace City, ND	Surface Water
NDDEQ 380013	James River at Jamestown, ND	Surface Water
NDDEQ 380012	James River at Lamoure, ND	Surface Water
NDDEQ 553265	Ash Coulee	Surface Water
Larimore Dam	Larimore Dam (Grand Forks Co)	Surface Water
Renwick	Lake Renwick (Pembina Co)	Surface Water
East Devils Lake	380235 East Devils Lake	Surface Water
West Bay Devils Lake	380236 West Bay Devils Lake	Surface Water
Pelican Lake	Pelican Lake	Surface Water
Homme Dam	Homme Dam (Walsh Co)	Surface Water
Bowman-Haley Dam	Bowman-Haley Dam (Bowman Co)	Surface Water
Patterson Lake	Patterson Lake (Stark Co)	Surface Water
380950-Tschida-Deepest	Lake Tschida (Grant Co)	Surface Water
Crystal Springs Public Boat Ramp	Crystal Springs (Kidder Co)	Surface Water
380840-Nelson Lake-Deepest	Nelson Lake (Oliver Co)	Surface Water

Sample ID	Location	Sample Type
380630 Mirror Lake	Mirror Lake	Surface Water
380860 Opland Dam	Opland Dam	Surface Water
Lake Metigoshe 1	Lake Metigoshe	Surface Water
Lake Metigoshe 2	Lake Metigoshe	Surface Water
Oakes North	Bear Creek	Surface Water
Souris Valley 1	Souris River	Surface Water
Souris River 2	Souris River	Surface Water
MAFB North	Egg Creek	Surface Water
Stanton 1	Missouri River near Stanton	Surface Water
Stanton East	Missouri River near Stanton	Surface Water
Cavalier	Tongue River near Cavalier ASF	Surface Water
Turtle River North Manvel	Turtle River North Manvel	Surface Water
380037 Turtle River	Turtle River 380037	Surface Water
Turtle River South Manvel	Turtle River South Manvel	Surface Water
Turtle River State Park	Turtle River at State Park near Arvilla	Surface Water
ABU Trailers	ABU Trailers Inc	Wastewater
Amber Waves	Amber Waves Inc	Wastewater
Bobcat Gwinner	Bobcat Company Gwinner Manufacturing	Wastewater
Bobcat Cylinders	Bobcat Cylinders	Wastewater
ComDel	ComDel Innovation	Wastewater
Goodrich	Goodrich formerly UTC Aero Space Systems	Wastewater
Goodrich 2	Goodrich formerly UTC Aero Space Systems	Wastewater
Heartland	Heartland Precision LLC	Wastewater
John Deere	John Deere Seeding Group	Wastewater
Malach USA	Malach USA	Wastewater
Newman Signs	Newman Signs Inc	Wastewater
Northern Plains Finishing	Northern Plains Finishing	Wastewater
Rugby Manufacturing	Rugby Manufacturing Co	Wastewater
Sheyenne Tooling	Sheyenne Tooling and Mfg Co	Wastewater
Tri W-G	Tri W G Inc	Wastewater
S2 Leachate Pond	PDI S2 Leachate Pond	Wastewater

2.2 Sample Procedures

The prevalence of PFAS chemicals in most everyday items coupled with the low method detection limits used by laboratories makes sampling protocols for PFAS necessarily stringent.

PFAS-free disposable equipment is used for sampling to mitigate cross-contamination between sampling sites. Sample bottles and coolers are provided by the contracted laboratory. Samplers wore field clothes that did not contain Tyvek, Gore-Tex, or similar material. Nitrile gloves are worn when sampling, and sampling procedures outlined in the *North Dakota PFAS Sampling Project 2023 Field Sampling Plan (NDDEQ, 2023)* are followed.

Samples from landfills were collected from leachate pond monitoring wells using a disposable bailer and 100% cotton twine.

Samples from industrial sites were collected at compliance points through direct grab samples.

Influent and effluent samples from wastewater treatment plants were collected at permitted compliance points.

Biosolid samples that were liquified were collected from the designated compliance point. Solid biosolid sample collection was done using a stainless-steel spade.

Monitoring wells were sampled using disposable bailers and 100% cotton twine. The well volume method was used, and water quality meters were used to collect pH, specific conductivity, and temperature measurements in between purges.

Surface water samples were collected by direct grab samples.

Fish tissue samples were collected using a trap netting.

Sampling and standard operating procedures can be found in the *North Dakota PFAS Sampling Project 2023 Field Sampling Plan (NDDEQ, 2023)*.

2.3 Sample Analysis

SGS North America laboratory performed PFAS analysis using EPA Draft Method 1633, which analyzes 40 PFAS chemicals. This method is approved for aqueous, solid (soil, biosolids, sediment) and tissue samples. EPA Draft Method 1633 was finalized in

January 2024. PFAS samples are analyzed in parts per trillion (ppt) using liquid chromatography with tandem mass spectrometry. Table 4 shows the PFAS analyte list for EPA Method 1633.

3.0 Quality Assurance/Quality Control

Quality assurance/quality control (QA/QC) procedures were established to ensure that project objectives were met for those who would use the data. The main purpose of a QA/QC plan is to maintain a high level of quality for field activities to ensure that the collected data is representative of current conditions. The QA/QC plan details procedures for field equipment calibration, data collection, record retention, sample collection, handling, custody, and the collection of duplicate and blank samples. These procedures were implemented to minimize the chance of cross-contamination and/or background contamination, and to ensure sample validity by documenting sample custody from the time of collection until arrival at the laboratory. Detailed procedures can be found in the *Quality Assurance Project Plan for the North Dakota PFAS Sampling Project 2021* (NDDEQ, 2023).

4.0 Results

One hundred and seventy-nine samples, including primary, duplicate, and blank samples, were collected, and analyzed from sample sites including: surface water, groundwater, wastewater, biosolids and fish tissue. Table 2 lists the total number of primary, duplicate, and blank samples collected. Table 3 breaks down the total number of samples collected at each type of sample site.

Table 2: Samples by Type

Sample Type	# of Samples
Primary	158
Duplicate	11
Field Blank	7
Equipment Blank	2

Table 3: Samples By Site Type

Sample Site	# of Samples
Ambient Surface Water	65
Whole Fish Tissue	32
Industrial	21

Ambient Groundwater	16
Wastewater Treatment	14
Biosolids	7
Landfill	3

Table 4: EPA Method 1633 Analyte List

EPA Method 1633 Analyte List (40 Analytes)		Aqueous (ng/L)*		Soild (ng/g)*		Tissue (ng/g)*		Regulatory Level
Analyte Description	CAS Number	MDL[1]	ML[2]	MDL	ML	MDL	ML	MCL
Perfluorobutanoic acid (PFBA)	375-22-4	0.80	2.0	0.40	0.8	0.59	2.0	NE[4]
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.53	2.0	0.02	0.4	0.08	1.0	NE[4]
Perfluorohexanoic acid (PFHxA)	307-24-4	0.48	2.0	0.02	0.2	0.10	0.5	NE[4]
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.39	2.0	0.03	0.2	0.09	0.5	NE[4]
Perfluorooctanoic acid (PFOA)	335-67-1	0.55	2.0	0.04	0.2	0.09	0.5	4.0 ng/L[3]
Perfluorodecanoic acid (PFDA)	335-76-2	0.53	2.0	0.03	0.2	0.12	0.5	NE[4]
Perfluoroundecanoic acid (PFUnA)	2058-94-8	0.44	2.0	0.03	0.2	0.15	0.5	NE[4]
Perfluorododecanoic acid (PFDoA)	307-55-1	0.37	2.0	0.06	0.2	0.13	0.5	NE[4]
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.46	2.0	0.04	0.2	0.09	0.5	NE[4]
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.51	2.0	0.03	0.2	0.19	0.5	NE[4]
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	0.53	2.0	0.02	0.2	0.03	0.5	NE[4]
Perfluorononanoic acid (PFNA)	375-95-1	0.46	2.0	0.09	0.2	0.16	0.5	10 ng/L[3]
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	0.56	2.0	0.02	0.2	0.08	0.5	10 ng/L[3]
Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.37	2.0	0.01	0.2	0.07	0.5	NE[4]
HFPO-DA (GenX)	13252-13-6	1.54	5.0	0.14	0.8	0.16	2.0	10 ng/L[3]
Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	0.87	2.0	0.06	0.2	0.04	0.5	NE[4]
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	0.64	2.0	0.07	0.2	0.29	0.5	4.0 ng/L[3]
Perfluorononanesulfonic acid (PFNS)	68259-12-1	0.49	2.0	0.05	0.2	0.11	0.5	NE[4]
Perfluorodecanesulfonic acid (PFDS)	335-77-3	0.90	2.0	0.04	0.2	0.10	0.5	NE[4]
Perfluorododecanesulfonic acid (PFDoS)	79780-39-5	0.64	2.0	0.04	0.2	0.18	0.5	NE[4]
Perfluorooctanesulfonamide (PFOSA)	754-91-6	0.32	2.0	0.07	0.2	0.09	0.5	NE[4]
NMeFOSAA	2355-31-9	1.04	2.0	0.03	0.2	0.09	0.5	NE[4]
NEtFOSAA	2991-50-6	0.80	2.0	0.04	0.2	0.14	0.5	NE[4]
4:2 FTS	757124-72-4	1.74	5.0	0.28	0.8	0.74	0.5	NE[4]
6:2 FTS	27619-97-2	2.52	10.0	0.12	0.8	1.15	0.5	NE[4]
8:2 FTS	39108-34-4	2.58	10.0	0.23	0.8	0.37	0.5	NE[4]
NEtFOSA	4151-50-2	0.43	2.0	0.04	0.2	0.17	0.5	NE[4]
NMeFOSA	31506-32-8	0.41	2.0	0.05	0.2	0.16	0.5	NE[4]
NMeFOSE	24448-09-7	3.93	10.0	0.20	2.0	9.98	5.0	NE[4]
NEtFOSE	1691-99-2	5.13	20.0	0.25	2.0	1.50	5.0	NE[4]
9Cl-PF3ONS	756426-58-1	1.42	5.0	0.04	0.8	0.15	2.0	NE[4]
11Cl-PF3OUdS	763051-92-9	1.78	5.0	0.07	0.8	0.31	2.0	NE[4]
ADONA	919005-14-4	1.47	5.0	0.06	0.8	0.08	2.0	NE[4]
3:3 FTCA	356-02-5	2.54	10.0	0.06	1.0	0.25	2.5	NE[4]
5:3 FTCA	914637-49-3	9.92	20.0	0.36	5.0	1.54	12.5	NE[4]
7:3 FTCA	812-70-4	9.14	20.0	0.31	5.0	0.85	12.5	NE[4]
NFDHA	151772-58-6	1.92	5.0	0.08	0.4	0.29	1.0	NE[4]
PFMBA	863090-89-5	0.53	2.0	0.03	0.4	0.07	1.0	NE[4]
PFMPA	377-73-1	0.54	2.0	0.03	0.4	0.07	1.0	NE[4]
PFEESA	113507-82-7	0.79	2.0	0.02	0.4	0.05	1.0	NE[4]
Perfluorononanoic acid (PFNA)	375-95-1	0.46	2.0	0.09	0.2	0.16	0.5	Hazard Index = 1 (unitless) Mixtures containing two or more.
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	0.56	2.0	0.02	0.2	0.08	0.5	
Perfluorobutanesulfonic acid (PFBS)	375-73-5	0.37	2.0	0.01	0.2	0.07	0.5	
HFPO-DA (GenX)	13252-13-6	1.54	5.0	0.14	0.8	0.16	2.0	

[1]Method Detection Limit [2]Minimum level of quantification [3]EPA Health Action Level or EPA Maximum Contaminant Level

[4]Not Established * nanograms per liter or nanograms per gram

4.1 Ambient Surface Water Results

Sixty-five (65) samples were collected from surface water sites across the state. A variety of rivers, lakes and streams were sampled to determine presence/absence of PFAS chemicals. Fifty-two (52) of samples analyzed contained PFAS analytes. The most commonly detected analytes are shown in Figure 1. Six (6) samples exceeded MCLs for PFOA, PFOS and the Hazard Index mixture (PFNA, PFHxS, PFBS and HFPO-DA). The most commonly exceeded Hazard Index chemical was PFHxS.

Analytical detections are in Table 5. Complete laboratory results are provided in Appendix A.

Figure 1: Surface Water Common PFAS Detects

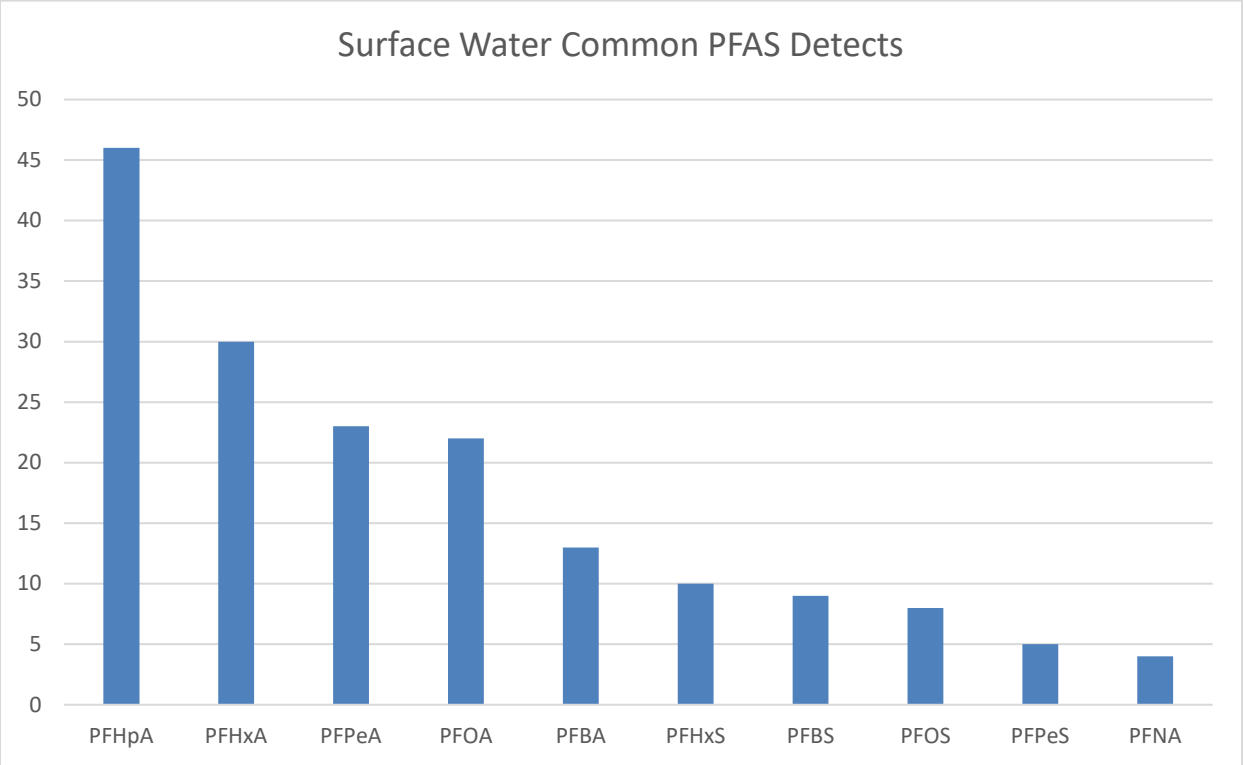


Table 5: Surface Water PFAS Analytical Detections

Regulatory Level		Hazard Index*					MCL*	PFNA/10 MCL*		PFHxS/10 MCL*	PFBS/2000	HFPO-DA(Genx)/10	MCL*
		1					4 ng/L	10 ng/L		10 ng/L			4 ng/L
Site ID	Unit	HI Exceedence	PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFPeS	PFHxS	PFBS	HFPO-DA (GenX)	PFOS
380087	ng/L	0.000				0.740							
380059	ng/L	0.000	11.500			1.000							
380022	ng/L	0.000	14.900		1.100	1.400							
380160	ng/L	0.000		12.800	3.800	1.400	1.000						
380151	ng/L	0.000				1.200							
380013	ng/L	0.000	5.900			0.980							
389999	ng/L	0.000	10.400			0.810							
380012	ng/L	0.000	9.800			0.790	0.920						
385169	ng/L	0.000				0.690							
385055	ng/L	0.000				1.300	1.200						
380083	ng/L	0.000	9.100		1.100	0.840							
380009	ng/L	0.000					1.100						
384130	ng/L	0.000	10.000			0.810	0.850						
389999	ng/L	0.000	10.400			0.810							
380037 Turtle River	ng/L	2.479		15.000	14.000	5.100	5.000		3.200	22.300	3.400		9.400
Renwick	ng/L	0.000			0.760								
MAFB North	ng/L	0.223	14.000		1.200	1.200				2.000	1.700		2.400
MAFB North Dupe	ng/L	0.256			1.300	1.200	1.100			2.300	1.600		2.800
380013	ng/L	0.000				1.100							
380012	ng/L	0.000		1.100		1.200	1.100						
385169	ng/L	0.000				1.100							
385055	ng/L	0.000		3.300									
380083	ng/L	0.000			2.100								
380153	ng/L	0.000		1.300									
380009	ng/L	0.000		2.000	1.700	1.600							
384130	ng/L	0.000		1.800		1.500							
Souris Valley 1	ng/L	0.000			1.500	2.000	1.200						
Souris River 2	ng/L	0.000		4.800	1.600	2.000	1.400						
Oakes North	ng/L	0.000		5.900	1.000	1.800							
Lake Metigoshe 1	ng/L	0.086			1.600	2.400	2.500	0.860					
Lake Metigoshe 2	ng/L	0.000		1.600	1.500	2.200	2.500						
Patterson Lake	ng/L	0.000		1.300	1.000	1.200							
Patterson Lake Dupe	ng/L	0.000				1.400							
Opland Dam	ng/L	0.001			2.200	1.400	1.900				1.100		
Bowman-Haley Dam	ng/L	0.000			1.400	2.000							
Mirror Lake	ng/L	0.000				1.200							
Tschida-Deepest	ng/L	0.000		2.100	1.300	1.200							
Nelson Lake-Deepest	ng/L	0.000			1.600	1.900							
380077	ng/L	0.000			1.000	1.100							
380059	ng/L	0.000		1.800	0.730	1.100							
380022	ng/L	0.000		1.900		1.600							
380160	ng/L	0.001		5.800	3.400	1.300	1.700				1.100		
380151	ng/L	0.000		1.800									
East Devils Lalke	ng/L	0.209		2.400	2.600	2.000	1.500	1.000		0.980			
West Bay Devils Lake	ng/L	0.111	42.200	2.000	2.800	2.700	1.600			1.000			
Pelican Lake	ng/L	0.000	59.000		2.000	2.600	1.300						
Cavalier	ng/L	1.611		5.700	3.600	2.200	4.100			14.500			1.900
Turtle River South Manvel	ng/L	2.312		15.100	10.500	5.700	4.800		2.500	20.800	2.600		12.600
Turtle River 380037	ng/L	2.840	8.100	18.400	13.900	6.700	5.700	0.720	3.700	24.900	3.200		13.100
Duplicate Turtle 380037	ng/L	2.788		19.100	13.700	6.400	6.000	0.860	3.400	24.300	3.200		16.400
Turtle River North Manvel	ng/L	3.569	8.900	21.900	16.800	8.400	6.500		4.500	32.100	4.000		13.500
Crystal Springs Boat Ramp	ng/L	0.000				0.690							

*** EPA Regulatory Levels Established for Drinking Water**

4.2 Whole Fish Tissue Results

Thirty-two (32) whole fish tissue samples were collected from two locations in Lake Sakakawea. Sixteen (16) Walleye samples were collected from Douglas Creek Bay and sixteen (16) Smelt samples were collected from Lake Sakakawea. Fish were analyzed using a whole fish tissue method.

PFAS analytes were detected in nine of the samples and in all four aquifers sampled. The most commonly detected analyte was PFBA.

Figure 2 shows the most commonly detected PFAS analytes found in the whole fish tissue samples. Analytical detections are in Table 6. Complete analytical laboratory results can be found in Appendix A.

Figure 2: Whole Fish Tissue Common PFAS Detects

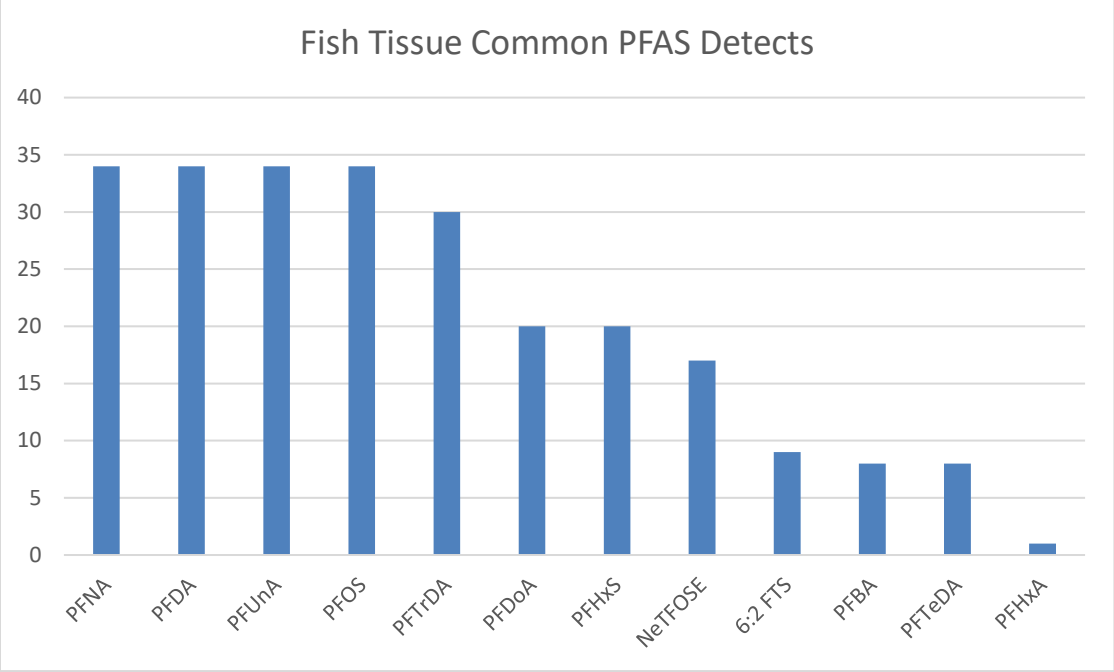


Table 6: Whole Fish Tissue PFAS Analytical Detections

Regulatory Level						PFNA/10						PFHxS/10	PFBS/2000	HFPO-DA (GenX)/10			
		Hazard Index*			MCL*	MCL*						MCL*			MCL*		
		1			4 ng/L	10 ng/L						10 ng/L			4 ng/L		
Site ID	Unit	HI Exceedence	PFBA	PFHxA	PFOA	PFNA	PFDA	PFUnA	PFDoA	PFTrDA	PFTeDA	PFHxS	PFBS	HFPO-DA (GenX)	PFOS	6:2 FTS	NEtFOSE
DCB23-21	ng/g	0.179				1.530	1.010	0.753	0.141	0.357	0.105	0.230			11.900	0.375	
DCB23-10	ng/g	0.102	1.450			0.812	0.439	0.326	0.076	0.175		0.190			5.020	0.634	
DCB23-10-D	ng/g	0.098	0.716			0.723	0.381	0.320	0.083	0.165		0.227			4.890	0.537	
DCB23-1	ng/g	0.149	1.390			1.240	0.928	0.665	0.141	0.427		0.228			8.920	0.461	
DCB23-9	ng/g	0.099				0.791	0.862	0.703	0.122	0.373		0.180			8.500	0.325	0.887
DCB23-7	ng/g	0.139				1.150	0.985	0.677	0.153	0.153	0.093	0.214			9.620		1.900
DCB23-14	ng/g	0.151				1.190	0.929	0.700	0.140	0.359	0.082	0.287			9.950		6.930
DCB23-3	ng/g	0.149				1.170	0.841	0.641	0.146	0.300		0.287			8.000		
DCB23-12	ng/g	0.139				1.170	0.905	0.629	0.170	0.358	0.096	0.197			10.300		1.260
DCB23-13	ng/g	0.092	1.210			0.679	0.355	0.291	0.070	0.122		0.219			4.380		
DCB23-4	ng/g	0.121				0.962	0.682	0.598	0.138	0.303	0.075	0.227			6.790		0.993
DCB23-2	ng/g	0.074				0.521	0.372	0.355	0.078	0.182		0.199			4.430		3.530
DCB23-5	ng/g	0.130				1.060	1.070	0.754	0.161	0.355		0.212			9.960		1.030
DCB23-6	ng/g	0.167	1.610			1.350	1.100	0.853	0.197	0.452	0.098	0.288			10.500		
DCB23-15	ng/g	0.156	0.918	0.172		1.310	0.962	0.752	0.164	0.328	0.109	0.229			11.200		
DCB23-8	ng/g	0.146	0.347			1.170	0.910	0.733	0.182	0.447	0.094	0.258			9.290	0.362	6.030
DCB23-11	ng/g	0.150	0.872			1.240	1.060	0.712	0.166	0.368		0.233			9.390	0.388	5.590
LS1	ng/g	0.063				0.630	0.250	0.174							2.880		
LS2	ng/g	0.078				0.779	0.486	0.349	0.111	0.167					3.790		2.030
LS3	ng/g	0.044				0.439	0.177	0.136		0.106					1.950		
LS4	ng/g	0.091				0.907	0.302	0.153		0.133					3.100		2.450
LS5	ng/g	0.061				0.611	0.382	0.299		0.142					3.400		2.090
LS6	ng/g	0.069				0.691	0.308	0.229		0.194					3.170		1.210
LS7	ng/g	0.052				0.515	0.212	0.157		0.129					2.280		1.370
LS8	ng/g	0.132				1.320	0.512	0.267		0.148					5.750		
LS9	ng/g	0.093				0.928	0.443	0.301		0.098					3.930		
LS9-D	ng/g	0.129				1.150	0.463	0.394	0.116	0.196		0.124			4.330		
LS10	ng/g	0.085				0.847	0.281	0.184		0.167					3.120		1.200
LS11	ng/g	0.094				0.935	0.265	0.174		0.167					2.900	0.355	
LS12	ng/g	0.119				1.040	0.553	0.489		0.219		0.131			5.680		1.100
LS13	ng/g	0.060				0.602	0.185	0.098							1.980		
LS14	ng/g	0.090				0.896	0.377	0.230		0.211					3.610		
LS15	ng/g	0.270				2.470	0.681	0.469	0.121			0.204			6.800		1.850
LS16	ng/g	0.083				0.831	0.259	0.160							2.900	0.384	

*** EPA Regulatory Levels Established for Drinking Water**

4.3 Industrial and Landfill Results

Twenty-one (21) aqueous samples and two (2) soil samples were collected from industrial sites, landfill groundwater monitoring wells and leachate ponds. PFAS chemicals were detected in both aqueous and soil samples. Eleven (11) aqueous samples detected PFAS analytes. Aqueous sample common exceedances were PFOS, PFHxA, PFHpA and PFBS. Three (3) aqueous samples exceeded the EPA's maximum contaminant levels for drinking water established in April 2024. The exceedances included PFOS, PFOA and the Hazard Index. Two (2) leachate samples had PFAS detections and one (1) exceeded the EPA's maximum contaminant levels established in April 2024. The leachate exceedances were in PFOS, PFOA and the Hazard Index of 1. The two (2) soil samples had minor detections of PFOS.

Figure 3 shows the most commonly detected analytes for industrial and landfill samples. Analytical detections are in Table 7. Complete analytical laboratory results can be found in Appendix A.

Figure 3: Industrial and Landfill Common PFAS Detects

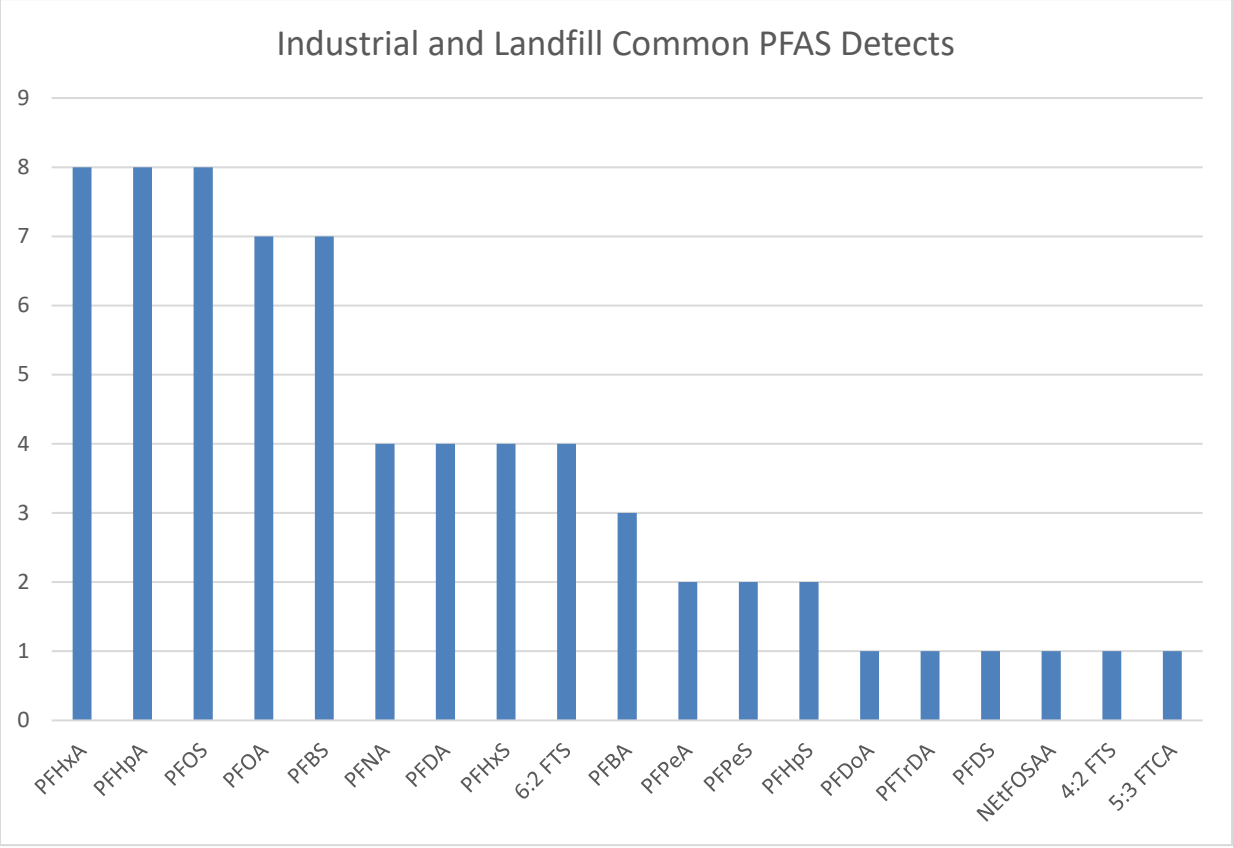


Table 7: Industrial and Landfill PFAS Analytical Detections

Regulatory Level			Hazard Index*					MCL*	PFNA/10 MCL*					PFHxS/10 MCL*	PFBS/2000	HFPO-DA(Genx)/10		MCL*					
			1					4 ng/L	10 ng/L					10 ng/L				4 ng/L					
Site ID	**Sample Type**	**Unit**	HI Exceedence	PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA	PFDoA	PFTrDA	PFPeS	PFHxS	PFBS	HFPO-DA (GenX)	PFHpS	PFOS	PFDS	NEtFOSAA	4:2 FTS	6:2 FTS	5:3 FTCA
Amber Waves	Industrial	ng/L	0.150				0.98	1.60	1.50														
Sheyenne Tooling	Industrial	ng/L	0.086			1.30			0.86														
Tri W-G	Industrial	ng/L	0.161			2.30	1.80	1.80	1.60	1.10	0.90	1.10			1.60			2.10					
John Deere	Industrial	ng/L	0.000			18.00	4.60	2.00		0.65												5.40	
Bobcat Cylinders	Industrial	ng/L	0.844											7.60				4.00					
Bobcat Gwinner	Industrial	ng/L	0.004												7.50					1.60		6.40	
Newman Signs	Industrial	ng/L	0.147	10.30	38.10	70.30	39.70	3.40		1.50				1.30	5.20				2.50				58.50
Goodrich	Industrial	ng/L	0.001												1.20			1.40					
Goodrich 2	Industrial	ng/L	0.001												1.30			1.10					
Flying JU	Industrial	ng/L	0.000			24.30	8.70	15.00															
Marathon	Industrial	ng/L	30.259	54.60	177.00	213.00	129.00	279.00	3.40				78.00	269.00	61.00		3.40	3.70				10.70	
S2 Leachate Pond	Leachate	ng/L	0.000			7.40	15.20															10.70	
OML LW2	Leachate	ng/L	10.400	15100.00		418.00	125.00	138.00					74.10	93.20	89.70		9.90	84.20			66.50		
Red River Supply	Soil	ug/kg	0.000															0.42					
Industrial Plating	Soil	ug/kg	0.000							0.15								0.30					

*** EPA Regulatory Levels Established for Drinking Water**

4.4 Wastewater Treatment Plants

A total of fourteen (14) aqueous samples and seven (7) biosolid samples were collected from seven wastewater treatment plants across the state. Influent, effluent and biosolids were sampled at each wastewater treatment plant. PFHpA, PFHxA, PFOA, PFHxS and PFBS were commonly detected across influent and effluent samples. Five (5) aqueous samples exceeded the EPA's maximum contaminant levels for drinking water established in April 2024. Several PFAS analytes were consistently detected in biosolid samples. There are no PFAS federal, or North Dakota state regulatory levels established for biosolids.

Figures 4 and 5 show common PFAS detections presents the number of wastewater plant samples and biosolid samples respectively. Analytical detections and exceedances are in Tables 8 and 9. Complete analytical laboratory results can be found in Appendix A.

Figure 4: Wastewater Treatment Plants Common PFAS Detects

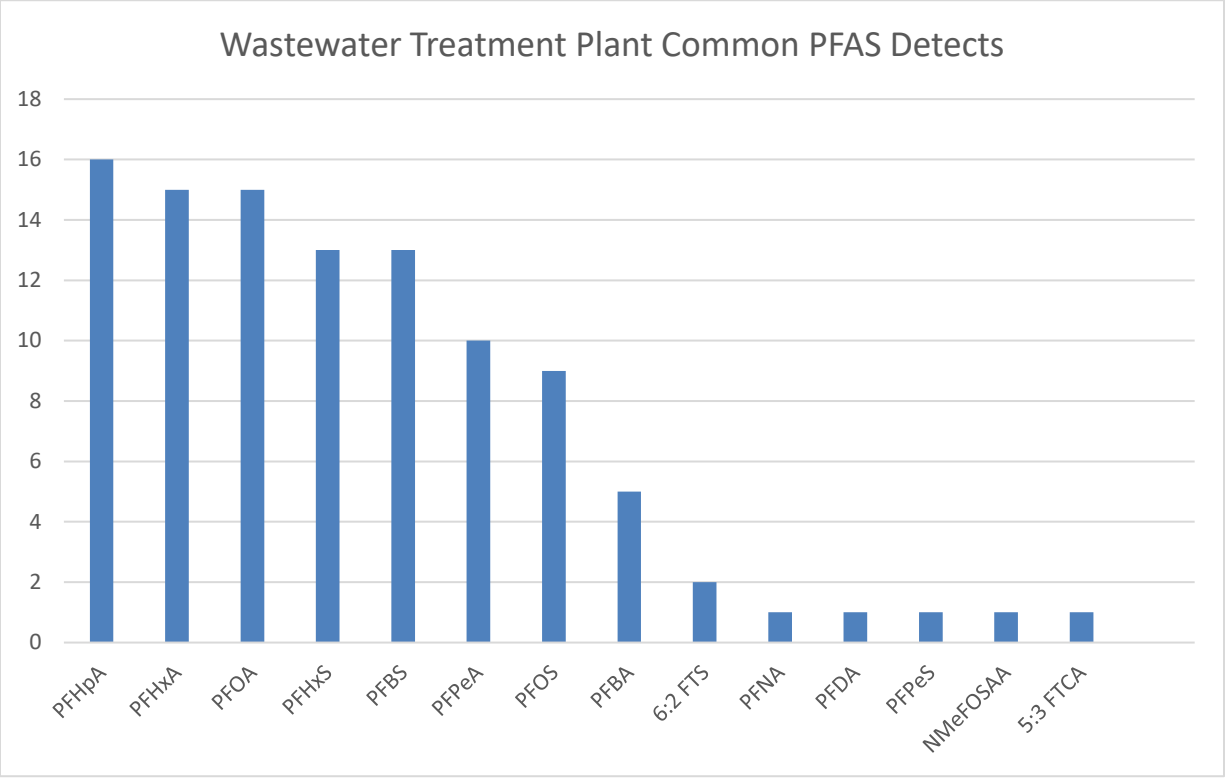


Table 8: Wastewater Treatment Plants PFAS Analytical Detections

Regulatory Levels			Hazard Index*					MCL*	PFNA/10 MCL*			PFHxS/10 MCL*	PFBS/2000	HFPO-DA (GenX)/10	MCL*			
			1					4 ng/L	10 ng/L			10 ng/L			4 ng/L			
Site ID	Sample Type	Unit	HI Exceedence	PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA	PFPeS	PFHxS	PFBS	HFPO-DA (GenX)	PFOS	NMeFOSAA	6:2 FTS	5:3 FTCA
Bismarck WWTP (Effluent)	Effluent	ng/L	0.189		4.00	6.00	1.90	1.90				1.70						
Bismarck WWTP (Effluent) Duplicate	Duplicate	ng/L	0.157	9.00	3.30	6.00	2.10	2.00				1.40	2.60			1.40		
Bismarck WWTP (Influent)	Influent	ng/L	0.167			4.20	3.10	1.60				1.50						
Bismarck WWTP (Influent) Duplicate	Duplicate	ng/L	0.190			4.40	3.20	1.60				1.70	2.40					
Dickinson WWTP (Effluent)	Effluent	ng/L	0.215	10.20	24.90	22.30	3.40	7.80				1.90	7.40		3.00			
Dickinson WWTP (Influent)	Influent	ng/L	0.200		10.00	6.10	2.00	2.80				1.70	22.30					
Fargo WWTP (Effluent)	Effluent	ng/L	0.279		3.80	6.60	1.30	2.50				2.50	2.60		1.10		21.00	
Fargo WWTP (Effluent) Duplicate	Duplicate	ng/L	0.235		5.80	10.30	1.50	2.40				2.10	2.70		1.90		23.20	
Fargo WWTP (Influent)	Influent	ng/L	0.368			11.30	3.00	2.60				3.30	2.70		4.40			
Grand Forks WWTP (Effluent)	Effluent	ng/L	0.491	27.20	13.60	8.30	3.10	2.90				4.40	4.00		3.70			
Grand Forks WWTP (Influent)	Influent	ng/L	1.315			12.90	2.90	4.10			2.40	11.80	7.20		15.20			24.20
Jamestown WWTP (Effluent)	Effluent	ng/L	0.113		8.50	3.40	0.87	1.60				1.00	3.40		1.90			
Jamestown WWTP (Influent)	Influent	ng/L	0.000															
Mandan WWTP (Effluent)	Effluent	ng/L	0.173	8.80	20.70	12.70	1.50	5.80				1.50	12.20		2.30			
Mandan WWTP (Influent)	Influent	ng/L	0.008				0.97	1.60					15.90					
Watford City WWTP (Effluent)	Effluent	ng/L	0.152	15.80	19.80	22.30	7.10	5.60	1.50	0.93			4.10		2.00			
Watford City WWTP (Influent)	Influent	ng/L	0.000			1.30	0.64											

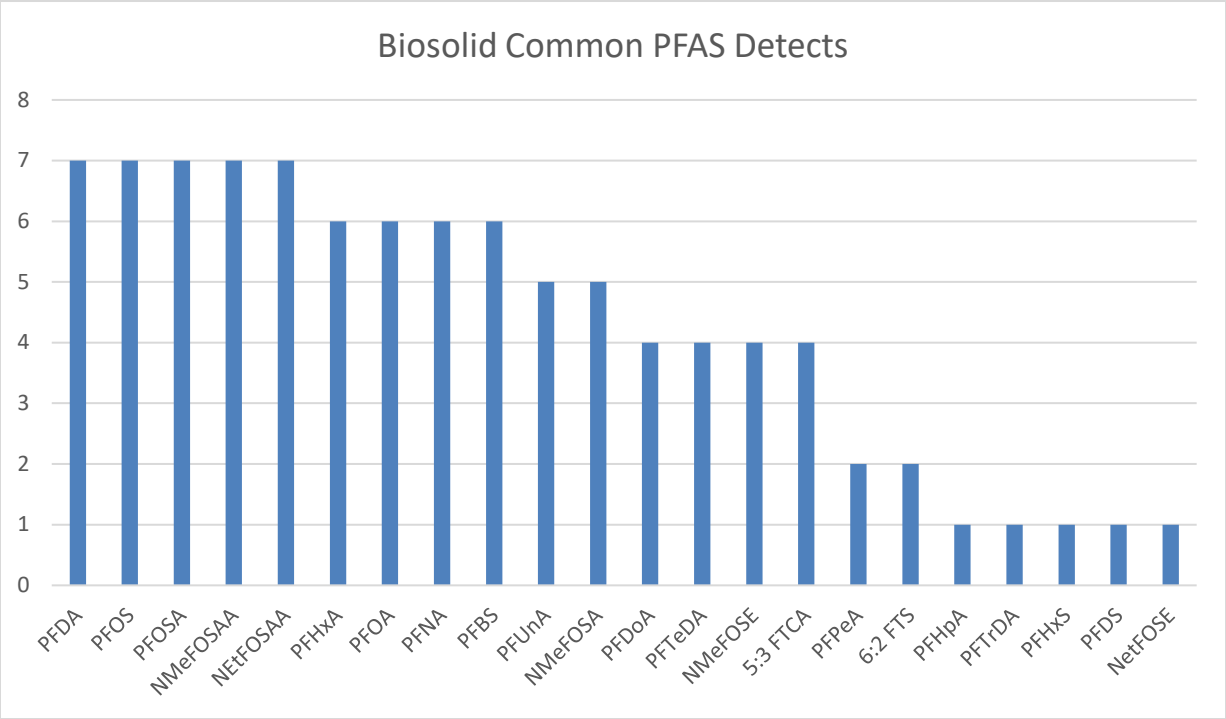
*** EPA Regulatory Levels Established for Drinking Water**

Table 9: Biosolid PFAS Analytical Detections

Regulatory Levels		Hazard Index*				MCL*	PFNA/10 MCL*						PFHxS/10 MCL*	PFBS/2000	HFPO-DA (GenX)/10	MCL*								
		1				4 ng/L	10 ng/L						10 ng/L			4 ng/L								
Site ID	Unit	HI Exceedence	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA	PFUnA	PFDoA	PFTrDA	PFTeDA	PFHxS	PFBS	HFPO-DA (GenX)	PFOS	PFDS	PFOSA	NMeFOSAA	NEtFOSAA	6:2 FTS	NMeFOSA	NMeFOSE	NEtFOSE	5:3 FTCA
Jamestown WWTP	ng/g	0.000																				1.01			
Grand Forks WWTP	ng/g	0.001				1.64		1.20						1.64		17.10		1.32	4.35	1.34					
Fargo WWTP	ng/g	0.058		0.48			0.56	0.53	0.39	0.62	0.51	0.76		3.76		2.77		0.46	1.37	1.54	105.00	0.60	12.80		
Dickinson WWTP	ng/g	0.228	7.68	5.77		9.59	2.27	9.82		3.10				2.64		25.80		2.61	16.70	6.84		1.84			
Watford City WWTP	ng/g	0.554	3.04	4.47	1.08	2.86	3.76	15.50	1.68	2.33			1.54	14.40		29.70		2.29	5.63	3.18	4.24				61.40
Bismarck WWTP	ng/g	0.050		1.65		0.38	0.50	0.47	0.55			1.13				2.61		0.48	6.79	2.39		0.79	15.40	3.36	70.90
Bismarck WWTP Duplicate	ng/g	0.046		1.77		0.41	0.43	0.53	0.50			1.01		6.73		2.89		0.51	6.01	2.64			18.00		66.40
Mandan WWTP	ng/g	0.230		2.93		4.36	2.29	14.70	3.32	7.05		2.84		1.97		36.40	2.29	8.68	28.20	10.60		2.04	17.70		40.50

*** EPA Regulatory Levels Established for Drinking Water**

Figure 5: Biosolid Common PFAS Detects



4.5 Ambient Groundwater

A total of sixteen (16) ambient groundwater samples were collected across North Dakota. Four (4) samples had detections of PFAS, none exceeded the EPA's maximum contaminant levels established in April 2024. Only five PFAS chemicals in total were detected: PFPeA, PFHxA, PFHpA, PFOA and 6:2 FTS.

Figure 6 shows the common PFAS detections, and Table 10 gives the analytical detections. Complete analytical laboratory results can be found in Appendix A.

Figure 6: Ambient Groundwater Common PFAS Detects

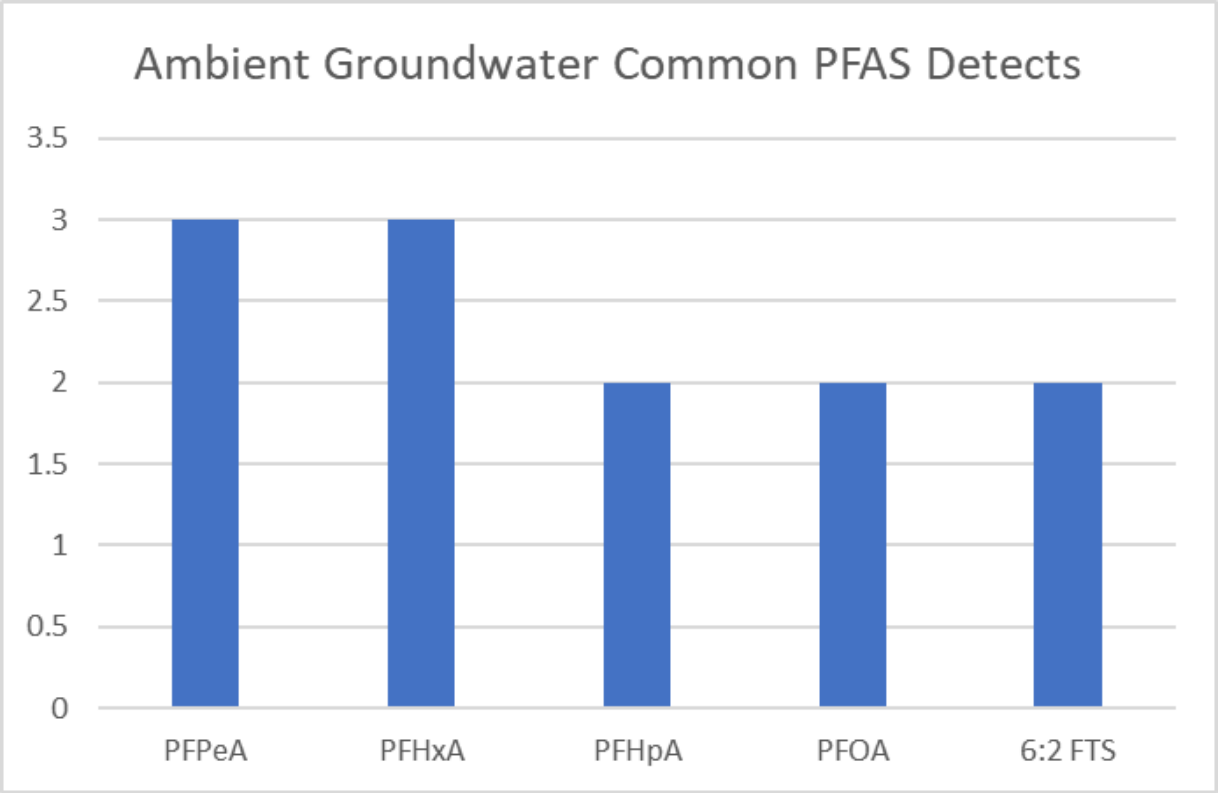


Table 10: Ambient Groundwater PFAS Analytical Detections

Regulatory Levels							PFNA/10	PFHxS/10	PFBS/2000	HFPO-DA (GenX)/10		
		Hazard Index*				MCL*	MCL*	MCL*			MCL*	
		1				4 ng/L	10 ng/L	10 ng/L			4 ng/L	
Site ID	Unit	HI Exceedence	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFHxS	PFBS	HFPO-DA (GenX)	PFOS	6:2 FTS
North Valley 1	ng/L	0.000	2.50	1.70	2.00	1.40						
North Valley 2	ng/L	0.000	4.10	2.00	2.00	1.50						
14608827CCD3	ng/L	0.000		0.66								10.90
14608827CCD3-D	ng/L	0.000	2.30									10.80
*** EPA Regulatory Levels Established for Drinking Water**												

5.0 Quality Control Samples

Eleven (11) duplicates, seven (7) field blank and two (2) equipment blank samples were collected from disposable bailers and scoop collectors for non-potable water samples. Laboratory results from the samples indicate that there were no detections of PFAS analytes. Complete analytical laboratory results can be found in Appendix A.

6.0 Work Plan Deviations

Deviations from the work plan did occur and are as follows.

Ten (10) planned samples related to underground injection control Class V facilities were not sampled.

7.0 Conclusions

The goal of this survey was to determine the presence or absence of PFAS in the state of North Dakota. Based on the results, PFAS was detected at industrial and landfill sites, wastewater treatment plants wastewater and biosolids, and at ambient groundwater and surface water sites.

Eighty-four (84) samples of one hundred and thirty-seven (137) aqueous samples collected had detections of one or more PFAS analytes. All fish tissue and biosolid samples had PFAS detections of one or more analytes. Common PFAS analytes detected across all sample types were PFHpA, PFOS, PFHxA, PFOA, PFNA, PFHxS, PFDA and PFPeA.

8.0 Discussion and Recommendations

Sampling indicates that PFAS detections trend higher at landfills and wastewater treatment plants. States that have a greater industrial and manufacturing component have exhibited more widespread and higher levels of PFAS than North Dakota.

Data gaps include groundwater sampling, which is restricted by locations of monitoring wells adjacent to identified areas of interest. A drill rig or Geoprobe could be used to drill temporary monitoring wells to expand to areas of interest that are currently inaccessible from lack of groundwater monitoring wells.

8.1 Updated EPA Drinking Water PFAS Regulation

In 2021 the EPA established a PFOA + PFOS HAL of 70 ppt. The EPA updated this HAL in June 2022 and additionally published health advisories for GenX and PFBS. On April 10, 2024, the EPA announced final National Primary Drinking Water Regulations for six PFAS. Although data for this report was collected in 2023, the results have been compared to the April 2024 EPA PFAS regulations.

9.0 References

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Appendix A

Laboratory Results

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS

SGS Job Number: FC6212

Sampling Dates: 05/16/23 - 05/18/23



Report to:

North Dakota DEQ
4201 Normandy Street
Bismark, ND 58503
ssuggs@nd.gov

ATTN: Shannon Suggs

Total number of pages in report: 59

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC6212

PFAS

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FC6212-1	05/16/23	07:00	MSSS	05/19/23	AQ	Surface Water	380067
FC6212-2	05/16/23	08:30	MSSS	05/19/23	AQ	Surface Water	380077
FC6212-3	05/16/23	08:30	MSSS	05/19/23	AQ	Surface Water	389999
FC6212-4	05/16/23	09:20	MSSS	05/19/23	AQ	Surface Water	380105
FC6212-5	05/16/23	12:00	MSSS	05/19/23	AQ	Surface Water	384131
FC6212-6	05/16/23	13:30	MSSS	05/19/23	AQ	Surface Water	380087
FC6212-7	05/18/23	06:30	MSSS	05/19/23	AQ	Surface Water	380059
FC6212-8	05/18/23	08:15	MSSS	05/19/23	AQ	Surface Water	380022
FC6212-9	05/18/23	10:00	MSSS	05/19/23	AQ	Surface Water	380160
FC6212-10	05/18/23	11:15	MSSS	05/19/23	AQ	Surface Water	380151

Summary of Hits

Job Number: FC6212
Account: North Dakota DEQ
Project: PFAS
Collected: 05/16/23 thru 05/18/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC6212-1	**380067**					
No hits reported in this sample.						
FC6212-2	**380077**					
No hits reported in this sample.						
FC6212-3	**389999**					
No hits reported in this sample.						
FC6212-4	**380105**					
No hits reported in this sample.						
FC6212-5	**384131**					
No hits reported in this sample.						
FC6212-6	**380087**					
Perfluoroheptanoic acid		0.74 J	2.1	0.52	ng/l	EPA DRAFT 1633
FC6212-7	**380059**					
Perfluorobutanoic acid		11.5	9.8	4.9	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.0 J	2.4	0.61	ng/l	EPA DRAFT 1633
FC6212-8	**380022**					
Perfluorobutanoic acid		14.9	9.8	4.9	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		1.1 J	2.4	0.61	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.4 J	2.4	0.61	ng/l	EPA DRAFT 1633
FC6212-9	**380160**					
Perfluoropentanoic acid		12.8	4.9	1.2	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		3.8	2.4	0.61	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.4 J	2.4	0.61	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.0 J	2.4	0.61	ng/l	EPA DRAFT 1633
FC6212-10	**380151**					
Perfluoroheptanoic acid		1.2 J	2.4	0.61	ng/l	EPA DRAFT 1633

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	380067		
Lab Sample ID:	FC6212-1	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q18787.D	1	06/02/23 18:09	MV	05/31/23 12:00	OP97146	S6Q280
Run #2							

	Initial Volume	Final Volume
Run #1	485 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.2	4.1	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.1	0.52	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.1	0.52	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.1	0.52	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.63	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.52	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.62	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.62	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.87	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.52	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380067		
Lab Sample ID:	FC6212-1	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.1	ng/l	
919005-14-4	ADONA	ND	8.2	2.1	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.1	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.2	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	32%		20-150%
	13C5-PFPeA	96%		20-150%
	13C5-PFHxA	102%		20-150%
	13C4-PFHpA	106%		20-150%
	13C8-PFOA	102%		20-150%
	13C9-PFNA	98%		20-150%
	13C6-PFDA	98%		20-150%
	13C7-PFUnDA	89%		20-150%
	13C2-PFDoDA	64%		20-150%
	13C2-PFTeDA	56%		20-150%
	13C3-PFBS	105%		20-150%
	13C3-PFHxS	104%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380067		
Lab Sample ID:	FC6212-1	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		20-150%
	13C8-FOSA	95%		20-150%
	d3-MeFOSA	79%		20-150%
	d5-EtFOSA	71%		20-150%
	d3-MeFOSAA	90%		20-150%
	d5-EtFOSAA	82%		20-150%
	d7-MeFOSE	58%		20-150%
	d9-EtFOSE	60%		20-150%
	13C2-4:2FTS	113%		20-180%
	13C2-6:2FTS	100%		20-180%
	13C2-8:2FTS	86%		20-180%
	13C3-HFPO-DA	101%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380077		
Lab Sample ID:	FC6212-2	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q18788.D	1	06/02/23 18:24	MV	05/31/23 12:00	OP97146	S6Q280
Run #2							

	Initial Volume	Final Volume
Run #1	485 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.2	4.1	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.1	0.52	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.1	0.52	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.1	0.52	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.63	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.52	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.62	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.62	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.87	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.52	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380077		
Lab Sample ID:	FC6212-2	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.1	ng/l	
919005-14-4	ADONA	ND	8.2	2.1	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.1	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.2	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	28%		20-150%
	13C5-PFPeA	100%		20-150%
	13C5-PFHxA	110%		20-150%
	13C4-PFHpA	113%		20-150%
	13C8-PFOA	109%		20-150%
	13C9-PFNA	106%		20-150%
	13C6-PFDA	100%		20-150%
	13C7-PFUnDA	91%		20-150%
	13C2-PFDoDA	62%		20-150%
	13C2-PFTeDA	52%		20-150%
	13C3-PFBS	107%		20-150%
	13C3-PFHxS	106%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380077		
Lab Sample ID:	FC6212-2	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		20-150%
	13C8-FOSA	98%		20-150%
	d3-MeFOSA	88%		20-150%
	d5-EtFOSA	80%		20-150%
	d3-MeFOSAA	93%		20-150%
	d5-EtFOSAA	91%		20-150%
	d7-MeFOSE	56%		20-150%
	d9-EtFOSE	58%		20-150%
	13C2-4:2FTS	133%		20-180%
	13C2-6:2FTS	106%		20-180%
	13C2-8:2FTS	86%		20-180%
	13C3-HFPO-DA	105%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	389999		
Lab Sample ID:	FC6212-3	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q18789.D	1	06/02/23 18:38	MV	05/31/23 12:00	OP97146	S6Q280
Run #2							

	Initial Volume	Final Volume
Run #1	485 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.2	4.1	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.1	0.52	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.1	0.52	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.1	0.52	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.63	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.52	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.62	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.62	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.87	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.52	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	389999		
Lab Sample ID:	FC6212-3	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.1	ng/l	
919005-14-4	ADONA	ND	8.2	2.1	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.1	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.2	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	30%		20-150%
	13C5-PFPeA	95%		20-150%
	13C5-PFHxA	104%		20-150%
	13C4-PFHpA	103%		20-150%
	13C8-PFOA	101%		20-150%
	13C9-PFNA	103%		20-150%
	13C6-PFDA	93%		20-150%
	13C7-PFUnDA	85%		20-150%
	13C2-PFDoDA	57%		20-150%
	13C2-PFTeDA	44%		20-150%
	13C3-PFBS	103%		20-150%
	13C3-PFHxS	100%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	389999		
Lab Sample ID:	FC6212-3	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		20-150%
	13C8-FOSA	88%		20-150%
	d3-MeFOSA	74%		20-150%
	d5-EtFOSA	72%		20-150%
	d3-MeFOSAA	89%		20-150%
	d5-EtFOSAA	93%		20-150%
	d7-MeFOSE	49%		20-150%
	d9-EtFOSE	53%		20-150%
	13C2-4:2FTS	121%		20-180%
	13C2-6:2FTS	109%		20-180%
	13C2-8:2FTS	80%		20-180%
	13C3-HFPO-DA	98%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380105		
Lab Sample ID:	FC6212-4	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q18790.D	1	06/02/23 18:53	MV	05/31/23 12:00	OP97146	S6Q280
Run #2							

	Initial Volume	Final Volume
Run #1	485 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.2	4.1	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.1	0.52	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.1	0.52	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.1	0.52	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.63	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.52	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.62	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.62	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.87	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.52	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380105		
Lab Sample ID:	FC6212-4	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.1	ng/l	
919005-14-4	ADONA	ND	8.2	2.1	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.1	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.2	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	33%		20-150%
	13C5-PFPeA	89%		20-150%
	13C5-PFHxA	99%		20-150%
	13C4-PFHpA	99%		20-150%
	13C8-PFOA	95%		20-150%
	13C9-PFNA	98%		20-150%
	13C6-PFDA	98%		20-150%
	13C7-PFUnDA	87%		20-150%
	13C2-PFDoDA	66%		20-150%
	13C2-PFTeDA	52%		20-150%
	13C3-PFBS	94%		20-150%
	13C3-PFHxS	97%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380105		
Lab Sample ID:	FC6212-4	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		20-150%
	13C8-FOSA	93%		20-150%
	d3-MeFOSA	77%		20-150%
	d5-EtFOSA	65%		20-150%
	d3-MeFOSAA	96%		20-150%
	d5-EtFOSAA	96%		20-150%
	d7-MeFOSE	55%		20-150%
	d9-EtFOSE	55%		20-150%
	13C2-4:2FTS	114%		20-180%
	13C2-6:2FTS	90%		20-180%
	13C2-8:2FTS	82%		20-180%
	13C3-HFPO-DA	94%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	384131		
Lab Sample ID:	FC6212-5	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q18791.D	1	06/02/23 19:07	MV	05/31/23 12:00	OP97146	S6Q280
Run #2							

	Initial Volume	Final Volume
Run #1	485 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.2	4.1	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.1	0.52	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.1	0.52	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.1	0.52	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.63	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.52	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.62	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.62	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.87	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.52	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	384131		
Lab Sample ID:	FC6212-5	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.1	ng/l	
919005-14-4	ADONA	ND	8.2	2.1	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.1	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.2	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	21%		20-150%
	13C5-PFPeA	83%		20-150%
	13C5-PFHxA	97%		20-150%
	13C4-PFHpA	99%		20-150%
	13C8-PFOA	94%		20-150%
	13C9-PFNA	91%		20-150%
	13C6-PFDA	93%		20-150%
	13C7-PFUnDA	90%		20-150%
	13C2-PFDoDA	57%		20-150%
	13C2-PFTeDA	32%		20-150%
	13C3-PFBS	93%		20-150%
	13C3-PFHxS	96%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	384131		
Lab Sample ID:	FC6212-5	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%		20-150%
	13C8-FOSA	84%		20-150%
	d3-MeFOSA	75%		20-150%
	d5-EtFOSA	76%		20-150%
	d3-MeFOSAA	89%		20-150%
	d5-EtFOSAA	91%		20-150%
	d7-MeFOSE	53%		20-150%
	d9-EtFOSE	52%		20-150%
	13C2-4:2FTS	116%		20-180%
	13C2-6:2FTS	96%		20-180%
	13C2-8:2FTS	78%		20-180%
	13C3-HFPO-DA	91%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380087		
Lab Sample ID:	FC6212-6	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q18795.D	1	06/02/23 20:05	MV	05/31/23 12:00	OP97146	S6Q280
Run #2							

	Initial Volume	Final Volume
Run #1	485 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.2	4.1	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.1	0.52	ng/l	
375-85-9	Perfluoroheptanoic acid	0.74	2.1	0.52	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.1	0.52	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.63	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.52	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.62	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.62	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.87	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.52	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380087		
Lab Sample ID:	FC6212-6	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.1	ng/l	
919005-14-4	ADONA	ND	8.2	2.1	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.1	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.2	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	32%		20-150%
	13C5-PFPeA	96%		20-150%
	13C5-PFHxA	105%		20-150%
	13C4-PFHpA	109%		20-150%
	13C8-PFOA	106%		20-150%
	13C9-PFNA	91%		20-150%
	13C6-PFDA	103%		20-150%
	13C7-PFUnDA	92%		20-150%
	13C2-PFDoDA	65%		20-150%
	13C2-PFTeDA	40%		20-150%
	13C3-PFBS	100%		20-150%
	13C3-PFHxS	98%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380087		
Lab Sample ID:	FC6212-6	**Date Sampled:**	05/16/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		20-150%
	13C8-FOSA	90%		20-150%
	d3-MeFOSA	73%		20-150%
	d5-EtFOSA	67%		20-150%
	d3-MeFOSAA	97%		20-150%
	d5-EtFOSAA	91%		20-150%
	d7-MeFOSE	50%		20-150%
	d9-EtFOSE	50%		20-150%
	13C2-4:2FTS	121%		20-180%
	13C2-6:2FTS	112%		20-180%
	13C2-8:2FTS	85%		20-180%
	13C3-HFPO-DA	106%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380059		
Lab Sample ID:	FC6212-7	**Date Sampled:**	05/18/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q18797.D	1	06/02/23 20:34	MV	05/31/23 12:00	OP97146	S6Q280
Run #2							

	Initial Volume	Final Volume
Run #1	410 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	11.5	9.8	4.9	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.9	1.2	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.4	0.61	ng/l	
375-85-9	Perfluoroheptanoic acid	1.0	2.4	0.61	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.4	0.61	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.4	0.74	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.4	0.61	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.4	0.73	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.4	0.73	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.4	1.0	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.4	0.61	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.4	1.2	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.4	1.4	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.4	1.2	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.4	1.2	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.4	1.2	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.4	1.2	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.4	1.2	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.4	1.4	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	9.8	4.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	9.8	4.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	9.8	5.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.4	1.2	ng/l	
31506-32-8	MeFOSA	ND	2.4	1.2	ng/l	
4151-50-2	EtFOSA	ND	2.4	1.2	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380059		
Lab Sample ID:	FC6212-7	**Date Sampled:**	05/18/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.4	1.2	ng/l	
2991-50-6	EtFOSAA	ND	2.4	1.6	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	24	12	ng/l	
1691-99-2	EtFOSE	ND	24	12	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	9.8	2.4	ng/l	
919005-14-4	ADONA	ND	9.8	2.4	ng/l	
377-73-1	PFMPA	ND	4.9	1.2	ng/l	
863090-89-5	PFMBA	ND	4.9	1.4	ng/l	
151772-58-6	NFDHA	ND	4.9	1.5	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	9.8	2.4	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	9.8	2.4	ng/l	
113507-82-7	PFEESA	ND	4.9	1.2	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	12	6.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	61	12	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	61	12	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	42%		20-150%
	13C5-PFPeA	95%		20-150%
	13C5-PFHxA	108%		20-150%
	13C4-PFHpA	109%		20-150%
	13C8-PFOA	110%		20-150%
	13C9-PFNA	104%		20-150%
	13C6-PFDA	110%		20-150%
	13C7-PFUnDA	86%		20-150%
	13C2-PFDoDA	67%		20-150%
	13C2-PFTeDA	53%		20-150%
	13C3-PFBS	107%		20-150%
	13C3-PFHxS	105%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380059		
Lab Sample ID:	FC6212-7	**Date Sampled:**	05/18/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	108%		20-150%
	13C8-FOSA	95%		20-150%
	d3-MeFOSA	72%		20-150%
	d5-EtFOSA	72%		20-150%
	d3-MeFOSAA	98%		20-150%
	d5-EtFOSAA	92%		20-150%
	d7-MeFOSE	56%		20-150%
	d9-EtFOSE	64%		20-150%
	13C2-4:2FTS	110%		20-180%
	13C2-6:2FTS	95%		20-180%
	13C2-8:2FTS	84%		20-180%
	13C3-HFPO-DA	105%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380022		
Lab Sample ID:	FC6212-8	**Date Sampled:**	05/18/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q18798.D	1	06/02/23 20:48	MV	05/31/23 12:00	OP97146	S6Q280
Run #2							

	Initial Volume	Final Volume
Run #1	410 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	14.9	9.8	4.9	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.9	1.2	ng/l	
307-24-4	Perfluorohexanoic acid	1.1	2.4	0.61	ng/l	J
375-85-9	Perfluoroheptanoic acid	1.4	2.4	0.61	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.4	0.61	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.4	0.74	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.4	0.61	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.4	0.73	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.4	0.73	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.4	1.0	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.4	0.61	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.4	1.2	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.4	1.4	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.4	1.2	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.4	1.2	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.4	1.2	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.4	1.2	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.4	1.2	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.4	1.4	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	9.8	4.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	9.8	4.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	9.8	5.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.4	1.2	ng/l	
31506-32-8	MeFOSA	ND	2.4	1.2	ng/l	
4151-50-2	EtFOSA	ND	2.4	1.2	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380022		
Lab Sample ID:	FC6212-8	**Date Sampled:**	05/18/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.4	1.2	ng/l	
2991-50-6	EtFOSAA	ND	2.4	1.6	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	24	12	ng/l	
1691-99-2	EtFOSE	ND	24	12	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	9.8	2.4	ng/l	
919005-14-4	ADONA	ND	9.8	2.4	ng/l	
377-73-1	PFMPA	ND	4.9	1.2	ng/l	
863090-89-5	PFMBA	ND	4.9	1.4	ng/l	
151772-58-6	NFDHA	ND	4.9	1.5	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	9.8	2.4	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	9.8	2.4	ng/l	
113507-82-7	PFEESA	ND	4.9	1.2	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	12	6.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	61	12	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	61	12	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	31%		20-150%
	13C5-PFPeA	83%		20-150%
	13C5-PFHxA	94%		20-150%
	13C4-PFHpA	99%		20-150%
	13C8-PFOA	98%		20-150%
	13C9-PFNA	96%		20-150%
	13C6-PFDA	94%		20-150%
	13C7-PFUnDA	79%		20-150%
	13C2-PFDoDA	56%		20-150%
	13C2-PFTeDA	43%		20-150%
	13C3-PFBS	95%		20-150%
	13C3-PFHxS	94%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380022		
Lab Sample ID:	FC6212-8	**Date Sampled:**	05/18/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%		20-150%
	13C8-FOSA	92%		20-150%
	d3-MeFOSA	80%		20-150%
	d5-EtFOSA	74%		20-150%
	d3-MeFOSAA	94%		20-150%
	d5-EtFOSAA	92%		20-150%
	d7-MeFOSE	53%		20-150%
	d9-EtFOSE	58%		20-150%
	13C2-4:2FTS	105%		20-180%
	13C2-6:2FTS	97%		20-180%
	13C2-8:2FTS	85%		20-180%
	13C3-HFPO-DA	91%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380160		
Lab Sample ID:	FC6212-9	**Date Sampled:**	05/18/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q18799.D	1	06/02/23 21:03	MV	05/31/23 12:00	OP97146	S6Q280
Run #2							

	Initial Volume	Final Volume
Run #1	410 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	9.8	4.9	ng/l	
2706-90-3	Perfluoropentanoic acid	12.8	4.9	1.2	ng/l	
307-24-4	Perfluorohexanoic acid	3.8	2.4	0.61	ng/l	
375-85-9	Perfluoroheptanoic acid	1.4	2.4	0.61	ng/l	J
335-67-1	Perfluorooctanoic acid	1.0	2.4	0.61	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.4	0.74	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.4	0.61	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.4	0.73	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.4	0.73	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.4	1.0	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.4	0.61	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.4	1.2	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.4	1.4	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.4	1.2	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.4	1.2	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.4	1.2	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.4	1.2	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.4	1.2	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.4	1.4	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	9.8	4.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	9.8	4.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	9.8	5.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.4	1.2	ng/l	
31506-32-8	MeFOSA	ND	2.4	1.2	ng/l	
4151-50-2	EtFOSA	ND	2.4	1.2	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380160		
Lab Sample ID:	FC6212-9	**Date Sampled:**	05/18/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.4	1.2	ng/l	
2991-50-6	EtFOSAA	ND	2.4	1.6	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	24	12	ng/l	
1691-99-2	EtFOSE	ND	24	12	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	9.8	2.4	ng/l	
919005-14-4	ADONA	ND	9.8	2.4	ng/l	
377-73-1	PFMPA	ND	4.9	1.2	ng/l	
863090-89-5	PFMBA	ND	4.9	1.4	ng/l	
151772-58-6	NFDHA	ND	4.9	1.5	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	9.8	2.4	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	9.8	2.4	ng/l	
113507-82-7	PFEESA	ND	4.9	1.2	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	12	6.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	61	12	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	61	12	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	24%		20-150%
	13C5-PFPeA	88%		20-150%
	13C5-PFHxA	102%		20-150%
	13C4-PFHpA	104%		20-150%
	13C8-PFOA	99%		20-150%
	13C9-PFNA	93%		20-150%
	13C6-PFDA	100%		20-150%
	13C7-PFUnDA	81%		20-150%
	13C2-PFDoDA	58%		20-150%
	13C2-PFTeDA	53%		20-150%
	13C3-PFBS	94%		20-150%
	13C3-PFHxS	93%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380160		
Lab Sample ID:	FC6212-9	**Date Sampled:**	05/18/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		20-150%
	13C8-FOSA	86%		20-150%
	d3-MeFOSA	74%		20-150%
	d5-EtFOSA	64%		20-150%
	d3-MeFOSAA	90%		20-150%
	d5-EtFOSAA	81%		20-150%
	d7-MeFOSE	50%		20-150%
	d9-EtFOSE	50%		20-150%
	13C2-4:2FTS	113%		20-180%
	13C2-6:2FTS	95%		20-180%
	13C2-8:2FTS	81%		20-180%
	13C3-HFPO-DA	96%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380151		
Lab Sample ID:	FC6212-10	**Date Sampled:**	05/18/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q18800.D	1	06/02/23 21:17	MV	05/31/23 12:00	OP97146	S6Q280
Run #2							

	Initial Volume	Final Volume
Run #1	410 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	9.8	4.9	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.9	1.2	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.4	0.61	ng/l	
375-85-9	Perfluoroheptanoic acid	1.2	2.4	0.61	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.4	0.61	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.4	0.74	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.4	0.61	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.4	0.73	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.4	0.73	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.4	1.0	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.4	0.61	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.4	1.2	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.4	1.4	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.4	1.2	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.4	1.2	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.4	1.2	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.4	1.2	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.4	1.2	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.4	1.4	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	9.8	4.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	9.8	4.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	9.8	5.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.4	1.2	ng/l	
31506-32-8	MeFOSA	ND	2.4	1.2	ng/l	
4151-50-2	EtFOSA	ND	2.4	1.2	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380151		
Lab Sample ID:	FC6212-10	**Date Sampled:**	05/18/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.4	1.2	ng/l	
2991-50-6	EtFOSAA	ND	2.4	1.6	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	24	12	ng/l	
1691-99-2	EtFOSE	ND	24	12	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	9.8	2.4	ng/l	
919005-14-4	ADONA	ND	9.8	2.4	ng/l	
377-73-1	PFMPA	ND	4.9	1.2	ng/l	
863090-89-5	PFMBA	ND	4.9	1.4	ng/l	
151772-58-6	NFDHA	ND	4.9	1.5	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	9.8	2.4	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	9.8	2.4	ng/l	
113507-82-7	PFEESA	ND	4.9	1.2	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	12	6.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	61	12	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	61	12	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	29%		20-150%
	13C5-PFPeA	90%		20-150%
	13C5-PFHxA	94%		20-150%
	13C4-PFHpA	102%		20-150%
	13C8-PFOA	99%		20-150%
	13C9-PFNA	85%		20-150%
	13C6-PFDA	93%		20-150%
	13C7-PFUnDA	74%		20-150%
	13C2-PFDoDA	52%		20-150%
	13C2-PFTeDA	38%		20-150%
	13C3-PFBS	92%		20-150%
	13C3-PFHxS	92%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380151		
Lab Sample ID:	FC6212-10	**Date Sampled:**	05/18/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		20-150%
	13C8-FOSA	87%		20-150%
	d3-MeFOSA	65%		20-150%
	d5-EtFOSA	62%		20-150%
	d3-MeFOSAA	86%		20-150%
	d5-EtFOSAA	78%		20-150%
	d7-MeFOSE	48%		20-150%
	d9-EtFOSE	51%		20-150%
	13C2-4:2FTS	103%		20-180%
	13C2-6:2FTS	90%		20-180%
	13C2-8:2FTS	77%		20-180%
	13C3-HFPO-DA	96%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando
Chain of Custody

FC6212

SGS - ORLANDO JOB # :

PAGE 1 OF 1

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: NDDEQ
Address: 4201 Normandy St.
City: Bismarck State: ND Zip: 58501
Project Contact: Shannon Suggs Email: SSuggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed)
Sampler 1: Shannon Suggs Sampler 2: McKenzie Schick

Project Information

Project Name: NDDEQ PFAS Sampling
Street: 4201 Normandy St
City: Bismarck State: ND
Project #:
Fax #:
Client Purchase Order #:

Analytical Information

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX *	TOTAL # OF BOTTLES	CONTAINER INFORMATION: OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LAB USE ONLY
1	380107	5.16.23	7:40	MS	SW	3										
2	380077	5.16.23	830	MS	SW	3										
3	389999	5.16.23	830	MS	SW	3										
4	380105	5.16.23	920	MS	SW	3										
5	384131	5.16.23	1200	MS		3										
6	380087	5.16.23	1330	MS		3										
7	380059	5.18.23	630	MS		3										
8	380022	5.18.23	815	MS		3										
9	380160	5.18.23	1000	MS		3										
10	380151	5.18.23	1115	MS		3										

INITIAL ASSESSMENT

LABEL VERIFICATION SP

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	Shannon Suggs	5/18 10:30	2 FedEx	3	5/18 1540	4
5	Relinquished by/Affiliation	Date Time:	Received By/Affiliation 6	Relinquished By/Affiliation 7	Date Time:	Received By/Affiliation 8 5/19/23 930

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 3.0 TR#1

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

FC6212: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC6212 **Client:** NDDEQ **Project:** NDDEQ PFAS SAMPLING

Date / Time Received: 5/19/2023 9:30:00 AM **Delivery Method:** FX **Airbill #'s:** 398490157292

Therm ID: IR 1; **Therm CF:** -0.1; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.9);

Cooler Information	Y	N
1. Custody Seals Present	☑	☐
2. Custody Seals Intact	☑	☐
3. Temp criteria achieved	☑	☐
4. Cooler temp verification	IR Gun	
5. Cooler media	Ice (Bag)	

Trip Blank Information	Y	N	N/A
1. Trip Blank present / cooler	☐	☐	☑
2. Trip Blank listed on COC	☐	☐	☑

	W	S	N/A
3. Type Of TB Received	☐	☐	☑

Sample Information	Y	N	N/A
1. Sample labels present on bottles	☑	☐	
2. Samples preserved properly	☑	☐	
3. Sufficient volume/containers recvd for analysis:	☑	☐	
4. Condition of sample	Intact		
5. Sample recvd within HT	☑	☐	
6. Dates/Times/IDs on COC match Sample Label	☑	☐	
7. VOCs have headspace	☐	☐	☑
8. Bottles received for unspecified tests	☐	☑	
9. Compositing instructions clear	☐	☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐	☐	☑
11. % Solids Jar received?	☐	☐	☑
12. Residual Chlorine Present?	☐	☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____

Number of 5035 Field Kits: _____

Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230320 pH 10-12 _____

Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: NATHANS Date: 5/19/2023 9:30:00 AM Reviewer: _____ Date: _____

FC6212: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97146-MB	6Q18786.D	1	06/02/23	MV	05/31/23	OP97146	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-1, FC6212-2, FC6212-3, FC6212-4, FC6212-5, FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97146-MB	6Q18786.D	1	06/02/23	MV	05/31/23	OP97146	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-1, FC6212-2, FC6212-3, FC6212-4, FC6212-5, FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	105%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	97%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	96%	20-150%
	13C2-PFTeDA	73%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	97%	20-150%
	13C8-PFOS	104%	20-150%
	13C8-FOSA	68%	20-150%
	d3-MeFOSA	60%	20-150%
	d5-EtFOSA	61%	20-150%
	d3-MeFOSAA	102%	20-150%
	d5-EtFOSAA	103%	20-150%
	d7-MeFOSE	57%	20-150%
	d9-EtFOSE	59%	20-150%
	13C2-4:2FTS	103%	20-180%
	13C2-6:2FTS	112%	20-180%
	13C2-8:2FTS	115%	20-180%
	13C3-HFPO-DA	104%	20-150%

Instrument Blank

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q280-IBLK	6Q18677.D	1	06/01/23	MV	n/a	n/a	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-1, FC6212-2, FC6212-3, FC6212-4, FC6212-5, FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q280-IBLK	6Q18677.D	1	06/01/23	MV	n/a	n/a	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-1, FC6212-2, FC6212-3, FC6212-4, FC6212-5, FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	102%	20-150%
	13C7-PFUnDA	97%	20-150%
	13C2-PFDoDA	95%	20-150%
	13C2-PFTeDA	100%	20-150%
	13C3-PFBS	93%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSA	100%	20-150%
	d5-EtFOSA	104%	20-150%
	d3-MeFOSAA	107%	20-150%
	d5-EtFOSAA	107%	20-150%
	d7-MeFOSE	103%	20-150%
	d9-EtFOSE	105%	20-150%
	13C2-4:2FTS	106%	20-180%
	13C2-6:2FTS	104%	20-180%
	13C2-8:2FTS	105%	20-180%
	13C3-HFPO-DA	102%	20-150%

Instrument Blank

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q280-IBLK	6Q18782.D	1	06/02/23	MV	n/a	n/a	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-1, FC6212-2, FC6212-3, FC6212-4, FC6212-5, FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q280-IBLK	6Q18782.D	1	06/02/23	MV	n/a	n/a	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-1, FC6212-2, FC6212-3, FC6212-4, FC6212-5, FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	101%	20-150%
	13C8-PFOA	97%	20-150%
	13C9-PFNA	94%	20-150%
	13C6-PFDA	110%	20-150%
	13C7-PFUnDA	107%	20-150%
	13C2-PFDoDA	109%	20-150%
	13C2-PFTeDA	105%	20-150%
	13C3-PFBS	103%	20-150%
	13C3-PFHxS	105%	20-150%
	13C8-PFOS	96%	20-150%
	13C8-FOSA	101%	20-150%
	d3-MeFOSA	99%	20-150%
	d5-EtFOSA	102%	20-150%
	d3-MeFOSAA	103%	20-150%
	d5-EtFOSAA	107%	20-150%
	d7-MeFOSE	103%	20-150%
	d9-EtFOSE	104%	20-150%
	13C2-4:2FTS	120%	20-180%
	13C2-6:2FTS	115%	20-180%
	13C2-8:2FTS	114%	20-180%
	13C3-HFPO-DA	103%	20-150%

Continuing Calibration Blank

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q280-ICCB	6Q18778.D	1	06/02/23	MV	n/a	n/a	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-1, FC6212-2, FC6212-3, FC6212-4, FC6212-5

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q280-ICCB	6Q18778.D	1	06/02/23	MV	n/a	n/a	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-1, FC6212-2, FC6212-3, FC6212-4, FC6212-5

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	109%	20-150%
	13C8-PFOA	104%	20-150%
	13C9-PFNA	94%	20-150%
	13C6-PFDA	97%	20-150%
	13C7-PFUnDA	103%	20-150%
	13C2-PFDoDA	99%	20-150%
	13C2-PFTeDA	102%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	98%	20-150%
	13C8-PFOS	102%	20-150%
	13C8-FOSA	101%	20-150%
	d3-MeFOSA	95%	20-150%
	d5-EtFOSA	101%	20-150%
	d3-MeFOSAA	108%	20-150%
	d5-EtFOSAA	111%	20-150%
	d7-MeFOSE	102%	20-150%
	d9-EtFOSE	97%	20-150%
	13C2-4:2FTS	113%	20-180%
	13C2-6:2FTS	117%	20-180%
	13C2-8:2FTS	111%	20-180%
	13C3-HFPO-DA	108%	20-150%

Continuing Calibration Blank

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q280-ICCB	6Q18794.D	1	06/02/23	MV	n/a	n/a	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q280-ICCB	6Q18794.D	1	06/02/23	MV	n/a	n/a	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	96%	20-150%
	13C9-PFNA	100%	20-150%
	13C6-PFDA	120%	20-150%
	13C7-PFUnDA	111%	20-150%
	13C2-PFDoDA	109%	20-150%
	13C2-PFTeDA	105%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	103%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	104%	20-150%
	d3-MeFOSA	100%	20-150%
	d5-EtFOSA	104%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	103%	20-150%
	d7-MeFOSE	100%	20-150%
	d9-EtFOSE	103%	20-150%
	13C2-4:2FTS	106%	20-180%
	13C2-6:2FTS	108%	20-180%
	13C2-8:2FTS	100%	20-180%
	13C3-HFPO-DA	100%	20-150%

Continuing Calibration Blank

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q280-ICCB	6Q18803.D	1	06/02/23	MV	n/a	n/a	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q280-ICCB	6Q18803.D	1	06/02/23	MV	n/a	n/a	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	101%	20-150%
	13C2-PFTeDA	100%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	96%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSA	94%	20-150%
	d5-EtFOSA	97%	20-150%
	d3-MeFOSAA	101%	20-150%
	d5-EtFOSAA	102%	20-150%
	d7-MeFOSE	97%	20-150%
	d9-EtFOSE	94%	20-150%
	13C2-4:2FTS	104%	20-180%
	13C2-6:2FTS	100%	20-180%
	13C2-8:2FTS	103%	20-180%
	13C3-HFPO-DA	105%	20-150%

Blank Spike Summary

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97146-LLBS	6Q18785.D	1	06/02/23	MV	05/31/23	OP97146	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-1, FC6212-2, FC6212-3, FC6212-4, FC6212-5, FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0177	111	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0091	114	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0049	123	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0041	103	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0044	110	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0046	115	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0044	110	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0040	100	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0044	110	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0038	95	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0045	113	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0036	101	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0042	112	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0043	118	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0043	113	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0039	105	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0040	104	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0037	96	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0032	82	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0162	108	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0178	117	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0174	113	40-150
754-91-6	PFOSA	0.004	0.0042	105	40-150
31506-32-8	MeFOSA	0.008	0.0086	108	40-150
4151-50-2	EtFOSA	0.008	0.0081	101	40-150
2355-31-9	MeFOSAA	0.004	0.0043	108	40-150
2991-50-6	EtFOSAA	0.004	0.0048	120	40-150
24448-09-7	MeFOSE	0.02	0.0228	114	40-150
1691-99-2	EtFOSE	0.02	0.0208	104	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0091	114	40-150
919005-14-4	ADONA	0.00756	0.0085	112	40-150
377-73-1	PFMPA	0.008	0.0092	115	40-150
863090-89-5	PFMBA	0.008	0.0091	114	40-150
151772-58-6	NFDHA	0.008	0.0091	114	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0090	120	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0071	94	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97146-LLBS	6Q18785.D	1	06/02/23	MV	05/31/23	OP97146	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-1, FC6212-2, FC6212-3, FC6212-4, FC6212-5, FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0081	114	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0202	101	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.109	109	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.105	105	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	97%	20-150%
	13C5-PFPeA	95%	20-150%
	13C5-PFHxA	93%	20-150%
	13C4-PFHpA	97%	20-150%
	13C8-PFOA	97%	20-150%
	13C9-PFNA	89%	20-150%
	13C6-PFDA	101%	20-150%
	13C7-PFUnDA	102%	20-150%
	13C2-PFDoDA	87%	20-150%
	13C2-PFTeDA	70%	20-150%
	13C3-PFBS	93%	20-150%
	13C3-PFHxS	90%	20-150%
	13C8-PFOS	90%	20-150%
	13C8-FOSA	70%	20-150%
	d3-MeFOSA	50%	20-150%
	d5-EtFOSA	54%	20-150%
	d3-MeFOSAA	94%	20-150%
	d5-EtFOSAA	89%	20-150%
	d7-MeFOSE	49%	20-150%
	d9-EtFOSE	55%	20-150%
	13C2-4:2FTS	102%	20-180%
	13C2-6:2FTS	99%	20-180%
	13C2-8:2FTS	100%	20-180%
	13C3-HFPO-DA	96%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97146-BS	6Q18784.D	1	06/02/23	MV	05/31/23	OP97146	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-1, FC6212-2, FC6212-3, FC6212-4, FC6212-5, FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.118	118	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0595	119	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0305	122	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0285	114	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0294	118	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0293	117	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0306	122	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0308	123	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0298	119	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0280	112	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0307	123	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0252	114	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0269	114	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0259	113	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0281	118	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0273	118	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0274	114	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0277	115	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0245	101	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.106	113	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.110	116	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.121	126	40-150
754-91-6	PFOSA	0.025	0.0277	111	40-150
31506-32-8	MeFOSA	0.05	0.0596	119	40-150
4151-50-2	EtFOSA	0.05	0.0594	119	40-150
2355-31-9	MeFOSAA	0.025	0.0320	128	40-150
2991-50-6	EtFOSAA	0.025	0.0320	128	40-150
24448-09-7	MeFOSE	0.125	0.148	118	40-150
1691-99-2	EtFOSE	0.125	0.150	120	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0564	113	40-150
919005-14-4	ADONA	0.0473	0.0542	115	40-150
377-73-1	PFMPA	0.05	0.0326	65	40-150
863090-89-5	PFMBA	0.05	0.0640	128	40-150
151772-58-6	NFDHA	0.05	0.0594	119	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0522	112	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0516	109	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97146-BS	6Q18784.D	1	06/02/23	MV	05/31/23	OP97146	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-1, FC6212-2, FC6212-3, FC6212-4, FC6212-5, FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0544	122	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.0774	62	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.715	114	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.741	119	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	26%	20-150%
	13C5-PFPeA	94%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	91%	20-150%
	13C7-PFUnDA	94%	20-150%
	13C2-PFDoDA	93%	20-150%
	13C2-PFTeDA	80%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	97%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	89%	20-150%
	d3-MeFOSA	82%	20-150%
	d5-EtFOSA	78%	20-150%
	d3-MeFOSAA	103%	20-150%
	d5-EtFOSAA	101%	20-150%
	d7-MeFOSE	57%	20-150%
	d9-EtFOSE	60%	20-150%
	13C2-4:2FTS	108%	20-180%
	13C2-6:2FTS	105%	20-180%
	13C2-8:2FTS	107%	20-180%
	13C3-HFPO-DA	105%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97146-MS	6Q18792.D	1	06/02/23	MV	05/31/23	OP97146	S6Q280
FC6212-5	6Q18791.D	1	06/02/23	MV	05/31/23	OP97146	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-1, FC6212-2, FC6212-3, FC6212-4, FC6212-5, FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	FC6212-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	ND		0.103	0.131	127	40-150
2706-90-3	Perfluoropentanoic acid	ND		0.0515	0.0633	123	40-150
307-24-4	Perfluorohexanoic acid	ND		0.0258	0.0302	117	40-150
375-85-9	Perfluoroheptanoic acid	ND		0.0258	0.0304	118	40-150
335-67-1	Perfluorooctanoic acid	ND		0.0258	0.0291	113	40-150
375-95-1	Perfluorononanoic acid	ND		0.0258	0.0301	117	40-150
335-76-2	Perfluorodecanoic acid	ND		0.0258	0.0294	114	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.0258	0.0308	120	40-150
307-55-1	Perfluorododecanoic acid	ND		0.0258	0.0312	121	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.0258	0.0193	75	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.0258	0.0296	115	40-150
375-73-5	Perfluorobutanesulfonic acid	ND		0.0229	0.0258	113	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0243	0.0286	118	40-150
355-46-4	Perfluorohexanesulfonic acid	ND		0.0236	0.0280	119	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0246	0.0292	119	40-150
1763-23-1	Perfluorooctanesulfonic acid	ND		0.0239	0.0265	111	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.0248	0.0252	102	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.0249	0.0193	78	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.025	0.0057	23*	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0966	0.114	118	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.0979	0.108	110	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.099	0.125	126	40-150
754-91-6	PFOSA	ND		0.0258	0.0311	121	40-150
31506-32-8	MeFOSA	ND		0.0515	0.0603	117	40-150
4151-50-2	EtFOSA	ND		0.0515	0.0587	114	40-150
2355-31-9	MeFOSAA	ND		0.0258	0.0312	121	40-150
2991-50-6	EtFOSAA	ND		0.0258	0.0308	120	40-150
24448-09-7	MeFOSE	ND		0.129	0.160	124	40-150
1691-99-2	EtFOSE	ND		0.129	0.156	121	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.0515	0.0594	115	40-150
919005-14-4	ADONA	ND		0.0487	0.0616	126	40-150
377-73-1	PFMPA	ND		0.0515	0.0323	63	40-150
863090-89-5	PFMBA	ND		0.0515	0.0691	134	40-150
151772-58-6	NFDHA	ND		0.0515	0.0558	108	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0482	0.0525	109	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0487	0.0296	61	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97146-MS	6Q18792.D	1	06/02/23	MV	05/31/23	OP97146	S6Q280
FC6212-5	6Q18791.D	1	06/02/23	MV	05/31/23	OP97146	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-1, FC6212-2, FC6212-3, FC6212-4, FC6212-5, FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	FC6212-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	ND		0.0459	0.0548	119	40-150
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.129	0.0856	66	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.644	0.774	120	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.644	0.783	122	40-150

CAS No.	ID Standard Recoveries	MS	FC6212-5	Limits
	13C4-PFBA	18%*	21%	20-150%
	13C5-PFPeA	83%	83%	20-150%
	13C5-PFHxA	102%	97%	20-150%
	13C4-PFHpA	103%	99%	20-150%
	13C8-PFOA	96%	94%	20-150%
	13C9-PFNA	88%	91%	20-150%
	13C6-PFDA	90%	93%	20-150%
	13C7-PFUnDA	80%	90%	20-150%
	13C2-PFDoDA	58%	57%	20-150%
	13C2-PFTeDA	22%	32%	20-150%
	13C3-PFBS	93%	93%	20-150%
	13C3-PFHxS	87%	96%	20-150%
	13C8-PFOS	85%	94%	20-150%
	13C8-FOSA	77%	84%	20-150%
	d3-MeFOSA	69%	75%	20-150%
	d5-EtFOSA	61%	76%	20-150%
	d3-MeFOSAA	86%	89%	20-150%
	d5-EtFOSAA	81%	91%	20-150%
	d7-MeFOSE	31%	53%	20-150%
	d9-EtFOSE	19%*	52%	20-150%
	13C2-4:2FTS	108%	116%	20-180%
	13C2-6:2FTS	97%	96%	20-180%
	13C2-8:2FTS	76%	78%	20-180%
	13C3-HFPO-DA	98%	91%	20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97146-DUP	6Q18796.D	1	06/02/23	MV	05/31/23	OP97146	S6Q280
FC6212-6	6Q18795.D	1	06/02/23	MV	05/31/23	OP97146	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-1, FC6212-2, FC6212-3, FC6212-4, FC6212-5, FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	FC6212-6 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	ND		ND		nc	30
2706-90-3	Perfluoropentanoic acid	ND		ND		nc	30
307-24-4	Perfluorohexanoic acid	ND		ND		nc	30
375-85-9	Perfluoroheptanoic acid	0.00074	J	0.00059	J	23	30
335-67-1	Perfluorooctanoic acid	ND		ND		nc	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	ND		ND		nc	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC6212
Account: NDDEQNDB North Dakota DEQ
Project: PFAS

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97146-DUP	6Q18796.D	1	06/02/23	MV	05/31/23	OP97146	S6Q280
FC6212-6	6Q18795.D	1	06/02/23	MV	05/31/23	OP97146	S6Q280

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6212-1, FC6212-2, FC6212-3, FC6212-4, FC6212-5, FC6212-6, FC6212-7, FC6212-8, FC6212-9, FC6212-10

CAS No.	Compound	FC6212-6 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC6212-6	Limits
	13C4-PFBA	26%	32%	20-150%
	13C5-PFPeA	81%	96%	20-150%
	13C5-PFHxA	93%	105%	20-150%
	13C4-PFHpA	97%	109%	20-150%
	13C8-PFOA	97%	106%	20-150%
	13C9-PFNA	89%	91%	20-150%
	13C6-PFDA	94%	103%	20-150%
	13C7-PFUnDA	86%	92%	20-150%
	13C2-PFDoDA	61%	65%	20-150%
	13C2-PFTeDA	43%	40%	20-150%
	13C3-PFBS	90%	100%	20-150%
	13C3-PFHxS	91%	98%	20-150%
	13C8-PFOS	87%	95%	20-150%
	13C8-FOSA	88%	90%	20-150%
	d3-MeFOSA	68%	73%	20-150%
	d5-EtFOSA	67%	67%	20-150%
	d3-MeFOSAA	91%	97%	20-150%
	d5-EtFOSAA	83%	91%	20-150%
	d7-MeFOSE	52%	50%	20-150%
	d9-EtFOSE	49%	50%	20-150%
	13C2-4:2FTS	112%	121%	20-180%
	13C2-6:2FTS	95%	112%	20-180%
	13C2-8:2FTS	71%	85%	20-180%
	13C3-HFPO-DA	90%	106%	20-150%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC6213

Sampling Date: 05/15/23



Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
ssuggs@nd.gov

ATTN: Shannon Suggs

Total number of pages in report: 52

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC6213

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FC6213-1	05/15/23	08:00	MSSS	05/19/23	AQ	Surface Water	380013
FC6213-2	05/15/23	08:00	MSSS	05/19/23	AQ	Surface Water	389990
FC6213-3	05/15/23	08:00	MSSS	05/19/23	AQ	Surface Water	389999
FC6213-4	05/15/23	09:45	MSSS	05/19/23	AQ	Surface Water	380012
FC6213-5	05/15/23	11:00	MSSS	05/19/23	AQ	Surface Water	385169
FC6213-6	05/15/23	12:45	MSSS	05/19/23	AQ	Surface Water	385055
FC6213-7	05/15/23	13:20	MSSS	05/19/23	AQ	Surface Water	380083
FC6213-8	05/15/23	15:45	MSSS	05/19/23	AQ	Surface Water	380153
FC6213-9	05/15/23	16:45	MSSS	05/19/23	AQ	Surface Water	380009
FC6213-10	05/15/23	18:00	MSSS	05/19/23	AQ	Surface Water	384130

Summary of Hits

Job Number: FC6213
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 05/15/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC6213-1	**380013**					
Perfluorobutanoic acid		5.9 J	7.7	3.8	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		0.98 J	1.9	0.48	ng/l	EPA DRAFT 1633
FC6213-2	**389990**					
No hits reported in this sample.						
FC6213-3	**389999**					
Perfluorobutanoic acid		10.4	7.7	3.8	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		0.81 J	1.9	0.48	ng/l	EPA DRAFT 1633
FC6213-4	**380012**					
Perfluorobutanoic acid		9.8	8.2	4.1	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		0.79 J	2.0	0.51	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		0.92 J	2.0	0.51	ng/l	EPA DRAFT 1633
FC6213-5	**385169**					
Perfluoroheptanoic acid		0.69 J	2.2	0.54	ng/l	EPA DRAFT 1633
FC6213-6	**385055**					
Perfluoroheptanoic acid		1.3 J	2.0	0.51	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.2 J	2.0	0.51	ng/l	EPA DRAFT 1633
FC6213-7	**380083**					
Perfluorobutanoic acid		9.1	7.7	3.8	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		1.1 J	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		0.84 J	1.9	0.48	ng/l	EPA DRAFT 1633
FC6213-8	**380153**					
No hits reported in this sample.						
FC6213-9	**380009**					
Perfluorooctanoic acid		1.1 J	2.1	0.52	ng/l	EPA DRAFT 1633

Summary of Hits

Job Number: FC6213
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 05/15/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC6213-10	**384130**					
Perfluorobutanoic acid		10	7.8	3.9	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		0.81 J	2.0	0.49	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		0.85 J	2.0	0.49	ng/l	EPA DRAFT 1633

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	380013		
Lab Sample ID:	FC6213-1	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q19174.D	1	06/11/23 16:54	MV	06/01/23 13:00	OP97160	S6Q286
Run #2							

	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	5.9	7.7	3.8	ng/l	J
2706-90-3	Perfluoropentanoic acid	ND	3.8	0.96	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	0.98	1.9	0.48	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.59	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.81	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.96	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.96	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.96	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.96	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.96	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.96	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.7	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.96	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.96	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.96	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380013		
Lab Sample ID:	FC6213-1	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.96	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.6	ng/l	
1691-99-2	EtFOSE	ND	19	9.6	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.7	1.9	ng/l	
919005-14-4	ADONA	ND	7.7	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.96	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.7	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.7	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.96	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.6	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	47%		20-150%
	13C5-PFPeA	104%		20-150%
	13C5-PFHxA	106%		20-150%
	13C4-PFHpA	108%		20-150%
	13C8-PFOA	107%		20-150%
	13C9-PFNA	105%		20-150%
	13C6-PFDA	100%		20-150%
	13C7-PFUnDA	96%		20-150%
	13C2-PFDoDA	81%		20-150%
	13C2-PFTeDA	64%		20-150%
	13C3-PFBS	109%		20-150%
	13C3-PFHxS	118%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380013		
Lab Sample ID:	FC6213-1	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	113%		20-150%
	13C8-FOSA	97%		20-150%
	d3-MeFOSA	97%		20-150%
	d5-EtFOSA	96%		20-150%
	d3-MeFOSAA	117%		20-150%
	d5-EtFOSAA	113%		20-150%
	d7-MeFOSE	82%		20-150%
	d9-EtFOSE	87%		20-150%
	13C2-4:2FTS	115%		20-180%
	13C2-6:2FTS	99%		20-180%
	13C2-8:2FTS	89%		20-180%
	13C3-HFPO-DA	116%		20-150%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	389990		
Lab Sample ID:	FC6213-2	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q19175.D	1	06/11/23 17:08	MV	06/01/23 13:00	OP97160	S6Q286
Run #2							

	Initial Volume	Final Volume
Run #1	526 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.6	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.8	0.95	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.58	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.57	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.57	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.80	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.95	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.95	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.95	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.95	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.95	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.95	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.6	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.6	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.6	3.9	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.95	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.95	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.95	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	389990		
Lab Sample ID:	FC6213-2	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.95	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.5	ng/l	
1691-99-2	EtFOSE	ND	19	9.5	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.6	1.9	ng/l	
919005-14-4	ADONA	ND	7.6	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.95	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.1	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.6	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.6	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.95	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.5	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.5	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.5	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	116%		20-150%
	13C5-PFPeA	118%		20-150%
	13C5-PFHxA	121%		20-150%
	13C4-PFHpA	115%		20-150%
	13C8-PFOA	108%		20-150%
	13C9-PFNA	108%		20-150%
	13C6-PFDA	113%		20-150%
	13C7-PFUnDA	97%		20-150%
	13C2-PFDoDA	88%		20-150%
	13C2-PFTeDA	89%		20-150%
	13C3-PFBS	113%		20-150%
	13C3-PFHxS	118%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	389990		
Lab Sample ID:	FC6213-2	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	116%		20-150%
	13C8-FOSA	89%		20-150%
	d3-MeFOSA	88%		20-150%
	d5-EtFOSA	98%		20-150%
	d3-MeFOSAA	117%		20-150%
	d5-EtFOSAA	105%		20-150%
	d7-MeFOSE	89%		20-150%
	d9-EtFOSE	101%		20-150%
	13C2-4:2FTS	115%		20-180%
	13C2-6:2FTS	109%		20-180%
	13C2-8:2FTS	101%		20-180%
	13C3-HFPO-DA	127%		20-150%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	389999		
Lab Sample ID:	FC6213-3	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q19176.D	1	06/11/23 17:23	MV	06/01/23 13:00	OP97160	S6Q286
Run #2							

	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	10.4	7.7	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.8	0.96	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	0.81	1.9	0.48	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.59	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.81	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.96	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.96	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.96	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.96	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.96	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.96	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.7	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.96	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.96	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.96	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	389999		
Lab Sample ID:	FC6213-3	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.96	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.6	ng/l	
1691-99-2	EtFOSE	ND	19	9.6	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.7	1.9	ng/l	
919005-14-4	ADONA	ND	7.7	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.96	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.7	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.7	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.96	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.6	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	39%		20-150%
	13C5-PFPeA	108%		20-150%
	13C5-PFHxA	123%		20-150%
	13C4-PFHpA	115%		20-150%
	13C8-PFOA	113%		20-150%
	13C9-PFNA	107%		20-150%
	13C6-PFDA	101%		20-150%
	13C7-PFUnDA	100%		20-150%
	13C2-PFDoDA	82%		20-150%
	13C2-PFTeDA	65%		20-150%
	13C3-PFBS	109%		20-150%
	13C3-PFHxS	111%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	389999		
Lab Sample ID:	FC6213-3	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		20-150%
	13C8-FOSA	105%		20-150%
	d3-MeFOSA	103%		20-150%
	d5-EtFOSA	99%		20-150%
	d3-MeFOSAA	116%		20-150%
	d5-EtFOSAA	110%		20-150%
	d7-MeFOSE	87%		20-150%
	d9-EtFOSE	87%		20-150%
	13C2-4:2FTS	112%		20-180%
	13C2-6:2FTS	105%		20-180%
	13C2-8:2FTS	97%		20-180%
	13C3-HFPO-DA	125%		20-150%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380012		
Lab Sample ID:	FC6213-4	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q19177.D	1	06/11/23 17:37	MV	06/01/23 13:00	OP97160	S6Q286
Run #2							

	Initial Volume	Final Volume
Run #1	490 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	9.8	8.2	4.1	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.51	ng/l	
375-85-9	Perfluoroheptanoic acid	0.79	2.0	0.51	ng/l	J
335-67-1	Perfluorooctanoic acid	0.92	2.0	0.51	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.86	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380012		
Lab Sample ID:	FC6213-4	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.0	ng/l	
919005-14-4	ADONA	ND	8.2	2.0	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.0	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	48%		20-150%
	13C5-PFPeA	110%		20-150%
	13C5-PFHxA	115%		20-150%
	13C4-PFHpA	118%		20-150%
	13C8-PFOA	111%		20-150%
	13C9-PFNA	111%		20-150%
	13C6-PFDA	111%		20-150%
	13C7-PFUnDA	110%		20-150%
	13C2-PFDoDA	94%		20-150%
	13C2-PFTeDA	78%		20-150%
	13C3-PFBS	110%		20-150%
	13C3-PFHxS	112%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380012		
Lab Sample ID:	FC6213-4	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	105%		20-150%
	13C8-FOSA	104%		20-150%
	d3-MeFOSA	104%		20-150%
	d5-EtFOSA	99%		20-150%
	d3-MeFOSAA	111%		20-150%
	d5-EtFOSAA	111%		20-150%
	d7-MeFOSE	90%		20-150%
	d9-EtFOSE	98%		20-150%
	13C2-4:2FTS	120%		20-180%
	13C2-6:2FTS	103%		20-180%
	13C2-8:2FTS	95%		20-180%
	13C3-HFPO-DA	127%		20-150%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	385169		
Lab Sample ID:	FC6213-5	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q19178.D	1	06/11/23 17:52	MV	06/01/23 13:00	OP97160	S6Q286
Run #2							

	Initial Volume	Final Volume
Run #1	465 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.6	4.3	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.3	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.2	0.54	ng/l	
375-85-9	Perfluoroheptanoic acid	0.69	2.2	0.54	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.2	0.54	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	0.66	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.54	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.65	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.65	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.90	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.54	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.6	4.3	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.6	4.3	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.6	4.4	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	385169		
Lab Sample ID:	FC6213-5	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.6	2.2	ng/l	
919005-14-4	ADONA	ND	8.6	2.2	ng/l	
377-73-1	PFMPA	ND	4.3	1.1	ng/l	
863090-89-5	PFMBA	ND	4.3	1.2	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.6	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.6	2.2	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	11	5.4	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	54	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	54	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	28%		20-150%
	13C5-PFPeA	90%		20-150%
	13C5-PFHxA	109%		20-150%
	13C4-PFHpA	108%		20-150%
	13C8-PFOA	100%		20-150%
	13C9-PFNA	106%		20-150%
	13C6-PFDA	107%		20-150%
	13C7-PFUnDA	97%		20-150%
	13C2-PFDoDA	88%		20-150%
	13C2-PFTeDA	74%		20-150%
	13C3-PFBS	98%		20-150%
	13C3-PFHxS	103%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	385169		
Lab Sample ID:	FC6213-5	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	101%		20-150%
	13C8-FOSA	100%		20-150%
	d3-MeFOSA	100%		20-150%
	d5-EtFOSA	99%		20-150%
	d3-MeFOSAA	111%		20-150%
	d5-EtFOSAA	101%		20-150%
	d7-MeFOSE	88%		20-150%
	d9-EtFOSE	91%		20-150%
	13C2-4:2FTS	100%		20-180%
	13C2-6:2FTS	96%		20-180%
	13C2-8:2FTS	92%		20-180%
	13C3-HFPO-DA	110%		20-150%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	385055		
Lab Sample ID:	FC6213-6	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q19172.D	1	06/11/23 16:23	MV	06/01/23 13:00	OP97160	S6Q286
Run #2 [a]	6Q19390.D	1	06/15/23 13:05	MV	06/14/23 14:01	OP97342	S6Q290

	Initial Volume	Final Volume
Run #1	490 ml	5.0 ml
Run #2	445 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.2	4.1	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.51	ng/l	
375-85-9	Perfluoroheptanoic acid	1.3	2.0	0.51	ng/l	J
335-67-1	Perfluorooctanoic acid	1.2	2.0	0.51	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.86	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	385055		
Lab Sample ID:	FC6213-6	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.0	ng/l	
919005-14-4	ADONA	ND	8.2	2.0	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.0	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [b]	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	12%	24%	20-150%
	13C5-PFPeA	79%	100%	20-150%
	13C5-PFHxA	118%	106%	20-150%
	13C4-PFHpA	116%	114%	20-150%
	13C8-PFOA	109%	94%	20-150%
	13C9-PFNA	113%	109%	20-150%
	13C6-PFDA	105%	83%	20-150%
	13C7-PFUnDA	101%	69%	20-150%
	13C2-PFDoDA	80%	56%	20-150%
	13C2-PFTeDA	54%	39%	20-150%
	13C3-PFBS	111%	101%	20-150%
	13C3-PFHxS	116%	101%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	385055		
Lab Sample ID:	FC6213-6	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	108%	91%	20-150%
	13C8-FOSA	106%	89%	20-150%
	d3-MeFOSA	107%	78%	20-150%
	d5-EtFOSA	107%	77%	20-150%
	d3-MeFOSAA	108%	89%	20-150%
	d5-EtFOSAA	110%	82%	20-150%
	d7-MeFOSE	89%	61%	20-150%
	d9-EtFOSE	92%	58%	20-150%
	13C2-4:2FTS	112%	98%	20-180%
	13C2-6:2FTS	106%	92%	20-180%
	13C2-8:2FTS	94%	91%	20-180%
	13C3-HFPO-DA	124%	98%	20-150%

(a) Confirmation run.
(b) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380083		
Lab Sample ID:	FC6213-7	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q19173.D	1	06/11/23 16:37	MV	06/01/23 13:00	OP97160	S6Q286
Run #2							

	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	9.1	7.7	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.8	0.96	ng/l	
307-24-4	Perfluorohexanoic acid	1.1	1.9	0.48	ng/l	J
375-85-9	Perfluoroheptanoic acid	0.84	1.9	0.48	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.59	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.81	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.96	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.96	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.96	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.96	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.96	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.96	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.7	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.96	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.96	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.96	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380083		
Lab Sample ID:	FC6213-7	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.96	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.6	ng/l	
1691-99-2	EtFOSE	ND	19	9.6	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.7	1.9	ng/l	
919005-14-4	ADONA	ND	7.7	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.96	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.7	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.7	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.96	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.6	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	36%		20-150%
	13C5-PFPeA	114%		20-150%
	13C5-PFHxA	122%		20-150%
	13C4-PFHpA	118%		20-150%
	13C8-PFOA	111%		20-150%
	13C9-PFNA	109%		20-150%
	13C6-PFDA	112%		20-150%
	13C7-PFUnDA	100%		20-150%
	13C2-PFDoDA	86%		20-150%
	13C2-PFTeDA	61%		20-150%
	13C3-PFBS	109%		20-150%
	13C3-PFHxS	114%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380083		
Lab Sample ID:	FC6213-7	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		20-150%
	13C8-FOSA	98%		20-150%
	d3-MeFOSA	97%		20-150%
	d5-EtFOSA	100%		20-150%
	d3-MeFOSAA	109%		20-150%
	d5-EtFOSAA	107%		20-150%
	d7-MeFOSE	84%		20-150%
	d9-EtFOSE	88%		20-150%
	13C2-4:2FTS	104%		20-180%
	13C2-6:2FTS	98%		20-180%
	13C2-8:2FTS	100%		20-180%
	13C3-HFPO-DA	127%		20-150%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380153		
Lab Sample ID:	FC6213-8	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q19181.D	1	06/11/23 18:35	MV	06/01/23 13:00	OP97160	S6Q286
Run #2							

	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.7	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.8	0.96	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.59	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.81	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.96	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.96	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.96	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.96	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.96	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.96	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.7	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.96	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.96	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.96	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380153		
Lab Sample ID:	FC6213-8	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.96	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.6	ng/l	
1691-99-2	EtFOSE	ND	19	9.6	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.7	1.9	ng/l	
919005-14-4	ADONA	ND	7.7	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.96	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.7	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.7	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.96	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.6	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	32%		20-150%
	13C5-PFPeA	110%		20-150%
	13C5-PFHxA	121%		20-150%
	13C4-PFHpA	119%		20-150%
	13C8-PFOA	118%		20-150%
	13C9-PFNA	116%		20-150%
	13C6-PFDA	112%		20-150%
	13C7-PFUnDA	111%		20-150%
	13C2-PFDoDA	95%		20-150%
	13C2-PFTeDA	69%		20-150%
	13C3-PFBS	122%		20-150%
	13C3-PFHxS	122%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380153		
Lab Sample ID:	FC6213-8	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	117%		20-150%
	13C8-FOSA	100%		20-150%
	d3-MeFOSA	107%		20-150%
	d5-EtFOSA	108%		20-150%
	d3-MeFOSAA	115%		20-150%
	d5-EtFOSAA	119%		20-150%
	d7-MeFOSE	88%		20-150%
	d9-EtFOSE	98%		20-150%
	13C2-4:2FTS	118%		20-180%
	13C2-6:2FTS	106%		20-180%
	13C2-8:2FTS	111%		20-180%
	13C3-HFPO-DA	130%		20-150%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380009		
Lab Sample ID:	FC6213-9	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q19182.D	1	06/11/23 18:50	MV	06/01/23 13:00	OP97160	S6Q286
Run #2							

	Initial Volume	Final Volume
Run #1	480 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.3	4.2	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.2	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.1	0.52	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.1	0.52	ng/l	
335-67-1	Perfluorooctanoic acid	1.1	2.1	0.52	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.1	0.64	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.52	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.63	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.63	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.88	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.52	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.3	4.2	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.3	4.2	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.3	4.3	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380009		
Lab Sample ID:	FC6213-9	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.3	2.1	ng/l	
919005-14-4	ADONA	ND	8.3	2.1	ng/l	
377-73-1	PFMPA	ND	4.2	1.0	ng/l	
863090-89-5	PFMBA	ND	4.2	1.2	ng/l	
151772-58-6	NFDHA	ND	4.2	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.3	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.3	2.1	ng/l	
113507-82-7	PFEESA	ND	4.2	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	10	5.2	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	45%		20-150%
	13C5-PFPeA	107%		20-150%
	13C5-PFHxA	122%		20-150%
	13C4-PFHpA	118%		20-150%
	13C8-PFOA	105%		20-150%
	13C9-PFNA	114%		20-150%
	13C6-PFDA	105%		20-150%
	13C7-PFUnDA	107%		20-150%
	13C2-PFDoDA	92%		20-150%
	13C2-PFTeDA	69%		20-150%
	13C3-PFBS	117%		20-150%
	13C3-PFHxS	118%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380009		
Lab Sample ID:	FC6213-9	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	114%		20-150%
	13C8-FOSA	106%		20-150%
	d3-MeFOSA	108%		20-150%
	d5-EtFOSA	111%		20-150%
	d3-MeFOSAA	113%		20-150%
	d5-EtFOSAA	109%		20-150%
	d7-MeFOSE	96%		20-150%
	d9-EtFOSE	99%		20-150%
	13C2-4:2FTS	123%		20-180%
	13C2-6:2FTS	105%		20-180%
	13C2-8:2FTS	98%		20-180%
	13C3-HFPO-DA	127%		20-150%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	384130		
Lab Sample ID:	FC6213-10	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q19183.D	1	06/11/23 19:04	MV	06/01/23 13:00	OP97160	S6Q286
Run #2							

	Initial Volume	Final Volume
Run #1	510 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	10	7.8	3.9	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.9	0.98	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.49	ng/l	
375-85-9	Perfluoroheptanoic acid	0.81	2.0	0.49	ng/l	J
335-67-1	Perfluorooctanoic acid	0.85	2.0	0.49	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.0	0.60	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.49	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.59	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.59	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.82	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.49	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	0.98	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	0.98	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	0.98	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	0.98	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	0.98	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	0.98	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.8	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	0.98	ng/l	
31506-32-8	MeFOSA	ND	2.0	0.98	ng/l	
4151-50-2	EtFOSA	ND	2.0	0.98	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	384130		
Lab Sample ID:	FC6213-10	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	0.98	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	9.8	ng/l	
1691-99-2	EtFOSE	ND	20	9.8	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.8	2.0	ng/l	
919005-14-4	ADONA	ND	7.8	2.0	ng/l	
377-73-1	PFMPA	ND	3.9	0.98	ng/l	
863090-89-5	PFMBA	ND	3.9	1.1	ng/l	
151772-58-6	NFDHA	ND	3.9	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.8	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.8	2.0	ng/l	
113507-82-7	PFEESA	ND	3.9	0.98	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.8	4.9	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	49	9.8	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	49	9.8	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	53%		20-150%
	13C5-PFPeA	102%		20-150%
	13C5-PFHxA	113%		20-150%
	13C4-PFHpA	112%		20-150%
	13C8-PFOA	108%		20-150%
	13C9-PFNA	103%		20-150%
	13C6-PFDA	104%		20-150%
	13C7-PFUnDA	99%		20-150%
	13C2-PFDoDA	89%		20-150%
	13C2-PFTeDA	65%		20-150%
	13C3-PFBS	109%		20-150%
	13C3-PFHxS	112%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	384130		
Lab Sample ID:	FC6213-10	**Date Sampled:**	05/15/23
Matrix:	AQ - Surface Water	**Date Received:**	05/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%		20-150%
	13C8-FOSA	102%		20-150%
	d3-MeFOSA	97%		20-150%
	d5-EtFOSA	97%		20-150%
	d3-MeFOSAA	106%		20-150%
	d5-EtFOSAA	111%		20-150%
	d7-MeFOSE	83%		20-150%
	d9-EtFOSE	91%		20-150%
	13C2-4:2FTS	112%		20-180%
	13C2-6:2FTS	106%		20-180%
	13C2-8:2FTS	90%		20-180%
	13C3-HFPO-DA	119%		20-150%

(a) Associated BS recovery outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FC6213

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # :

PAGE 1 OF 1

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: NDDEQ
Address: 4201 Normandy St.
City: Bismarck State: ND Zip: 58501
Project Contact: Shannon Suggs Email: ssuggs@nd.gov
Phone #: 701-328-5769
Sampler(s) Name(s) (Printed) Sampler 1: McKenzie Stride Sampler 2: SSuggs

Project Information

Project Name: NDDEQ PFAS Sampling
Street: 4201 Normandy St
City: Bismarck State: ND
Project #:
Fax #:
Client Purchase Order #:

Analytical Information

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NaOH+ZnAc	DI WATER	MEOH	LAB USE ONLY
1	380013	5.15.23	8:00	MS	SW	3										
2	389990	5 15 23	8:00	MS												
3	389999	5 15 23	8:00	MS												
4	380012	5.15.23	9:45	MS												
5	385169	5.15.23	1100	MS												
6	385055	5.15.23	1245	MS												
7	380083	5.15.23	1320	MS												
8	380153	5.15.23	1545	MS												
9	380009	5.15.23	1645	MS												
10	381130	5.15.23	1800	MS												

INITIAL ASSESSMENT

LABEL VERIFICATION SF

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	SSuggs	5/18 14:25	2 Fed Ex	3	5/18 4:35	4 5/19
5	Relinquished by/Affiliation	Date Time:	Received By/Affiliation 6	Relinquished By/Affiliation 7	Date Time:	Received By/Affiliation 8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 3.4 FLH1

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

FC6213: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC6213 **Client:** NDDEQ **Project:** NDDEQ PFAS SAMPLING

Date / Time Received: 5/19/2023 9:30:00 AM **Delivery Method:** FX **Airbill #'s:** 3998490157292

Therm ID: IR 1; **Therm CF:** -0.1; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.4);

Cooler Temps (Corrected) °C: Cooler 1: (3.3);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230320 pH 10-12 _____ Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: NATHANS Date: 5/19/2023 9:30:00 AM Reviewer: _____ Date: _____

FC6213: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC6213
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97160-MB	6Q19171.D	1	06/11/23	MV	06/01/23	OP97160	S6Q286

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6213-1, FC6213-2, FC6213-3, FC6213-4, FC6213-5, FC6213-6, FC6213-7, FC6213-8, FC6213-9, FC6213-10

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC6213
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97160-MB	6Q19171.D	1	06/11/23	MV	06/01/23	OP97160	S6Q286

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6213-1, FC6213-2, FC6213-3, FC6213-4, FC6213-5, FC6213-6, FC6213-7, FC6213-8, FC6213-9, FC6213-10

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	109%	20-150%
	13C5-PFPeA	104%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	100%	20-150%
	13C7-PFUnDA	97%	20-150%
	13C2-PFDoDA	95%	20-150%
	13C2-PFTeDA	89%	20-150%
	13C3-PFBS	111%	20-150%
	13C3-PFHxS	111%	20-150%
	13C8-PFOS	110%	20-150%
	13C8-FOSA	85%	20-150%
	d3-MeFOSA	81%	20-150%
	d5-EtFOSA	87%	20-150%
	d3-MeFOSAA	114%	20-150%
	d5-EtFOSAA	106%	20-150%
	d7-MeFOSE	85%	20-150%
	d9-EtFOSE	99%	20-150%
	13C2-4:2FTS	108%	20-180%
	13C2-6:2FTS	105%	20-180%
	13C2-8:2FTS	99%	20-180%
	13C3-HFPO-DA	113%	20-150%

Instrument Blank

Job Number: FC6213
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q286-IBLK	6Q19166.D	1	06/11/23	MV	n/a	n/a	S6Q286

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6213-1, FC6213-2, FC6213-3, FC6213-4, FC6213-5, FC6213-6, FC6213-7, FC6213-8, FC6213-9, FC6213-10

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC6213
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q286-IBLK	6Q19166.D	1	06/11/23	MV	n/a	n/a	S6Q286

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6213-1, FC6213-2, FC6213-3, FC6213-4, FC6213-5, FC6213-6, FC6213-7, FC6213-8, FC6213-9, FC6213-10

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	97%	20-150%
	13C7-PFUnDA	96%	20-150%
	13C2-PFDoDA	96%	20-150%
	13C2-PFTeDA	96%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	102%	20-150%
	13C8-FOSA	97%	20-150%
	d3-MeFOSA	98%	20-150%
	d5-EtFOSA	103%	20-150%
	d3-MeFOSAA	96%	20-150%
	d5-EtFOSAA	99%	20-150%
	d7-MeFOSE	103%	20-150%
	d9-EtFOSE	99%	20-150%
	13C2-4:2FTS	90%	20-180%
	13C2-6:2FTS	90%	20-180%
	13C2-8:2FTS	83%	20-180%
	13C3-HFPO-DA	112%	20-150%

Continuing Calibration Blank

Job Number: FC6213
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q286-ICCB	6Q19180.D	1	06/11/23	MV	n/a	n/a	S6Q286

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6213-8, FC6213-9, FC6213-10

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC6213
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q286-ICCB	6Q19180.D	1	06/11/23	MV	n/a	n/a	S6Q286

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6213-8, FC6213-9, FC6213-10

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	93%	20-150%
	13C7-PFUnDA	93%	20-150%
	13C2-PFDoDA	93%	20-150%
	13C2-PFTeDA	92%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	94%	20-150%
	d3-MeFOSA	93%	20-150%
	d5-EtFOSA	99%	20-150%
	d3-MeFOSAA	103%	20-150%
	d5-EtFOSAA	101%	20-150%
	d7-MeFOSE	96%	20-150%
	d9-EtFOSE	96%	20-150%
	13C2-4:2FTS	100%	20-180%
	13C2-6:2FTS	99%	20-180%
	13C2-8:2FTS	92%	20-180%
	13C3-HFPO-DA	111%	20-150%

Blank Spike Summary

Job Number: FC6213
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97160-LLBS	6Q19170.D	1	06/11/23	MV	06/01/23	OP97160	S6Q286

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6213-1, FC6213-2, FC6213-3, FC6213-4, FC6213-5, FC6213-6, FC6213-7, FC6213-8, FC6213-9, FC6213-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0166	104	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0084	105	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0040	100	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0043	108	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0041	103	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0039	98	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0045	113	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0042	105	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0038	95	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0042	105	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0041	103	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0039	110	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0039	104	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0039	107	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0041	108	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0038	102	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0040	104	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0041	106	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0040	103	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0162	108	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0161	106	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0159	104	40-150
754-91-6	PFOSA	0.004	0.0040	100	40-150
31506-32-8	MeFOSA	0.008	0.0082	103	40-150
4151-50-2	EtFOSA	0.008	0.0076	95	40-150
2355-31-9	MeFOSAA	0.004	0.0046	115	40-150
2991-50-6	EtFOSAA	0.004	0.0048	120	40-150
24448-09-7	MeFOSE	0.02	0.0196	98	40-150
1691-99-2	EtFOSE	0.02	0.0208	104	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0088	110	40-150
919005-14-4	ADONA	0.00756	0.0075	99	40-150
377-73-1	PFMPA	0.008	0.0087	109	40-150
863090-89-5	PFMBA	0.008	0.0086	108	40-150
151772-58-6	NFDHA	0.008	0.0080	100	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0076	102	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0076	101	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6213
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97160-LLBS	6Q19170.D	1	06/11/23	MV	06/01/23	OP97160	S6Q286

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6213-1, FC6213-2, FC6213-3, FC6213-4, FC6213-5, FC6213-6, FC6213-7, FC6213-8, FC6213-9, FC6213-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0074	104	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0138	69	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.0902	90	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.0941	94	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	112%	20-150%
	13C5-PFPeA	116%	20-150%
	13C5-PFHxA	117%	20-150%
	13C4-PFHpA	113%	20-150%
	13C8-PFOA	108%	20-150%
	13C9-PFNA	100%	20-150%
	13C6-PFDA	110%	20-150%
	13C7-PFUnDA	107%	20-150%
	13C2-PFDoDA	105%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	112%	20-150%
	13C3-PFHxS	114%	20-150%
	13C8-PFOS	113%	20-150%
	13C8-FOSA	86%	20-150%
	d3-MeFOSA	89%	20-150%
	d5-EtFOSA	103%	20-150%
	d3-MeFOSAA	116%	20-150%
	d5-EtFOSAA	114%	20-150%
	d7-MeFOSE	83%	20-150%
	d9-EtFOSE	97%	20-150%
	13C2-4:2FTS	108%	20-180%
	13C2-6:2FTS	111%	20-180%
	13C2-8:2FTS	118%	20-180%
	13C3-HFPO-DA	122%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6213
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97160-BS	6Q19169.D	1	06/11/23	MV	06/01/23	OP97160	S6Q286

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6213-1, FC6213-2, FC6213-3, FC6213-4, FC6213-5, FC6213-6, FC6213-7, FC6213-8, FC6213-9, FC6213-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.101	101	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0512	102	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0268	107	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0267	107	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0282	113	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0242	97	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0250	100	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0250	100	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0254	102	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0257	103	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0258	103	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0232	105	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0234	99	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0228	100	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0257	108	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0231	100	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0227	94	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0240	99	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0224	92	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.0946	101	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.0981	103	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.0928	97	40-150
754-91-6	PFOSA	0.025	0.0252	101	40-150
31506-32-8	MeFOSA	0.05	0.0481	96	40-150
4151-50-2	EtFOSA	0.05	0.0476	95	40-150
2355-31-9	MeFOSAA	0.025	0.0277	111	40-150
2991-50-6	EtFOSAA	0.025	0.0243	97	40-150
24448-09-7	MeFOSE	0.125	0.124	99	40-150
1691-99-2	EtFOSE	0.125	0.116	93	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0521	104	40-150
919005-14-4	ADONA	0.0473	0.0459	97	40-150
377-73-1	PFMPA	0.05	0.0264	53	40-150
863090-89-5	PFMBA	0.05	0.0545	109	40-150
151772-58-6	NFDHA	0.05	0.0572	114	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0458	98	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0468	99	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6213
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97160-BS	6Q19169.D	1	06/11/23	MV	06/01/23	OP97160	S6Q286

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6213-1, FC6213-2, FC6213-3, FC6213-4, FC6213-5, FC6213-6, FC6213-7, FC6213-8, FC6213-9, FC6213-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0494	111	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.0421	34*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.572	92	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.595	95	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	29%	20-150%
	13C5-PFPeA	116%	20-150%
	13C5-PFHxA	115%	20-150%
	13C4-PFHpA	117%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	115%	20-150%
	13C6-PFDA	126%	20-150%
	13C7-PFUnDA	120%	20-150%
	13C2-PFDoDA	115%	20-150%
	13C2-PFTeDA	113%	20-150%
	13C3-PFBS	121%	20-150%
	13C3-PFHxS	122%	20-150%
	13C8-PFOS	124%	20-150%
	13C8-FOSA	90%	20-150%
	d3-MeFOSA	104%	20-150%
	d5-EtFOSA	107%	20-150%
	d3-MeFOSAA	115%	20-150%
	d5-EtFOSAA	118%	20-150%
	d7-MeFOSE	89%	20-150%
	d9-EtFOSE	106%	20-150%
	13C2-4:2FTS	112%	20-180%
	13C2-6:2FTS	108%	20-180%
	13C2-8:2FTS	114%	20-180%
	13C3-HFPO-DA	130%	20-150%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC6213
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97160-MS	6Q19185.D	1	06/11/23	MV	06/01/23	OP97160	S6Q286
OP97160-MSD	6Q19186.D	1	06/11/23	MV	06/01/23	OP97160	S6Q286
JD66240-1	6Q19184.D	1	06/11/23	MV	06/01/23	OP97160	S6Q286
JD66240-1 [a]	6Q19257.D	5	06/12/23	MV	06/01/23	OP97160	S6Q287

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6213-1, FC6213-2, FC6213-3, FC6213-4, FC6213-5, FC6213-6, FC6213-7, FC6213-8, FC6213-9, FC6213-10

CAS No.	Compound	JD66240-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
375-22-4	Perfluorobutanoic acid	0.175		0.0936	0.299	132	0.0943	0.234	63	24	40-150/30
2706-90-3	Perfluoropentanoic acid	ND		0.0468	0.437	933*	0.0472	0.362	767*	19	40-150/30
307-24-4	Perfluorohexanoic acid	0.0811		0.0234	0.135	230* [b]	0.0236	0.116	148	15	40-150/30
375-85-9	Perfluoroheptanoic acid	0.0229		0.0234	0.0518	123	0.0236	0.0470	102	10	40-150/30
335-67-1	Perfluorooctanoic acid	0.0137		0.0234	0.0395	110	0.0236	0.0393	109	1	40-150/30
375-95-1	Perfluorononanoic acid	0.0064		0.0234	0.0289	96	0.0236	0.0344	119	17	40-150/30
335-76-2	Perfluorodecanoic acid	0.0034		0.0234	0.0273	102	0.0236	0.0289	108	6	40-150/30
2058-94-8	Perfluoroundecanoic acid	0.0064		0.0234	0.0322	110	0.0236	0.0313	106	3	40-150/30
307-55-1	Perfluorododecanoic acid	ND		0.0234	0.0263	112	0.0236	0.0286	121	8	40-150/30
72629-94-8	Perfluorotridecanoic acid	ND		0.0234	0.0231	99	0.0236	0.0215	91	7	40-150/30
376-06-7	Perfluorotetradecanoic acid	ND		0.0234	0.0248	106	0.0236	0.0250	106	1	40-150/30
375-73-5	Perfluorobutanesulfonic acid	ND		0.0208	0.0276	133	0.0209	0.0275	131	0	40-150/30
2706-91-4	Perfluoropentanesulfonic acid	ND		0.022	0.0248	113	0.0222	0.0222	100	11	40-150/30
355-46-4	Perfluorohexanesulfonic acid	0.0011	J	0.0214	0.0210	93	0.0216	0.0218	96	4	40-150/30
375-92-8	Perfluoroheptanesulfonic acid	0.0065		0.0223	0.0320	114	0.0225	0.0301	105	6	40-150/30
1763-23-1	Perfluorooctanesulfonic acid	0.0045		0.0217	0.0254	96	0.0219	0.0277	106	9	40-150/30
68259-12-1	Perfluorononanesulfonic acid	ND		0.0225	0.0216	96	0.0227	0.0216	95	0	40-150/30
335-77-3	Perfluorodecanesulfonic acid	ND		0.0226	0.0234	104	0.0228	0.0225	99	4	40-150/30
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0227	0.0150	66	0.0229	0.0135	59	11	40-150/30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0878	0.0854	97	0.0884	0.0902	102	5	40-150/30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.089	0.0998	112	0.0896	0.108	121	8	40-150/30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.0899	0.101	112	0.0906	0.103	114	2	40-150/30
754-91-6	PFOSA	ND		0.0234	0.0246	105	0.0236	0.0235	100	5	40-150/30
31506-32-8	MeFOSA	ND		0.0468	0.0490	105	0.0472	0.0488	103	0	40-150/30
4151-50-2	EtFOSA	ND		0.0468	0.0492	105	0.0472	0.0489	104	1	40-150/30
2355-31-9	MeFOSAA	ND		0.0234	0.0257	110	0.0236	0.0267	113	4	40-150/30
2991-50-6	EtFOSAA	ND		0.0234	0.0223	95	0.0236	0.0252	107	12	40-150/30
24448-09-7	MeFOSE	ND		0.117	0.121	103	0.118	0.121	103	0	40-150/30
1691-99-2	EtFOSE	ND		0.117	0.120	103	0.118	0.121	103	1	40-150/30
13252-13-6	HFPO-DA (GenX)	ND		0.0468	0.0539	115	0.0472	0.0501	106	7	40-150/30
919005-14-4	ADONA	ND		0.0442	0.117	264*	0.0446	0.108	242*	8	40-150/30
377-73-1	PFMPA	ND		0.0468	0.0288	62	0.0472	0.0256	54	12	40-150/30
863090-89-5	PFMBA	ND		0.0468	0.0186	40	0.0472	0.0166	35*	11	40-150/30
151772-58-6	NFDHA	ND		0.0468	0.0327	70	0.0472	0.0309	66	6	40-150/30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0438	0.148	338*	0.0441	0.138	313*	7	40-150/30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0442	0.141	319*	0.0446	0.129	289*	9	40-150/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC6213
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97160-MS	6Q19185.D	1	06/11/23	MV	06/01/23	OP97160	S6Q286
OP97160-MSD	6Q19186.D	1	06/11/23	MV	06/01/23	OP97160	S6Q286
JD66240-1	6Q19184.D	1	06/11/23	MV	06/01/23	OP97160	S6Q286
JD66240-1 [a]	6Q19257.D	5	06/12/23	MV	06/01/23	OP97160	S6Q287

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6213-1, FC6213-2, FC6213-3, FC6213-4, FC6213-5, FC6213-6, FC6213-7, FC6213-8, FC6213-9, FC6213-10

CAS No.	Compound	JD66240-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
113507-82-7	PFEESA	ND		0.0417	0.0758	182*	0.042	0.0692	165*	9	40-150/30
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.117	0.0140	12*	0.118	0.0145	12*	4	40-150/30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.585	0.711	121	0.59	0.622	105	13	40-150/30
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.585	1.56	267*	0.59	1.41	239*	10	40-150/30

CAS No.	ID Standard Recoveries	MS	MSD	JD66240-1	JD66240-1	Limits
	13C4-PFBA	4%* [c]	4%* [c]	5%* [c]	5%* [c]	20-150%
	13C5-PFPeA	14%* [c]	15%* [c]	16%* [c]	16%* [c]	20-150%
	13C5-PFHxA	55%	59%	58%	55%	20-150%
	13C4-PFHpA	100%	101%	100%	103%	20-150%
	13C8-PFOA	106%	111%	103%	107%	20-150%
	13C9-PFNA	116%	107%	112%	118%	20-150%
	13C6-PFDA	111%	103%	115%	132%	20-150%
	13C7-PFUnDA	95%	88%	97%	112%	20-150%
	13C2-PFDoDA	89%	83%	92%	86%	20-150%
	13C2-PFTeDA	65%	56%	63%	56%	20-150%
	13C3-PFBS	68%	74%	74%	81%	20-150%
	13C3-PFHxS	105%	114%	103%	117%	20-150%
	13C8-PFOS	108%	113%	105%	113%	20-150%
	13C8-FOSA	106%	109%	104%	91%	20-150%
	d3-MeFOSA	73%	73%	67%	58%	20-150%
	d5-EtFOSA	62%	63%	61%	53%	20-150%
	d3-MeFOSAA	80%	82%	78%	121%	20-150%
	d5-EtFOSAA	87%	73%	70%	100%	20-150%
	d7-MeFOSE	54%	55%	52%	42%	20-150%
	d9-EtFOSE	51%	54%	50%	44%	20-150%
	13C2-4:2FTS	25%	26%	28%	29%	20-180%
	13C2-6:2FTS	93%	89%	92%	94%	20-180%
	13C2-8:2FTS	104%	107%	109%	116%	20-180%
	13C3-HFPO-DA	43%	45%	51%	47%	20-150%

(a) Confirmation run.
(b) Outside control limits due to high level in sample relative to spike amount.
(c) Outside control limits.

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC6994

Sampling Dates: 06/13/23 - 06/14/23



Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
ssuggs@nd.gov

ATTN: Shannon Suggs

Total number of pages in report: **41**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC6994

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FC6994-1	06/14/23	15:30	EJ	06/16/23	AQ	Surface Water	380037 TURTLE RIVER
FC6994-2	06/13/23	13:00	EJ	06/16/23	AQ	Surface Water	RENWICK
FC6994-3	06/13/23	17:55	EJ	06/16/23	AQ	Field Blank Water	HOMME DAM-BLANK
FC6994-4	06/13/23	17:50	EJ	06/16/23	AQ	Surface Water	HOMME DAM-DUP
FC6994-5	06/13/23	17:45	EJ	06/16/23	AQ	Surface Water	HOMME DAM
FC6994-6	06/14/23	12:00	EJ	06/16/23	AQ	Surface Water	LARIMORE DAM

Summary of Hits

Job Number: FC6994
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 06/13/23 thru 06/14/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC6994-1	**380037 TURTLE RIVER**					
Perfluoropentanoic acid		15.0	3.9	0.98	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		14.0	2.0	0.49	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		5.1	2.0	0.49	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		5.0	2.0	0.49	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		3.4	2.0	0.98	ng/l	EPA DRAFT 1633
Perfluoropentanesulfonic acid		3.2	2.0	1.1	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		22.3	2.0	0.98	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		9.4	2.0	0.98	ng/l	EPA DRAFT 1633
FC6994-2	**RENWICK**					
Perfluoroheptanoic acid		0.76 J	2.0	0.51	ng/l	EPA DRAFT 1633
FC6994-3	**HOMME DAM-BLANK**					
No hits reported in this sample.						
FC6994-4	**HOMME DAM-DUP**					
No hits reported in this sample.						
FC6994-5	**HOMME DAM**					
No hits reported in this sample.						
FC6994-6	**LARIMORE DAM**					
No hits reported in this sample.						

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	380037 TURTLE RIVER		
Lab Sample ID:	FC6994-1	**Date Sampled:**	06/14/23
Matrix:	AQ - Surface Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q20682.D	1	07/10/23 23:17	MV	07/07/23 11:15	OP97713	S6Q307
Run #2							

	Initial Volume	Final Volume
Run #1	510 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.8	3.9	ng/l	
2706-90-3	Perfluoropentanoic acid	15.0	3.9	0.98	ng/l	
307-24-4	Perfluorohexanoic acid	14.0	2.0	0.49	ng/l	
375-85-9	Perfluoroheptanoic acid	5.1	2.0	0.49	ng/l	
335-67-1	Perfluorooctanoic acid	5.0	2.0	0.49	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.60	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.49	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.59	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.59	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.82	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.49	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	3.4	2.0	0.98	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	3.2	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	22.3	2.0	0.98	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	0.98	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	9.4	2.0	0.98	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	0.98	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	0.98	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.8	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	0.98	ng/l	
31506-32-8	MeFOSA	ND	2.0	0.98	ng/l	
4151-50-2	EtFOSA	ND	2.0	0.98	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380037 TURTLE RIVER		
Lab Sample ID:	FC6994-1	**Date Sampled:**	06/14/23
Matrix:	AQ - Surface Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	0.98	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	9.8	ng/l	
1691-99-2	EtFOSE	ND	20	9.8	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.8	2.0	ng/l	
919005-14-4	ADONA	ND	7.8	2.0	ng/l	
377-73-1	PFMPA	ND	3.9	0.98	ng/l	
863090-89-5	PFMBA	ND	3.9	1.1	ng/l	
151772-58-6	NFDHA	ND	3.9	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.8	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.8	2.0	ng/l	
113507-82-7	PFEESA	ND	3.9	0.98	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.8	4.9	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	49	9.8	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	49	9.8	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	24%		20-150%
	13C5-PFPeA	92%		20-150%
	13C5-PFHxA	104%		20-150%
	13C4-PFHpA	113%		20-150%
	13C8-PFOA	100%		20-150%
	13C9-PFNA	103%		20-150%
	13C6-PFDA	116%		20-150%
	13C7-PFUnDA	100%		20-150%
	13C2-PFDoDA	67%		20-150%
	13C2-PFTeDA	46%		20-150%
	13C3-PFBS	99%		20-150%
	13C3-PFHxS	102%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380037 TURTLE RIVER		
Lab Sample ID:	FC6994-1	**Date Sampled:**	06/14/23
Matrix:	AQ - Surface Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		20-150%
	13C8-FOSA	107%		20-150%
	d3-MeFOSA	91%		20-150%
	d5-EtFOSA	79%		20-150%
	d3-MeFOSAA	92%		20-150%
	d5-EtFOSAA	97%		20-150%
	d7-MeFOSE	59%		20-150%
	d9-EtFOSE	60%		20-150%
	13C2-4:2FTS	99%		20-180%
	13C2-6:2FTS	102%		20-180%
	13C2-8:2FTS	86%		20-180%
	13C3-HFPO-DA	96%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RENWICK		
Lab Sample ID:	FC6994-2	**Date Sampled:**	06/13/23
Matrix:	AQ - Surface Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q20683.D	1	07/10/23 23:31	MV	07/07/23 11:15	OP97713	S6Q307
Run #2							

	Initial Volume	Final Volume
Run #1	490 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.2	4.1	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.51	ng/l	
375-85-9	Perfluoroheptanoic acid	0.76	2.0	0.51	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.0	0.51	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.86	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RENWICK		
Lab Sample ID:	FC6994-2	**Date Sampled:**	06/13/23
Matrix:	AQ - Surface Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.0	ng/l	
919005-14-4	ADONA	ND	8.2	2.0	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.0	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	23%		20-150%
	13C5-PFPeA	99%		20-150%
	13C5-PFHxA	115%		20-150%
	13C4-PFHpA	112%		20-150%
	13C8-PFOA	106%		20-150%
	13C9-PFNA	105%		20-150%
	13C6-PFDA	105%		20-150%
	13C7-PFUnDA	98%		20-150%
	13C2-PFDoDA	72%		20-150%
	13C2-PFTeDA	49%		20-150%
	13C3-PFBS	111%		20-150%
	13C3-PFHxS	111%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RENWICK		
Lab Sample ID:	FC6994-2	**Date Sampled:**	06/13/23
Matrix:	AQ - Surface Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		20-150%
	13C8-FOSA	103%		20-150%
	d3-MeFOSA	86%		20-150%
	d5-EtFOSA	85%		20-150%
	d3-MeFOSAA	87%		20-150%
	d5-EtFOSAA	89%		20-150%
	d7-MeFOSE	58%		20-150%
	d9-EtFOSE	64%		20-150%
	13C2-4:2FTS	112%		20-180%
	13C2-6:2FTS	106%		20-180%
	13C2-8:2FTS	95%		20-180%
	13C3-HFPO-DA	104%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOMME DAM-BLANK		
Lab Sample ID:	FC6994-3	**Date Sampled:**	06/13/23
Matrix:	AQ - Field Blank Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q20684.D	1	07/10/23 23:45	MV	07/07/23 11:15	OP97713	S6Q307
Run #2							

	Initial Volume	Final Volume
Run #1	550 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.3	3.6	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.6	0.91	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.8	0.45	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.8	0.45	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.8	0.45	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.8	0.55	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.8	0.45	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.8	0.55	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.8	0.55	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.8	0.76	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.8	0.45	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.8	0.91	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.8	1.0	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.8	0.91	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.8	0.91	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.8	0.91	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.8	0.91	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.8	0.91	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.8	1.0	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.3	3.6	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.3	3.6	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.3	3.7	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.8	0.91	ng/l	
31506-32-8	MeFOSA	ND	1.8	0.91	ng/l	
4151-50-2	EtFOSA	ND	1.8	0.91	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOMME DAM-BLANK		
Lab Sample ID:	FC6994-3	**Date Sampled:**	06/13/23
Matrix:	AQ - Field Blank Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.8	0.91	ng/l	
2991-50-6	EtFOSAA	ND	1.8	1.2	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	18	9.1	ng/l	
1691-99-2	EtFOSE	ND	18	9.1	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.3	1.8	ng/l	
919005-14-4	ADONA	ND	7.3	1.8	ng/l	
377-73-1	PFMPA	ND	3.6	0.91	ng/l	
863090-89-5	PFMBA	ND	3.6	1.0	ng/l	
151772-58-6	NFDHA	ND	3.6	1.1	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.3	1.8	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.3	1.8	ng/l	
113507-82-7	PFEESA	ND	3.6	0.91	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.1	4.5	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	45	9.1	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	45	9.1	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	106%		20-150%
	13C5-PFPeA	111%		20-150%
	13C5-PFHxA	108%		20-150%
	13C4-PFHpA	112%		20-150%
	13C8-PFOA	87%		20-150%
	13C9-PFNA	95%		20-150%
	13C6-PFDA	96%		20-150%
	13C7-PFUnDA	90%		20-150%
	13C2-PFDoDA	78%		20-150%
	13C2-PFTeDA	77%		20-150%
	13C3-PFBS	104%		20-150%
	13C3-PFHxS	111%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOMME DAM-BLANK		
Lab Sample ID:	FC6994-3	**Date Sampled:**	06/13/23
Matrix:	AQ - Field Blank Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		20-150%
	13C8-FOSA	87%		20-150%
	d3-MeFOSA	78%		20-150%
	d5-EtFOSA	75%		20-150%
	d3-MeFOSAA	87%		20-150%
	d5-EtFOSAA	83%		20-150%
	d7-MeFOSE	75%		20-150%
	d9-EtFOSE	85%		20-150%
	13C2-4:2FTS	110%		20-180%
	13C2-6:2FTS	99%		20-180%
	13C2-8:2FTS	86%		20-180%
	13C3-HFPO-DA	113%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOMME DAM-DUP		
Lab Sample ID:	FC6994-4	**Date Sampled:**	06/13/23
Matrix:	AQ - Surface Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q20685.D	1	07/10/23 23:59	MV	07/07/23 11:15	OP97713	S6Q307
Run #2 [a]	4Q47505.D	1	07/18/23 13:54	AL	07/17/23 12:15	OP97881	S4Q696

	Initial Volume	Final Volume
Run #1	450 ml	5.0 ml
Run #2	455 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.9	4.4	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.4	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.2	0.56	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.2	0.56	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.2	0.56	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	0.68	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.56	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.67	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.67	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.93	ng/l	
376-06-7	Perfluorotetradecanoic acid [b]	ND	2.2	0.56	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.3	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.9	4.4	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.9	4.4	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.9	4.6	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOMME DAM-DUP		
Lab Sample ID:	FC6994-4	**Date Sampled:**	06/13/23
Matrix:	AQ - Surface Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.5	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE [b]	ND	22	11	ng/l	
1691-99-2	EtFOSE [b]	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.9	2.2	ng/l	
919005-14-4	ADONA	ND	8.9	2.2	ng/l	
377-73-1	PFMPA	ND	4.4	1.1	ng/l	
863090-89-5	PFMBA	ND	4.4	1.3	ng/l	
151772-58-6	NFDHA	ND	4.4	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.9	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.9	2.2	ng/l	
113507-82-7	PFEESA	ND	4.4	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.6	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	56	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	56	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	21%	20%	20-150%
	13C5-PFPeA	95%	100%	20-150%
	13C5-PFHxA	108%	105%	20-150%
	13C4-PFHpA	113%	103%	20-150%
	13C8-PFOA	110%	106%	20-150%
	13C9-PFNA	103%	100%	20-150%
	13C6-PFDA	90%	98%	20-150%
	13C7-PFUnDA	85%	90%	20-150%
	13C2-PFDoDA	40%	72%	20-150%
	13C2-PFTeDA	5% [c]	46%	20-150%
	13C3-PFBS	104%	114%	20-150%
	13C3-PFHxS	103%	100%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOMME DAM-DUP		
Lab Sample ID:	FC6994-4	**Date Sampled:**	06/13/23
Matrix:	AQ - Surface Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%	111%	20-150%
	13C8-FOSA	92%	109%	20-150%
	d3-MeFOSA	77%	97%	20-150%
	d5-EtFOSA	58%	99%	20-150%
	d3-MeFOSAA	88%	107%	20-150%
	d5-EtFOSAA	81%	99%	20-150%
	d7-MeFOSE	9% [c]	82%	20-150%
	d9-EtFOSE	4% [c]	84%	20-150%
	13C2-4:2FTS	107%	148%	20-180%
	13C2-6:2FTS	102%	114%	20-180%
	13C2-8:2FTS	95%	87%	20-180%
	13C3-HFPO-DA	104%	91%	20-150%

(a) Confirmation run.
(b) Associated ISTD outside of control limits.
(c) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOMME DAM		
Lab Sample ID:	FC6994-5	**Date Sampled:**	06/13/23
Matrix:	AQ - Surface Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q20688.D	1	07/11/23 00:41	MV	07/07/23 11:15	OP97713	S6Q307
Run #2							

	Initial Volume	Final Volume
Run #1	450 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [a]	ND	8.9	4.4	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.4	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.2	0.56	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.2	0.56	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.2	0.56	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	0.68	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.56	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.67	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.67	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.93	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.56	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.3	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.9	4.4	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.9	4.4	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.9	4.6	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOMME DAM		
Lab Sample ID:	FC6994-5	**Date Sampled:**	06/13/23
Matrix:	AQ - Surface Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.5	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.9	2.2	ng/l	
919005-14-4	ADONA	ND	8.9	2.2	ng/l	
377-73-1	PFMPA	ND	4.4	1.1	ng/l	
863090-89-5	PFMBA	ND	4.4	1.3	ng/l	
151772-58-6	NFDHA	ND	4.4	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.9	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.9	2.2	ng/l	
113507-82-7	PFEESA	ND	4.4	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.6	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	56	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	56	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	19% [b]		20-150%
	13C5-PFPeA	91%		20-150%
	13C5-PFHxA	99%		20-150%
	13C4-PFHpA	100%		20-150%
	13C8-PFOA	104%		20-150%
	13C9-PFNA	103%		20-150%
	13C6-PFDA	109%		20-150%
	13C7-PFUnDA	101%		20-150%
	13C2-PFDoDA	70%		20-150%
	13C2-PFTeDA	43%		20-150%
	13C3-PFBS	102%		20-150%
	13C3-PFHxS	103%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HOMME DAM		
Lab Sample ID:	FC6994-5	**Date Sampled:**	06/13/23
Matrix:	AQ - Surface Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		20-150%
	13C8-FOSA	101%		20-150%
	d3-MeFOSA	91%		20-150%
	d5-EtFOSA	86%		20-150%
	d3-MeFOSAA	99%		20-150%
	d5-EtFOSAA	100%		20-150%
	d7-MeFOSE	58%		20-150%
	d9-EtFOSE	61%		20-150%
	13C2-4:2FTS	105%		20-180%
	13C2-6:2FTS	109%		20-180%
	13C2-8:2FTS	84%		20-180%
	13C3-HFPO-DA	101%		20-150%

(a) Outside control limits. Confirmed by MS.
(b) Outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LARIMORE DAM		
Lab Sample ID:	FC6994-6	**Date Sampled:**	06/14/23
Matrix:	AQ - Surface Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q20690.D	1	07/11/23 01:09	MV	07/07/23 11:15	OP97713	S6Q307
Run #2							

	Initial Volume	Final Volume
Run #1	450 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.9	4.4	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.4	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.2	0.56	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.2	0.56	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.2	0.56	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	0.68	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.56	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.67	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.67	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.93	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.56	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.3	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.9	4.4	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.9	4.4	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.9	4.6	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LARIMORE DAM		
Lab Sample ID:	FC6994-6	**Date Sampled:**	06/14/23
Matrix:	AQ - Surface Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.5	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.9	2.2	ng/l	
919005-14-4	ADONA	ND	8.9	2.2	ng/l	
377-73-1	PFMPA	ND	4.4	1.1	ng/l	
863090-89-5	PFMBA	ND	4.4	1.3	ng/l	
151772-58-6	NFDHA	ND	4.4	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.9	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.9	2.2	ng/l	
113507-82-7	PFEESA	ND	4.4	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.6	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	56	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	56	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	28%		20-150%
	13C5-PFPeA	103%		20-150%
	13C5-PFHxA	113%		20-150%
	13C4-PFHpA	117%		20-150%
	13C8-PFOA	112%		20-150%
	13C9-PFNA	102%		20-150%
	13C6-PFDA	103%		20-150%
	13C7-PFUnDA	102%		20-150%
	13C2-PFDoDA	74%		20-150%
	13C2-PFTeDA	43%		20-150%
	13C3-PFBS	110%		20-150%
	13C3-PFHxS	110%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LARIMORE DAM		
Lab Sample ID:	FC6994-6	**Date Sampled:**	06/14/23
Matrix:	AQ - Surface Water	**Date Received:**	06/16/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		20-150%
	13C8-FOSA	90%		20-150%
	d3-MeFOSA	78%		20-150%
	d5-EtFOSA	70%		20-150%
	d3-MeFOSAA	89%		20-150%
	d5-EtFOSAA	101%		20-150%
	d7-MeFOSE	49%		20-150%
	d9-EtFOSE	57%		20-150%
	13C2-4:2FTS	109%		20-180%
	13C2-6:2FTS	109%		20-180%
	13C2-8:2FTS	96%		20-180%
	13C3-HFPO-DA	104%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # SKIFF # FC6994

Client / Reporting Information

Company Name: NDDEQ PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58503
Project Contact: Shannon Suggs Email: ssuggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed)
Sampler 1: E Toyat Sampler 2: S Suggs

Project Information

Project Name: NDDEQ PFAS
Street 4201 Normandy St
City Bismarck State ND
Project #
Fax #
Client Purchase Order #

Analytical Information

LCI016 33 LIST 40

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LAB USE ONLY
1	380037 Turtle River	6/14/23	1530	EJ	SW	3										
2	Renwick	6/13/23	1300	EJ	SW											
3	Homme Dam - blank	6/13/23	1755	EJ												
4	Homme Dam - dup	6/13/23	1750	EJ												
5	Homme Dam	6/13/23	1745	EJ												
6	Larimore Dam	6/14/23	1200	EJ												

INITIAL ASSESSMENT SP

LABEL VERIFICATION

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- ☐ COMMERCIAL "A" (RESULTS ONLY)
- ☐ COMMERCIAL "B" (RESULTS PLUS QC)
- ☐ REDT1 (EPA LEVEL 3)
- ☐ FULLT1 (EPA LEVEL 4)
- ☐ EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 E Toyat	6/14/23	2 S Suggs	3 S Suggs	6/14/23	4 Fed Ex
5 Fed Ex		6 [signature] 06/16/23 1015	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 1.6 FR#1

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

4.1

4

FC6994: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC6994 **Client:** NDDEQ PFAS **Project:** NDDEQ PFAS

Date / Time Received: 6/16/2023 10:15:00 AM **Delivery Method:** FED EX **Airbill #'s:** 3996 9112 2252

Therm ID: IR 1; **Therm CF:** -0.1; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (1.7);

Cooler Temps (Corrected) °C: Cooler 1: (1.6);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230320 pH 10-12 _____ Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP Date: 6/16/2023 10:15:00 A Reviewer: _____ Date: _____

FC6994: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC6994
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97713-MB	6Q20679.D	1	07/10/23	MV	07/07/23	OP97713	S6Q307

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6994-1, FC6994-2, FC6994-3, FC6994-4, FC6994-5, FC6994-6

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC6994
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97713-MB	6Q20679.D	1	07/10/23	MV	07/07/23	OP97713	S6Q307

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6994-1, FC6994-2, FC6994-3, FC6994-4, FC6994-5, FC6994-6

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	103%	20-150%
	13C5-PFPeA	104%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	104%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	91%	20-150%
	13C6-PFDA	102%	20-150%
	13C7-PFUnDA	106%	20-150%
	13C2-PFDoDA	86%	20-150%
	13C2-PFTeDA	68%	20-150%
	13C3-PFBS	110%	20-150%
	13C3-PFHxS	107%	20-150%
	13C8-PFOS	111%	20-150%
	13C8-FOSA	87%	20-150%
	d3-MeFOSA	60%	20-150%
	d5-EtFOSA	65%	20-150%
	d3-MeFOSAA	92%	20-150%
	d5-EtFOSAA	101%	20-150%
	d7-MeFOSE	61%	20-150%
	d9-EtFOSE	72%	20-150%
	13C2-4:2FTS	119%	20-180%
	13C2-6:2FTS	117%	20-180%
	13C2-8:2FTS	122%	20-180%
	13C3-HFPO-DA	102%	20-150%

Instrument Blank

Job Number: FC6994
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q307-IBLK	6Q20672.D	1	07/10/23	MV	n/a	n/a	S6Q307

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6994-1, FC6994-2, FC6994-3, FC6994-4, FC6994-5, FC6994-6

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC6994
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q307-IBLK	6Q20672.D	1	07/10/23	MV	n/a	n/a	S6Q307

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6994-1, FC6994-2, FC6994-3, FC6994-4, FC6994-5, FC6994-6

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	106%	20-150%
	13C4-PFHpA	97%	20-150%
	13C8-PFOA	95%	20-150%
	13C9-PFNA	90%	20-150%
	13C6-PFDA	94%	20-150%
	13C7-PFUnDA	103%	20-150%
	13C2-PFDoDA	94%	20-150%
	13C2-PFTeDA	88%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	105%	20-150%
	13C8-PFOS	110%	20-150%
	13C8-FOSA	101%	20-150%
	d3-MeFOSA	102%	20-150%
	d5-EtFOSA	106%	20-150%
	d3-MeFOSAA	105%	20-150%
	d5-EtFOSAA	105%	20-150%
	d7-MeFOSE	97%	20-150%
	d9-EtFOSE	104%	20-150%
	13C2-4:2FTS	118%	20-180%
	13C2-6:2FTS	112%	20-180%
	13C2-8:2FTS	114%	20-180%
	13C3-HFPO-DA	102%	20-150%

Continuing Calibration Blank

Job Number: FC6994
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q307-ICCB	6Q20687.D	1	07/11/23	MV	n/a	n/a	S6Q307

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6994-5, FC6994-6

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC6994
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q307-ICCB	6Q20687.D	1	07/11/23	MV	n/a	n/a	S6Q307

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6994-5, FC6994-6

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	95%	20-150%
	13C4-PFHpA	100%	20-150%
	13C8-PFOA	89%	20-150%
	13C9-PFNA	106%	20-150%
	13C6-PFDA	106%	20-150%
	13C7-PFUnDA	105%	20-150%
	13C2-PFDoDA	98%	20-150%
	13C2-PFTeDA	103%	20-150%
	13C3-PFBS	96%	20-150%
	13C3-PFHxS	94%	20-150%
	13C8-PFOS	96%	20-150%
	13C8-FOSA	92%	20-150%
	d3-MeFOSA	97%	20-150%
	d5-EtFOSA	97%	20-150%
	d3-MeFOSAA	88%	20-150%
	d5-EtFOSAA	102%	20-150%
	d7-MeFOSE	91%	20-150%
	d9-EtFOSE	96%	20-150%
	13C2-4:2FTS	106%	20-180%
	13C2-6:2FTS	99%	20-180%
	13C2-8:2FTS	106%	20-180%
	13C3-HFPO-DA	97%	20-150%

Blank Spike Summary

Job Number: FC6994
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97713-LLBS	6Q20678.D	1	07/10/23	MV	07/07/23	OP97713	S6Q307

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6994-1, FC6994-2, FC6994-3, FC6994-4, FC6994-5, FC6994-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0156	98	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0081	101	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0044	110	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0040	100	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0039	98	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0044	110	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0042	105	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0032	80	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0042	105	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0033	83	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0038	95	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0037	104	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0038	101	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0039	107	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0039	102	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0033	89	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0035	91	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0036	93	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0030	77	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0146	97	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0149	98	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0165	107	40-150
754-91-6	PFOSA	0.004	0.0037	93	40-150
31506-32-8	MeFOSA	0.008	0.0088	110	40-150
4151-50-2	EtFOSA	0.008	0.0076	95	40-150
2355-31-9	MeFOSAA	0.004	0.0039	98	40-150
2991-50-6	EtFOSAA	0.004	0.0036	90	40-150
24448-09-7	MeFOSE	0.02	0.0193	97	40-150
1691-99-2	EtFOSE	0.02	0.0175	88	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0079	99	40-150
919005-14-4	ADONA	0.00756	0.0077	102	40-150
377-73-1	PFMPA	0.008	0.0076	95	40-150
863090-89-5	PFMBA	0.008	0.0077	96	40-150
151772-58-6	NFDHA	0.008	0.0077	96	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0077	103	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0067	89	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6994
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97713-LLBS	6Q20678.D	1	07/10/23	MV	07/07/23	OP97713	S6Q307

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6994-1, FC6994-2, FC6994-3, FC6994-4, FC6994-5, FC6994-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0066	93	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0182	91	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.0923	92	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.0870	87	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	105%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	97%	20-150%
	13C6-PFDA	102%	20-150%
	13C7-PFUnDA	114%	20-150%
	13C2-PFDoDA	90%	20-150%
	13C2-PFTeDA	75%	20-150%
	13C3-PFBS	98%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	106%	20-150%
	13C8-FOSA	81%	20-150%
	d3-MeFOSA	54%	20-150%
	d5-EtFOSA	60%	20-150%
	d3-MeFOSAA	92%	20-150%
	d5-EtFOSAA	101%	20-150%
	d7-MeFOSE	58%	20-150%
	d9-EtFOSE	62%	20-150%
	13C2-4:2FTS	110%	20-180%
	13C2-6:2FTS	111%	20-180%
	13C2-8:2FTS	104%	20-180%
	13C3-HFPO-DA	99%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6994
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97713-BS	6Q20677.D	1	07/10/23	MV	07/07/23	OP97713	S6Q307

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6994-1, FC6994-2, FC6994-3, FC6994-4, FC6994-5, FC6994-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.100	100	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0517	103	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0256	102	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0252	101	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0252	101	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0261	104	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0255	102	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0229	92	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0254	102	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0254	102	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0294	118	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0204	92	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0220	94	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0222	97	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0237	99	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0222	96	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0224	93	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0223	92	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0224	92	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.0959	102	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.0946	100	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.0995	104	40-150
754-91-6	PFOSA	0.025	0.0239	96	40-150
31506-32-8	MeFOSA	0.05	0.0539	108	40-150
4151-50-2	EtFOSA	0.05	0.0524	105	40-150
2355-31-9	MeFOSAA	0.025	0.0280	112	40-150
2991-50-6	EtFOSAA	0.025	0.0259	104	40-150
24448-09-7	MeFOSE	0.125	0.126	101	40-150
1691-99-2	EtFOSE	0.125	0.116	93	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0490	98	40-150
919005-14-4	ADONA	0.0473	0.0483	102	40-150
377-73-1	PFMPA	0.05	0.0500	100	40-150
863090-89-5	PFMBA	0.05	0.0508	102	40-150
151772-58-6	NFDHA	0.05	0.0488	98	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0475	102	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0443	94	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6994
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97713-BS	6Q20677.D	1	07/10/23	MV	07/07/23	OP97713	S6Q307

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6994-1, FC6994-2, FC6994-3, FC6994-4, FC6994-5, FC6994-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0441	99	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.115	92	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.590	94	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.577	92	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	103%	20-150%
	13C5-PFPeA	100%	20-150%
	13C5-PFHxA	103%	20-150%
	13C4-PFHpA	101%	20-150%
	13C8-PFOA	104%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	109%	20-150%
	13C2-PFDoDA	87%	20-150%
	13C2-PFTeDA	80%	20-150%
	13C3-PFBS	107%	20-150%
	13C3-PFHxS	107%	20-150%
	13C8-PFOS	108%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSA	71%	20-150%
	d5-EtFOSA	75%	20-150%
	d3-MeFOSAA	92%	20-150%
	d5-EtFOSAA	108%	20-150%
	d7-MeFOSE	74%	20-150%
	d9-EtFOSE	87%	20-150%
	13C2-4:2FTS	107%	20-180%
	13C2-6:2FTS	111%	20-180%
	13C2-8:2FTS	111%	20-180%
	13C3-HFPO-DA	102%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC6994
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97713-MS	6Q20689.D	1	07/11/23	MV	07/07/23	OP97713	S6Q307
FC6994-5	6Q20688.D	1	07/11/23	MV	07/07/23	OP97713	S6Q307

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6994-1, FC6994-2, FC6994-3, FC6994-4, FC6994-5, FC6994-6

CAS No.	Compound	FC6994-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	ND		0.111	0.115	104	40-150
2706-90-3	Perfluoropentanoic acid	ND		0.0556	0.0567	102	40-150
307-24-4	Perfluorohexanoic acid	ND		0.0278	0.0246	89	40-150
375-85-9	Perfluoroheptanoic acid	ND		0.0278	0.0275	99	40-150
335-67-1	Perfluorooctanoic acid	ND		0.0278	0.0284	102	40-150
375-95-1	Perfluorononanoic acid	ND		0.0278	0.0318	114	40-150
335-76-2	Perfluorodecanoic acid	ND		0.0278	0.0275	99	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.0278	0.0270	97	40-150
307-55-1	Perfluorododecanoic acid	ND		0.0278	0.0288	104	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.0278	0.0236	85	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.0278	0.0305	110	40-150
375-73-5	Perfluorobutanesulfonic acid	ND		0.0246	0.0256	104	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0261	0.0248	95	40-150
355-46-4	Perfluorohexanesulfonic acid	ND		0.0254	0.0241	95	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0265	0.0255	96	40-150
1763-23-1	Perfluorooctanesulfonic acid	ND		0.0258	0.0242	94	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.0267	0.0230	86	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.0268	0.0170	63	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0269	0.0110	41	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.104	0.105	101	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.106	0.0973	92	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.107	0.0978	92	40-150
754-91-6	PFOSA	ND		0.0278	0.0284	102	40-150
31506-32-8	MeFOSA	ND		0.0556	0.0600	108	40-150
4151-50-2	EtFOSA	ND		0.0556	0.0546	98	40-150
2355-31-9	MeFOSAA	ND		0.0278	0.0327	118	40-150
2991-50-6	EtFOSAA	ND		0.0278	0.0283	102	40-150
24448-09-7	MeFOSE	ND		0.139	0.148	107	40-150
1691-99-2	EtFOSE	ND		0.139	0.138	99	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.0556	0.0557	100	40-150
919005-14-4	ADONA	ND		0.0525	0.0518	99	40-150
377-73-1	PFMPA	ND		0.0556	0.0243	44	40-150
863090-89-5	PFMBA	ND		0.0556	0.0604	109	40-150
151772-58-6	NFDHA	ND		0.0556	0.0496	89	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0519	0.0475	91	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0525	0.0335	64	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC6994
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97713-MS	6Q20689.D	1	07/11/23	MV	07/07/23	OP97713	S6Q307
FC6994-5	6Q20688.D	1	07/11/23	MV	07/07/23	OP97713	S6Q307

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6994-1, FC6994-2, FC6994-3, FC6994-4, FC6994-5, FC6994-6

CAS No.	Compound	FC6994-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	ND		0.0494	0.0449	91	40-150
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.139	0.376	271*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.694	0.660	95	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.694	0.614	88	40-150

CAS No.	ID Standard Recoveries	MS	FC6994-5	Limits
	13C4-PFBA	19%* [a]	19%* [a]	20-150%
	13C5-PFPeA	82%	91%	20-150%
	13C5-PFHxA	106%	99%	20-150%
	13C4-PFHpA	103%	100%	20-150%
	13C8-PFOA	103%	104%	20-150%
	13C9-PFNA	89%	103%	20-150%
	13C6-PFDA	107%	109%	20-150%
	13C7-PFUnDA	94%	101%	20-150%
	13C2-PFDoDA	62%	70%	20-150%
	13C2-PFTeDA	38%	43%	20-150%
	13C3-PFBS	104%	102%	20-150%
	13C3-PFHxS	105%	103%	20-150%
	13C8-PFOS	112%	106%	20-150%
	13C8-FOSA	98%	101%	20-150%
	d3-MeFOSA	88%	91%	20-150%
	d5-EtFOSA	86%	86%	20-150%
	d3-MeFOSAA	86%	99%	20-150%
	d5-EtFOSAA	84%	100%	20-150%
	d7-MeFOSE	59%	58%	20-150%
	d9-EtFOSE	61%	61%	20-150%
	13C2-4:2FTS	109%	105%	20-180%
	13C2-6:2FTS	109%	109%	20-180%
	13C2-8:2FTS	97%	84%	20-180%
	13C3-HFPO-DA	99%	101%	20-150%

(a) Outside control limits.

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC6994
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97713-DUP	6Q20691.D	1	07/11/23	MV	07/07/23	OP97713	S6Q307
FC6994-6	6Q20690.D	1	07/11/23	MV	07/07/23	OP97713	S6Q307

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6994-1, FC6994-2, FC6994-3, FC6994-4, FC6994-5, FC6994-6

CAS No.	Compound	FC6994-6 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	ND		ND		nc	30
2706-90-3	Perfluoropentanoic acid	ND		ND		nc	30
307-24-4	Perfluorohexanoic acid	ND		ND		nc	30
375-85-9	Perfluoroheptanoic acid	ND		ND		nc	30
335-67-1	Perfluorooctanoic acid	ND		0.00060	J	200*	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	ND		ND		nc	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC6994
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97713-DUP	6Q20691.D	1	07/11/23	MV	07/07/23	OP97713	S6Q307
FC6994-6	6Q20690.D	1	07/11/23	MV	07/07/23	OP97713	S6Q307

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC6994-1, FC6994-2, FC6994-3, FC6994-4, FC6994-5, FC6994-6

CAS No.	Compound	FC6994-6 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC6994-6	Limits
	13C4-PFBA	30%	28%	20-150%
	13C5-PFPeA	98%	103%	20-150%
	13C5-PFHxA	105%	113%	20-150%
	13C4-PFHpA	105%	117%	20-150%
	13C8-PFOA	113%	112%	20-150%
	13C9-PFNA	116%	102%	20-150%
	13C6-PFDA	100%	103%	20-150%
	13C7-PFUnDA	114%	102%	20-150%
	13C2-PFDoDA	68%	74%	20-150%
	13C2-PFTeDA	38%	43%	20-150%
	13C3-PFBS	101%	110%	20-150%
	13C3-PFHxS	101%	110%	20-150%
	13C8-PFOS	97%	96%	20-150%
	13C8-FOSA	96%	90%	20-150%
	d3-MeFOSA	86%	78%	20-150%
	d5-EtFOSA	79%	70%	20-150%
	d3-MeFOSAA	95%	89%	20-150%
	d5-EtFOSAA	97%	101%	20-150%
	d7-MeFOSE	62%	49%	20-150%
	d9-EtFOSE	67%	57%	20-150%
	13C2-4:2FTS	105%	109%	20-180%
	13C2-6:2FTS	104%	109%	20-180%
	13C2-8:2FTS	79%	96%	20-180%
	13C3-HFPO-DA	102%	104%	20-150%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC7401

Sampling Date: 06/27/23



Report to:

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Bismark, ND 58503
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ATTN: Shannon Suggs

Total number of pages in report: 25

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC7401

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
FC7401-1	06/27/23	14:10	LH	06/29/23	AQ	Water	RUGBY MANUFACTURING
FC7401-2	06/27/23	14:14	LH	06/29/23	AQ	Water	RUGBY MKG DUP

Summary of Hits

Job Number: FC7401
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 06/27/23

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method

FC7401-1 RUGBY MANUFACTURING

No hits reported in this sample.

FC7401-2 RUGBY MKG DUP

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	RUGBY MANUFACTURING		
Lab Sample ID:	FC7401-1	**Date Sampled:**	06/27/23
Matrix:	AQ - Water	**Date Received:**	06/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q48657.D	1	08/08/23 10:14	AL	08/03/23 10:00	OP98225	S4Q711
Run #2 [a]	4Q48658.D	10	08/08/23 10:29	AL	08/03/23 10:00	OP98225	S4Q711
Run #3 [b]	4Q48215.D	1	07/29/23 05:17	AL	07/25/23 11:15	OP98040	S4Q705

	Initial Volume	Final Volume
Run #1	60.0 ml	5.0 ml
Run #2	60.0 ml	5.0 ml
Run #3	470 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	67	33	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	33	8.3	ng/l	
307-24-4	Perfluorohexanoic acid [c]	ND	17	4.2	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	17	4.2	ng/l	
335-67-1	Perfluorooctanoic acid	ND	17	4.2	ng/l	
375-95-1	Perfluorononanoic acid	ND	17	5.1	ng/l	
335-76-2	Perfluorodecanoic acid	ND	17	4.2	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	17	5.0	ng/l	
307-55-1	Perfluorododecanoic acid	ND	17	5.0	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	17	7.0	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	17	4.2	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	17	8.3	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	17	9.3	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	17	8.3	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	17	8.3	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	17	8.3	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	17	8.3	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	17	8.3	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	17	9.5	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate [d]	ND [e]	670	330	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND [e]	670	330	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate [c]	ND [e]	670	340	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	17	8.3	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RUGBY MANUFACTURING		
Lab Sample ID:	FC7401-1	**Date Sampled:**	06/27/23
Matrix:	AQ - Water	**Date Received:**	06/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
31506-32-8	MeFOSA	ND	17	8.3	ng/l	
4151-50-2	EtFOSA	ND	17	8.3	ng/l	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND [e]	170	83	ng/l	
2991-50-6	EtFOSAA	ND [e]	170	110	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	170	83	ng/l	
1691-99-2	EtFOSE	ND	170	83	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	67	17	ng/l	
919005-14-4	ADONA	ND	67	17	ng/l	
377-73-1	PFMPA	ND	33	8.3	ng/l	
863090-89-5	PFMBA	ND	33	9.5	ng/l	
151772-58-6	NFDHA	ND	33	10	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	67	17	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	67	17	ng/l	
113507-82-7	PFEESA	ND	33	8.3	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	83	42	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	420	83	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	420	83	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C4-PFBA	102%	101%	10% [f]	20-150%
	13C5-PFPeA	92%	87%	34%	20-150%
	13C5-PFHxA	99%	97%	85%	20-150%
	13C4-PFHpA	97%	94%	41%	20-150%
	13C8-PFOA	101%	101%	89%	20-150%
	13C9-PFNA	87%	86%	81%	20-150%
	13C6-PFDA	90%	104%	80%	20-150%
	13C7-PFUnDA	94%	80%	74%	20-150%
	13C2-PFDoDA	86%	80%	86%	20-150%
	13C2-PFTeDA	77%	77%	62%	20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RUGBY MANUFACTURING		
Lab Sample ID:	FC7401-1	**Date Sampled:**	06/27/23
Matrix:	AQ - Water	**Date Received:**	06/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C3-PFBS	83%	118%	87%	20-150%
	13C3-PFHxS	98%	108%	82%	20-150%
	13C8-PFOS	92%	93%	74%	20-150%
	13C8-FOSA	66%	62%	99%	20-150%
	d3-MeFOSA	74%	61%	58%	20-150%
	d5-EtFOSA	73%	73%	50%	20-150%
	d3-MeFOSAA	178% [f]	137%	130%	20-150%
	d5-EtFOSAA	194% [f]	123%	127%	20-150%
	d7-MeFOSE	67%	59%	46%	20-150%
	d9-EtFOSE	76%	77%	47%	20-150%
	13C2-4:2FTS	394% [f]	300% [f]	269% [f]	20-180%
	13C2-6:2FTS	267% [f]	169%	487% [f]	20-180%
	13C2-8:2FTS	312% [f]	173%	553% [f]	20-180%
	13C3-HFPO-DA	90%	93%	56%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Confirmation run.
(c) Associated Low Level BS outside of control limits high, sample was ND.
(d) Associated ID Standard outside control limits.
(e) Result is from Run# 2
(f) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RUGBY MKG DUP		
Lab Sample ID:	FC7401-2	**Date Sampled:**	06/27/23
Matrix:	AQ - Water	**Date Received:**	06/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q48604.D	1	08/07/23 21:10	AL	08/03/23 10:00	OP98225	S4Q711
Run #2 [a]	4Q48661.D	10	08/08/23 11:14	AL	08/03/23 10:00	OP98225	S4Q711
Run #3 [b]	4Q48216.D	1	07/29/23 05:31	AL	07/25/23 11:15	OP98040	S4Q705

	Initial Volume	Final Volume
Run #1	60.0 ml	5.0 ml
Run #2	60.0 ml	5.0 ml
Run #3	470 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	67	33	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	33	8.3	ng/l	
307-24-4	Perfluorohexanoic acid [c]	ND	17	4.2	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	17	4.2	ng/l	
335-67-1	Perfluorooctanoic acid	ND	17	4.2	ng/l	
375-95-1	Perfluorononanoic acid	ND	17	5.1	ng/l	
335-76-2	Perfluorodecanoic acid	ND	17	4.2	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	17	5.0	ng/l	
307-55-1	Perfluorododecanoic acid	ND	17	5.0	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	17	7.0	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	17	4.2	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	17	8.3	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	17	9.3	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	17	8.3	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	17	8.3	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	17	8.3	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	17	8.3	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	17	8.3	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	17	9.5	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND [d]	670	330	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND [d]	670	330	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate [c]	ND [d]	670	340	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	17	8.3	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RUGBY MKG DUP		
Lab Sample ID:	FC7401-2	**Date Sampled:**	06/27/23
Matrix:	AQ - Water	**Date Received:**	06/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
31506-32-8	MeFOSA	ND	17	8.3	ng/l	
4151-50-2	EtFOSA	ND	17	8.3	ng/l	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND [d]	170	83	ng/l	
2991-50-6	EtFOSAA	ND [d]	170	110	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	170	83	ng/l	
1691-99-2	EtFOSE	ND	170	83	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	67	17	ng/l	
919005-14-4	ADONA	ND	67	17	ng/l	
377-73-1	PFMPA	ND	33	8.3	ng/l	
863090-89-5	PFMBA	ND	33	9.5	ng/l	
151772-58-6	NFDHA	ND	33	10	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	67	17	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	67	17	ng/l	
113507-82-7	PFEESA	ND	33	8.3	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	83	42	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	420	83	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	420	83	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C4-PFBA	112%	102%	12% [e]	20-150%
	13C5-PFPeA	107%	99%	41%	20-150%
	13C5-PFHxA	112%	103%	87%	20-150%
	13C4-PFHpA	112%	103%	85%	20-150%
	13C8-PFOA	110%	104%	93%	20-150%
	13C9-PFNA	99%	101%	87%	20-150%
	13C6-PFDA	105%	106%	83%	20-150%
	13C7-PFUnDA	113%	101%	78%	20-150%
	13C2-PFDoDA	102%	89%	71%	20-150%
	13C2-PFTeDA	93%	90%	59%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RUGBY MKG DUP		
Lab Sample ID:	FC7401-2	**Date Sampled:**	06/27/23
Matrix:	AQ - Water	**Date Received:**	06/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C3-PFBS	96%	93%	91%	20-150%
	13C3-PFHxS	103%	94%	89%	20-150%
	13C8-PFOS	93%	91%	82%	20-150%
	13C8-FOSA	86%	73%	106%	20-150%
	d3-MeFOSA	93%	76%	58%	20-150%
	d5-EtFOSA	98%	91%	48%	20-150%
	d3-MeFOSAA	208% e	140%	168% e	20-150%
	d5-EtFOSAA	226% e	138%	181% e	20-150%
	d7-MeFOSE	76%	71%	60%	20-150%
	d9-EtFOSE	85%	76%	50%	20-150%
	13C2-4:2FTS	391% e	136%	315% e	20-180%
	13C2-6:2FTS	331% e	131%	540% e	20-180%
	13C2-8:2FTS	454% e	157%	531% e	20-180%
	13C3-HFPO-DA	100%	102%	58%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Confirmation run.
(c) Associated Low Level BS outside of control limits high, sample was ND.
(d) Result is from Run# 2
(e) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # SKIFF # FC7401

Client / Reporting Information

Company Name: NDDEQ - PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58504
Project Contact: Shannon Suggs Email: SSuggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed)
Sampler 1: Sampler 2:

Project Information

Project Name: NDDEQ PFAS
Street 4201 Normandy
City Bismarck State ND
Project #
Fax #
Client Purchase Order #

Analytical Information

LCID1633LIST40

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNA	DI WATER	MEOH	LAB USE ONLY
1	RUGBY MANUFACTURING	6/27	14:10	L.H.	WW	3										
2	RUGBY MFG DUP	6/27	14:14	L.H.	WW	3										

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

INITIAL ASSESSMENT SP
LABEL VERIFICATION

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 [signature] / DEQ	6/28 10:25	2 Shannon Suggs/DEQ	3 SSuggs	6/28	4 FEDEX
5 Fed Ex		6 [signature] 06/29/23 1015	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 4.0 / FR #1

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

4.1

4

FC7401: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC7401 **Client:** NDDEQ-PFAS **Project:** NDDEQ PFAS

Date / Time Received: 6/29/2023 10:15:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7804 7455 2239

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (4.0);

Cooler Temps (Corrected) °C: Cooler 1: (3.8);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230320 pH 10-12 _____ Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP Date: 6/29/2023 10:15:00 A Reviewer: _____ Date: _____

FC7401: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC7401
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98225-MB	4Q48601.D	1	08/07/23	AL	08/03/23	OP98225	S4Q711

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7401-1, FC7401-2

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC7401
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98225-MB	4Q48601.D	1	08/07/23	AL	08/03/23	OP98225	S4Q711

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7401-1, FC7401-2

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	125%	20-150%
	13C5-PFPeA	114%	20-150%
	13C5-PFHxA	118%	20-150%
	13C4-PFHpA	122%	20-150%
	13C8-PFOA	120%	20-150%
	13C9-PFNA	106%	20-150%
	13C6-PFDA	122%	20-150%
	13C7-PFUnDA	118%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	80%	20-150%
	13C3-PFBS	113%	20-150%
	13C3-PFHxS	109%	20-150%
	13C8-PFOS	106%	20-150%
	13C8-FOSA	65%	20-150%
	d3-MeFOSA	66%	20-150%
	d5-EtFOSA	72%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	95%	20-150%
	d7-MeFOSE	59%	20-150%
	d9-EtFOSE	66%	20-150%
	13C2-4:2FTS	137%	20-180%
	13C2-6:2FTS	110%	20-180%
	13C2-8:2FTS	121%	20-180%
	13C3-HFPO-DA	112%	20-150%

Instrument Blank

Job Number: FC7401
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q711-IBLK	4Q48593.D	1	08/07/23	AL	n/a	n/a	S4Q711

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7401-1, FC7401-2

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	0.0025	0.0080	0.0010	ug/l	J
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC7401
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q711-IBLK	4Q48593.D	1	08/07/23	AL	n/a	n/a	S4Q711

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7401-1, FC7401-2

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	100%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	101%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	86%	20-150%
	13C7-PFUnDA	96%	20-150%
	13C2-PFDoDA	94%	20-150%
	13C2-PFTeDA	88%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	95%	20-150%
	13C8-PFOS	90%	20-150%
	13C8-FOSA	93%	20-150%
	d3-MeFOSA	95%	20-150%
	d5-EtFOSA	102%	20-150%
	d3-MeFOSAA	95%	20-150%
	d5-EtFOSAA	92%	20-150%
	d7-MeFOSE	90%	20-150%
	d9-EtFOSE	95%	20-150%
	13C2-4:2FTS	80%	20-180%
	13C2-6:2FTS	88%	20-180%
	13C2-8:2FTS	90%	20-180%
	13C3-HFPO-DA	97%	20-150%

Continuing Calibration Blank

Job Number: FC7401
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q711-ICCB	4Q48652.D	1	08/08/23	AL	n/a	n/a	S4Q711

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7401-1, FC7401-2

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0015	0.0080	0.00094	ug/l	J
307-24-4	Perfluorohexanoic acid	0.00082	0.0040	0.00050	ug/l	J
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC7401
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q711-ICCB	4Q48652.D	1	08/08/23	AL	n/a	n/a	S4Q711

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7401-1, FC7401-2

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	103%	20-150%
	13C5-PFPeA	98%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	101%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	109%	20-150%
	13C2-PFDoDA	106%	20-150%
	13C2-PFTeDA	107%	20-150%
	13C3-PFBS	98%	20-150%
	13C3-PFHxS	103%	20-150%
	13C8-PFOS	95%	20-150%
	13C8-FOSA	95%	20-150%
	d3-MeFOSA	84%	20-150%
	d5-EtFOSA	76%	20-150%
	d3-MeFOSAA	109%	20-150%
	d5-EtFOSAA	112%	20-150%
	d7-MeFOSE	99%	20-150%
	d9-EtFOSE	89%	20-150%
	13C2-4:2FTS	161%	20-180%
	13C2-6:2FTS	161%	20-180%
	13C2-8:2FTS	176%	20-180%
	13C3-HFPO-DA	102%	20-150%

Blank Spike Summary

Job Number: FC7401
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98225-LLBS	4Q48600.D	1	08/07/23	AL	08/03/23	OP98225	S4Q711

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7401-1, FC7401-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0199	124	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0101	126	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0061	153*	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0047	118	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0049	123	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0050	125	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0049	123	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0044	110	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0048	120	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0049	123	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0046	115	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0052	147	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0049	130	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0046	126	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0051	134	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0050	135	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0054	140	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0051	132	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0046	119	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0217	145	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0180	118	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0244	159*	40-150
754-91-6	PFOSA	0.004	0.0052	130	40-150
31506-32-8	MeFOSA	0.008	0.0092	115	40-150
4151-50-2	EtFOSA	0.008	0.0092	115	40-150
2355-31-9	MeFOSAA	0.004	0.0058	145	40-150
2991-50-6	EtFOSAA	0.004	0.0055	138	40-150
24448-09-7	MeFOSE	0.02	0.0237	119	40-150
1691-99-2	EtFOSE	0.02	0.0219	110	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0107	134	40-150
919005-14-4	ADONA	0.00756	0.0098	130	40-150
377-73-1	PFMPA	0.008	0.0094	118	40-150
863090-89-5	PFMBA	0.008	0.0094	118	40-150
151772-58-6	NFDHA	0.008	0.0101	126	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0099	132	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0091	120	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC7401
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98225-LLBS	4Q48600.D	1	08/07/23	AL	08/03/23	OP98225	S4Q711

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7401-1, FC7401-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0081	114	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0161	81	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.102	102	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.113	113	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	111%	20-150%
	13C5-PFPeA	110%	20-150%
	13C5-PFHxA	115%	20-150%
	13C4-PFHpA	113%	20-150%
	13C8-PFOA	112%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	113%	20-150%
	13C7-PFUnDA	115%	20-150%
	13C2-PFDoDA	100%	20-150%
	13C2-PFTeDA	83%	20-150%
	13C3-PFBS	108%	20-150%
	13C3-PFHxS	108%	20-150%
	13C8-PFOS	97%	20-150%
	13C8-FOSA	66%	20-150%
	d3-MeFOSA	72%	20-150%
	d5-EtFOSA	78%	20-150%
	d3-MeFOSAA	100%	20-150%
	d5-EtFOSAA	99%	20-150%
	d7-MeFOSE	64%	20-150%
	d9-EtFOSE	75%	20-150%
	13C2-4:2FTS	108%	20-180%
	13C2-6:2FTS	125%	20-180%
	13C2-8:2FTS	102%	20-180%
	13C3-HFPO-DA	106%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC7401
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98225-BS [a]	4Q48599.D	1	08/07/23	AL	08/03/23	OP98225	S4Q711

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7401-1, FC7401-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.131	131	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0668	134	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0316	126	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0319	128	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0321	128	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0316	126	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0320	128	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0325	130	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0310	124	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0320	128	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0324	130	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0293	132	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0320	136	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0308	135	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0299	125	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0323	139	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0320	133	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0304	126	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0298	123	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.110	117	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.106	112	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.135	141	40-150
754-91-6	PFOSA	0.025	0.0334	134	40-150
31506-32-8	MeFOSA	0.05	0.0544	109	40-150
4151-50-2	EtFOSA	0.05	0.0566	113	40-150
2355-31-9	MeFOSAA	0.025	0.0375	150	40-150
2991-50-6	EtFOSAA	0.025	0.0313	125	40-150
24448-09-7	MeFOSE	0.125	0.160	128	40-150
1691-99-2	EtFOSE	0.125	0.157	126	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0608	122	40-150
919005-14-4	ADONA	0.0473	0.0595	126	40-150
377-73-1	PFMPA	0.05	0.0619	124	40-150
863090-89-5	PFMBA	0.05	0.0616	123	40-150
151772-58-6	NFDHA	0.05	0.0628	126	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0626	134	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0586	124	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC7401
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98225-BS [a]	4Q48599.D	1	08/07/23	AL	08/03/23	OP98225	S4Q711

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7401-1, FC7401-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0531	119	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.108	86	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.684	109	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.740	118	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	112%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	112%	20-150%
	13C4-PFHpA	110%	20-150%
	13C8-PFOA	111%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	120%	20-150%
	13C7-PFUnDA	113%	20-150%
	13C2-PFDoDA	108%	20-150%
	13C2-PFTeDA	93%	20-150%
	13C3-PFBS	111%	20-150%
	13C3-PFHxS	107%	20-150%
	13C8-PFOS	102%	20-150%
	13C8-FOSA	69%	20-150%
	d3-MeFOSA	74%	20-150%
	d5-EtFOSA	80%	20-150%
	d3-MeFOSAA	99%	20-150%
	d5-EtFOSAA	98%	20-150%
	d7-MeFOSE	68%	20-150%
	d9-EtFOSE	77%	20-150%
	13C2-4:2FTS	118%	20-180%
	13C2-6:2FTS	129%	20-180%
	13C2-8:2FTS	113%	20-180%
	13C3-HFPO-DA	105%	20-150%

(a) Insufficient sample for MS/MSD.

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC7823

Sampling Date: 07/10/23



Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
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ATTN: Shannon Suggs

Total number of pages in report: 53

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC7823

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FC7823-1	07/10/23	12:23	SGO	07/14/23	AQ	Ground Water	ELK VALLEY 1
FC7823-2	07/10/23	13:42	SGO	07/14/23	AQ	Ground Water	ELK VALLEY 2
FC7823-3	07/10/23	15:13	SGO	07/14/23	AQ	Ground Water	ELK VALLEY 3
FC7823-4	07/10/23	16:13	SGO	07/14/23	AQ	Ground Water	ELK VALLEY 4
FC7823-5	07/10/23	08:40	SGO	07/14/23	AQ	Surface Water	STANTON 1
FC7823-6	07/10/23	09:50	SGO	07/14/23	AQ	Surface Water	STANTON EAST
FC7823-7	07/10/23	11:50	SGO	07/14/23	AQ	Surface Water	MAFB NORTH
FC7823-8	07/10/23	11:55	SGO	07/14/23	AQ	Surface Water	DUPLICATE-MAFB NORTH

Summary of Hits

Job Number: FC7823
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 07/10/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC7823-1	**ELK VALLEY 1**					
No hits reported in this sample.						
FC7823-2	**ELK VALLEY 2**					
No hits reported in this sample.						
FC7823-3	**ELK VALLEY 3**					
No hits reported in this sample.						
FC7823-4	**ELK VALLEY 4**					
No hits reported in this sample.						
FC7823-5	**STANTON 1**					
No hits reported in this sample.						
FC7823-6	**STANTON EAST**					
No hits reported in this sample.						
FC7823-7	**MAFB NORTH**					
Perfluorobutanoic acid		14.0	7.9	4.0	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		1.2 JB	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.2 J	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		1.7 J	2.0	0.99	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		2.0	2.0	0.99	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		2.4	2.0	0.99	ng/l	EPA DRAFT 1633
FC7823-8	**DUPLICATE-MAFB NORTH**					
Perfluorohexanoic acid		1.3 JB	2.0	0.49	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.2 J	2.0	0.49	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.1 J	2.0	0.49	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		1.6 J	2.0	0.98	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		2.3	2.0	0.98	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		2.8	2.0	0.98	ng/l	EPA DRAFT 1633

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	ELK VALLEY 1		
Lab Sample ID:	FC7823-1	**Date Sampled:**	07/10/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22725.D	1	08/11/23 09:56	MV	08/03/23 11:35	OP98222	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.7	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.8	0.96	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.59	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.81	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.96	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.96	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.96	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.96	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.96	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.96	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.7	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.96	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.96	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.96	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ELK VALLEY 1		
Lab Sample ID:	FC7823-1	**Date Sampled:**	07/10/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.96	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.6	ng/l	
1691-99-2	EtFOSE	ND	19	9.6	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.7	1.9	ng/l	
919005-14-4	ADONA	ND	7.7	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.96	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.7	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.7	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.96	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.6	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	71%		20-150%
	13C5-PFPeA	91%		20-150%
	13C5-PFHxA	94%		20-150%
	13C4-PFHpA	95%		20-150%
	13C8-PFOA	92%		20-150%
	13C9-PFNA	82%		20-150%
	13C6-PFDA	78%		20-150%
	13C7-PFUnDA	75%		20-150%
	13C2-PFDoDA	64%		20-150%
	13C2-PFTeDA	57%		20-150%
	13C3-PFBS	89%		20-150%
	13C3-PFHxS	86%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ELK VALLEY 1		
Lab Sample ID:	FC7823-1	**Date Sampled:**	07/10/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	78%		20-150%
	13C8-FOSA	78%		20-150%
	d3-MeFOSA	57%		20-150%
	d5-EtFOSA	58%		20-150%
	d3-MeFOSAA	75%		20-150%
	d5-EtFOSAA	69%		20-150%
	d7-MeFOSE	59%		20-150%
	d9-EtFOSE	59%		20-150%
	13C2-4:2FTS	84%		20-180%
	13C2-6:2FTS	88%		20-180%
	13C2-8:2FTS	77%		20-180%
	13C3-HFPO-DA	84%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ELK VALLEY 2		
Lab Sample ID:	FC7823-2	**Date Sampled:**	07/10/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22726.D	1	08/11/23 10:10	MV	08/03/23 11:35	OP98222	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	450 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.9	4.4	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.4	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.2	0.56	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.2	0.56	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.2	0.56	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	0.68	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.56	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.67	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.67	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.93	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.56	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.3	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.9	4.4	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.9	4.4	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.9	4.6	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ELK VALLEY 2		
Lab Sample ID:	FC7823-2	**Date Sampled:**	07/10/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.5	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.9	2.2	ng/l	
919005-14-4	ADONA	ND	8.9	2.2	ng/l	
377-73-1	PFMPA	ND	4.4	1.1	ng/l	
863090-89-5	PFMBA	ND	4.4	1.3	ng/l	
151772-58-6	NFDHA	ND	4.4	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.9	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.9	2.2	ng/l	
113507-82-7	PFEESA	ND	4.4	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.6	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	56	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	56	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	67%		20-150%
	13C5-PFPeA	101%		20-150%
	13C5-PFHxA	103%		20-150%
	13C4-PFHpA	102%		20-150%
	13C8-PFOA	99%		20-150%
	13C9-PFNA	82%		20-150%
	13C6-PFDA	81%		20-150%
	13C7-PFUnDA	66%		20-150%
	13C2-PFDoDA	60%		20-150%
	13C2-PFTeDA	60%		20-150%
	13C3-PFBS	103%		20-150%
	13C3-PFHxS	92%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ELK VALLEY 2		
Lab Sample ID:	FC7823-2	**Date Sampled:**	07/10/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	71%		20-150%
	13C8-FOSA	70%		20-150%
	d3-MeFOSA	52%		20-150%
	d5-EtFOSA	53%		20-150%
	d3-MeFOSAA	66%		20-150%
	d5-EtFOSAA	60%		20-150%
	d7-MeFOSE	57%		20-150%
	d9-EtFOSE	55%		20-150%
	13C2-4:2FTS	94%		20-180%
	13C2-6:2FTS	101%		20-180%
	13C2-8:2FTS	78%		20-180%
	13C3-HFPO-DA	96%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ELK VALLEY 3		
Lab Sample ID:	FC7823-3	**Date Sampled:**	07/10/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22727.D	1	08/11/23 10:25	MV	08/03/23 11:35	OP98222	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	475 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.4	4.2	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.2	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.1	0.53	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.1	0.53	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.1	0.53	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.64	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.53	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.63	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.63	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.88	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.53	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.4	4.2	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.4	4.2	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.4	4.3	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ELK VALLEY 3		
Lab Sample ID:	FC7823-3	**Date Sampled:**	07/10/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	11	ng/l	
1691-99-2	EtFOSE	ND	21	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.4	2.1	ng/l	
919005-14-4	ADONA	ND	8.4	2.1	ng/l	
377-73-1	PFMPA	ND	4.2	1.1	ng/l	
863090-89-5	PFMBA	ND	4.2	1.2	ng/l	
151772-58-6	NFDHA	ND	4.2	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.4	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.4	2.1	ng/l	
113507-82-7	PFEESA	ND	4.2	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.3	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	53	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	53	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	80%		20-150%
	13C5-PFPeA	98%		20-150%
	13C5-PFHxA	101%		20-150%
	13C4-PFHpA	100%		20-150%
	13C8-PFOA	101%		20-150%
	13C9-PFNA	84%		20-150%
	13C6-PFDA	85%		20-150%
	13C7-PFUnDA	78%		20-150%
	13C2-PFDoDA	73%		20-150%
	13C2-PFTeDA	60%		20-150%
	13C3-PFBS	97%		20-150%
	13C3-PFHxS	93%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ELK VALLEY 3		
Lab Sample ID:	FC7823-3	**Date Sampled:**	07/10/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	80%		20-150%
	13C8-FOSA	81%		20-150%
	d3-MeFOSA	71%		20-150%
	d5-EtFOSA	74%		20-150%
	d3-MeFOSAA	77%		20-150%
	d5-EtFOSAA	75%		20-150%
	d7-MeFOSE	68%		20-150%
	d9-EtFOSE	73%		20-150%
	13C2-4:2FTS	92%		20-180%
	13C2-6:2FTS	104%		20-180%
	13C2-8:2FTS	88%		20-180%
	13C3-HFPO-DA	92%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ELK VALLEY 4		
Lab Sample ID:	FC7823-4	**Date Sampled:**	07/10/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22728.D	1	08/11/23 10:39	MV	08/03/23 11:35	OP98222	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	475 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.4	4.2	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.2	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.1	0.53	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.1	0.53	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.1	0.53	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.64	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.53	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.63	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.63	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.88	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.53	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.4	4.2	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.4	4.2	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.4	4.3	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ELK VALLEY 4		
Lab Sample ID:	FC7823-4	**Date Sampled:**	07/10/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	11	ng/l	
1691-99-2	EtFOSE	ND	21	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.4	2.1	ng/l	
919005-14-4	ADONA	ND	8.4	2.1	ng/l	
377-73-1	PFMPA	ND	4.2	1.1	ng/l	
863090-89-5	PFMBA	ND	4.2	1.2	ng/l	
151772-58-6	NFDHA	ND	4.2	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.4	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.4	2.1	ng/l	
113507-82-7	PFEESA	ND	4.2	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.3	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	53	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	53	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	75%		20-150%
	13C5-PFPeA	104%		20-150%
	13C5-PFHxA	101%		20-150%
	13C4-PFHpA	104%		20-150%
	13C8-PFOA	107%		20-150%
	13C9-PFNA	94%		20-150%
	13C6-PFDA	91%		20-150%
	13C7-PFUnDA	80%		20-150%
	13C2-PFDoDA	72%		20-150%
	13C2-PFTeDA	63%		20-150%
	13C3-PFBS	103%		20-150%
	13C3-PFHxS	94%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ELK VALLEY 4		
Lab Sample ID:	FC7823-4	**Date Sampled:**	07/10/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		20-150%
	13C8-FOSA	97%		20-150%
	d3-MeFOSA	73%		20-150%
	d5-EtFOSA	76%		20-150%
	d3-MeFOSAA	89%		20-150%
	d5-EtFOSAA	85%		20-150%
	d7-MeFOSE	71%		20-150%
	d9-EtFOSE	71%		20-150%
	13C2-4:2FTS	102%		20-180%
	13C2-6:2FTS	109%		20-180%
	13C2-8:2FTS	95%		20-180%
	13C3-HFPO-DA	98%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STANTON 1		
Lab Sample ID:	FC7823-5	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22729.D	1	08/11/23 10:53	MV	08/03/23 11:35	OP98222	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	525 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.6	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.8	0.95	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.58	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.57	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.57	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.80	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.95	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.95	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.95	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.95	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.95	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.95	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.6	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.6	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.6	3.9	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.95	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.95	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.95	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STANTON 1		
Lab Sample ID:	FC7823-5	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.95	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.5	ng/l	
1691-99-2	EtFOSE	ND	19	9.5	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.6	1.9	ng/l	
919005-14-4	ADONA	ND	7.6	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.95	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.1	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.6	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.6	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.95	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.5	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.5	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.5	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	31%		20-150%
	13C5-PFPeA	102%		20-150%
	13C5-PFHxA	105%		20-150%
	13C4-PFHpA	108%		20-150%
	13C8-PFOA	100%		20-150%
	13C9-PFNA	102%		20-150%
	13C6-PFDA	93%		20-150%
	13C7-PFUnDA	74%		20-150%
	13C2-PFDoDA	58%		20-150%
	13C2-PFTeDA	41%		20-150%
	13C3-PFBS	105%		20-150%
	13C3-PFHxS	105%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STANTON 1		
Lab Sample ID:	FC7823-5	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		20-150%
	13C8-FOSA	98%		20-150%
	d3-MeFOSA	68%		20-150%
	d5-EtFOSA	59%		20-150%
	d3-MeFOSAA	86%		20-150%
	d5-EtFOSAA	74%		20-150%
	d7-MeFOSE	56%		20-150%
	d9-EtFOSE	51%		20-150%
	13C2-4:2FTS	96%		20-180%
	13C2-6:2FTS	101%		20-180%
	13C2-8:2FTS	100%		20-180%
	13C3-HFPO-DA	98%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STANTON EAST		
Lab Sample ID:	FC7823-6	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22730.D	1	08/11/23 11:08	MV	08/03/23 11:35	OP98222	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.7	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.8	0.96	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.59	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.81	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.96	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.96	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.96	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.96	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.96	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.96	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.7	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.96	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.96	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.96	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STANTON EAST		
Lab Sample ID:	FC7823-6	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.96	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.6	ng/l	
1691-99-2	EtFOSE	ND	19	9.6	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.7	1.9	ng/l	
919005-14-4	ADONA	ND	7.7	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.96	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.7	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.7	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.96	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.6	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	34%		20-150%
	13C5-PFPeA	100%		20-150%
	13C5-PFHxA	101%		20-150%
	13C4-PFHpA	99%		20-150%
	13C8-PFOA	96%		20-150%
	13C9-PFNA	89%		20-150%
	13C6-PFDA	88%		20-150%
	13C7-PFUnDA	69%		20-150%
	13C2-PFDoDA	61%		20-150%
	13C2-PFTeDA	49%		20-150%
	13C3-PFBS	89%		20-150%
	13C3-PFHxS	92%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STANTON EAST		
Lab Sample ID:	FC7823-6	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	75%		20-150%
	13C8-FOSA	83%		20-150%
	d3-MeFOSA	63%		20-150%
	d5-EtFOSA	52%		20-150%
	d3-MeFOSAA	75%		20-150%
	d5-EtFOSAA	62%		20-150%
	d7-MeFOSE	55%		20-150%
	d9-EtFOSE	50%		20-150%
	13C2-4:2FTS	83%		20-180%
	13C2-6:2FTS	89%		20-180%
	13C2-8:2FTS	74%		20-180%
	13C3-HFPO-DA	94%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MAFB NORTH		
Lab Sample ID:	FC7823-7	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22731.D	1	08/11/23 11:22	MV	08/03/23 11:35	OP98222	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	505 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	14.0	7.9	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	0.99	ng/l	
307-24-4	Perfluorohexanoic acid	1.2	2.0	0.50	ng/l	JB
375-85-9	Perfluoroheptanoic acid	1.2	2.0	0.50	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.60	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.59	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.59	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.83	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	1.7	2.0	0.99	ng/l	J
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	2.0	2.0	0.99	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	0.99	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	2.4	2.0	0.99	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	0.99	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	0.99	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.9	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.9	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.9	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	0.99	ng/l	
31506-32-8	MeFOSA	ND	2.0	0.99	ng/l	
4151-50-2	EtFOSA	ND	2.0	0.99	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MAFB NORTH		
Lab Sample ID:	FC7823-7	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	0.99	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	9.9	ng/l	
1691-99-2	EtFOSE	ND	20	9.9	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.9	2.0	ng/l	
919005-14-4	ADONA	ND	7.9	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	0.99	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.9	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.9	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	0.99	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.9	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	50	9.9	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	9.9	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	28%		20-150%
	13C5-PFPeA	92%		20-150%
	13C5-PFHxA	105%		20-150%
	13C4-PFHpA	104%		20-150%
	13C8-PFOA	105%		20-150%
	13C9-PFNA	108%		20-150%
	13C6-PFDA	108%		20-150%
	13C7-PFUnDA	101%		20-150%
	13C2-PFDoDA	86%		20-150%
	13C2-PFTeDA	40%		20-150%
	13C3-PFBS	99%		20-150%
	13C3-PFHxS	99%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MAFB NORTH		
Lab Sample ID:	FC7823-7	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		20-150%
	13C8-FOSA	84%		20-150%
	d3-MeFOSA	76%		20-150%
	d5-EtFOSA	77%		20-150%
	d3-MeFOSAA	95%		20-150%
	d5-EtFOSAA	90%		20-150%
	d7-MeFOSE	73%		20-150%
	d9-EtFOSE	71%		20-150%
	13C2-4:2FTS	114%		20-180%
	13C2-6:2FTS	112%		20-180%
	13C2-8:2FTS	80%		20-180%
	13C3-HFPO-DA	92%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUPLICATE-MAFB NORTH		
Lab Sample ID:	FC7823-8	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22740.D	1	08/11/23 13:31	MV	08/03/23 11:35	OP98222	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	510 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.8	3.9	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.9	0.98	ng/l	
307-24-4	Perfluorohexanoic acid	1.3	2.0	0.49	ng/l	JB
375-85-9	Perfluoroheptanoic acid	1.2	2.0	0.49	ng/l	J
335-67-1	Perfluorooctanoic acid	1.1	2.0	0.49	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.0	0.60	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.49	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.59	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.59	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.82	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.49	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	1.6	2.0	0.98	ng/l	J
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	2.3	2.0	0.98	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	0.98	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	2.8	2.0	0.98	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	0.98	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	0.98	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.8	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	0.98	ng/l	
31506-32-8	MeFOSA	ND	2.0	0.98	ng/l	
4151-50-2	EtFOSA	ND	2.0	0.98	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUPLICATE-MAFB NORTH		
Lab Sample ID:	FC7823-8	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	0.98	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	9.8	ng/l	
1691-99-2	EtFOSE	ND	20	9.8	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.8	2.0	ng/l	
919005-14-4	ADONA	ND	7.8	2.0	ng/l	
377-73-1	PFMPA	ND	3.9	0.98	ng/l	
863090-89-5	PFMBA	ND	3.9	1.1	ng/l	
151772-58-6	NFDHA	ND	3.9	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.8	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.8	2.0	ng/l	
113507-82-7	PFEESA	ND	3.9	0.98	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.8	4.9	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	49	9.8	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	49	9.8	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	26%		20-150%
	13C5-PFPeA	86%		20-150%
	13C5-PFHxA	95%		20-150%
	13C4-PFHpA	99%		20-150%
	13C8-PFOA	93%		20-150%
	13C9-PFNA	91%		20-150%
	13C6-PFDA	89%		20-150%
	13C7-PFUnDA	85%		20-150%
	13C2-PFDoDA	77%		20-150%
	13C2-PFTeDA	36%		20-150%
	13C3-PFBS	97%		20-150%
	13C3-PFHxS	91%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUPLICATE-MAFB NORTH		
Lab Sample ID:	FC7823-8	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%		20-150%
	13C8-FOSA	89%		20-150%
	d3-MeFOSA	80%		20-150%
	d5-EtFOSA	75%		20-150%
	d3-MeFOSAA	91%		20-150%
	d5-EtFOSAA	90%		20-150%
	d7-MeFOSE	69%		20-150%
	d9-EtFOSE	65%		20-150%
	13C2-4:2FTS	107%		20-180%
	13C2-6:2FTS	95%		20-180%
	13C2-8:2FTS	72%		20-180%
	13C3-HFPO-DA	91%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # SKIFF # FC7823

Client / Reporting Information

Company Name: NDDEQ - PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58504
Project Contact: Shannon Suggs Email: SSuggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed) Casey Olieck
Sampler 1: Alyssa Schinkel Sampler 2: Jaxsyn Olson

Project Information

Project Name: NDDEQ - PFAS
Street 4201 Normandy St
City Bismarck State ND
Project #
Fax #
Client Purchase Order #

Analytical Information

SGS Orlando Sample #	Field ID / Point of Collection	DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNA	DI WATER	MEOH	LCID1633 LIST 40	LCID1633 LIST 40									LAB USE ONLY
1	Elk Valley 1	7/10	1223	AS	GW	3		X								X										
2	Elk valley 2	7/10	1342	AS	GW	3		X								X										
3	Elk Valley 3	7/10	1513	AS	GW	3		X								X										
4	Elk Valley 4	7/10	1613	AS	GW	3		X								X										
5	Stanton 1	7/10	840	CG	SW	3		X									X									
6	Stanton east	7/10	950	CG	SW	3		X									X									
7	MAFB North	7/10	1150	CG	SW	3		X									X									
8	Duplicate - MAFB North	7/10	1155	CG	SW	3		X									X									

Matrix Codes
DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- ☐ COMMERCIAL "A" (RESULTS ONLY)
- ☐ COMMERCIAL "B" (RESULTS PLUS QC)
- ☐ REDT1 (EPA LEVEL 3)
- ☐ FULLT1 (EPA LEVEL 4)
- ☐ EDD'S

Comments / Remarks

INITIAL ASSESSMENT
LABEL VERIFICATION

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 Sugs	7/13	2 Fedex	3 Fed Ex		4 07/14/23 0945
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 2.4° IR#4

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

4.1
4

FC7823: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC7823 **Client:** NDDEQ-PFAS **Project:** NDDEQ-PFAS

Date / Time Received: 7/14/2023 9:45:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7810 881 7903

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (2.4);

Cooler Temps (Corrected) °C: Cooler 1: (2.2);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230320 pH 10-12 _____ Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP Date: 7/14/2023 9:45:00 AM Reviewer: _____ Date: _____

FC7823: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-MB	6Q22712.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7823-1, FC7823-2, FC7823-3, FC7823-4, FC7823-5, FC7823-6, FC7823-7, FC7823-8

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	0.0012	0.0020	0.00050	ug/l	J
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-MB	6Q22712.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7823-1, FC7823-2, FC7823-3, FC7823-4, FC7823-5, FC7823-6, FC7823-7, FC7823-8

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	108%	20-150%
	13C5-PFPeA	109%	20-150%
	13C5-PFHxA	113%	20-150%
	13C4-PFHpA	110%	20-150%
	13C8-PFOA	109%	20-150%
	13C9-PFNA	105%	20-150%
	13C6-PFDA	102%	20-150%
	13C7-PFUnDA	103%	20-150%
	13C2-PFDoDA	101%	20-150%
	13C2-PFTeDA	93%	20-150%
	13C3-PFBS	110%	20-150%
	13C3-PFHxS	104%	20-150%
	13C8-PFOS	103%	20-150%
	13C8-FOSA	98%	20-150%
	d3-MeFOSA	76%	20-150%
	d5-EtFOSA	79%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	100%	20-150%
	d7-MeFOSE	100%	20-150%
	d9-EtFOSE	96%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	128%	20-180%
	13C2-8:2FTS	123%	20-180%
	13C3-HFPO-DA	100%	20-150%

Instrument Blank

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-IBLK	6Q22648.D	1	08/10/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7823-1, FC7823-2, FC7823-3, FC7823-4, FC7823-5, FC7823-6, FC7823-7, FC7823-8

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-IBLK	6Q22648.D	1	08/10/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7823-1, FC7823-2, FC7823-3, FC7823-4, FC7823-5, FC7823-6, FC7823-7, FC7823-8

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	94%	20-150%
	13C9-PFNA	95%	20-150%
	13C6-PFDA	99%	20-150%
	13C7-PFUnDA	96%	20-150%
	13C2-PFDoDA	99%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	105%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	104%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	100%	20-150%
	13C2-4:2FTS	109%	20-180%
	13C2-6:2FTS	110%	20-180%
	13C2-8:2FTS	111%	20-180%

Instrument Blank

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-IBLK	6Q22737.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7823-1, FC7823-2, FC7823-3, FC7823-4, FC7823-5, FC7823-6, FC7823-7, FC7823-8

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-IBLK	6Q22737.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7823-1, FC7823-2, FC7823-3, FC7823-4, FC7823-5, FC7823-6, FC7823-7, FC7823-8

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	104%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	95%	20-150%
	13C6-PFDA	103%	20-150%
	13C7-PFUnDA	98%	20-150%
	13C2-PFDoDA	98%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSAA	100%	20-150%
	d5-EtFOSAA	105%	20-150%
	13C2-4:2FTS	102%	20-180%
	13C2-6:2FTS	102%	20-180%
	13C2-8:2FTS	104%	20-180%

Continuing Calibration Blank

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-ICCB	6Q22721.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7823-1, FC7823-2, FC7823-3, FC7823-4, FC7823-5, FC7823-6, FC7823-7

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-ICCB	6Q22721.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7823-1, FC7823-2, FC7823-3, FC7823-4, FC7823-5, FC7823-6, FC7823-7

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	100%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	95%	20-150%
	13C6-PFDA	99%	20-150%
	13C7-PFUnDA	104%	20-150%
	13C2-PFDoDA	100%	20-150%
	13C2-PFTeDA	99%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	103%	20-150%
	d3-MeFOSAA	111%	20-150%
	d5-EtFOSAA	105%	20-150%
	13C2-4:2FTS	100%	20-180%
	13C2-6:2FTS	111%	20-180%
	13C2-8:2FTS	105%	20-180%

Continuing Calibration Blank

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-ICCB	6Q22709.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98222-BS, OP98222-LLBS, OP98222-DUP, OP98222-MB, OP98222-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-ICCB	6Q22709.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98222-BS, OP98222-LLBS, OP98222-DUP, OP98222-MB, OP98222-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	97%	20-150%
	13C8-PFOA	103%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	102%	20-150%
	13C7-PFUnDA	104%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	95%	20-150%
	13C3-PFHxS	94%	20-150%
	13C8-PFOS	103%	20-150%
	13C8-FOSA	106%	20-150%
	d3-MeFOSAA	112%	20-150%
	d5-EtFOSAA	103%	20-150%
	13C2-4:2FTS	107%	20-180%
	13C2-6:2FTS	115%	20-180%
	13C2-8:2FTS	114%	20-180%

Continuing Calibration Blank

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-ICCB	6Q22733.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q330-IBLK, S6Q330-RT

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-ICCB	6Q22733.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q330-IBLK, S6Q330-RT

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	106%	20-150%
	13C4-PFHpA	100%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	105%	20-150%
	13C2-PFDoDA	103%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	102%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSAA	101%	20-150%
	d5-EtFOSAA	103%	20-150%
	13C2-4:2FTS	102%	20-180%
	13C2-6:2FTS	99%	20-180%
	13C2-8:2FTS	94%	20-180%

Blank Spike Summary

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-LLBS	6Q22711.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7823-1, FC7823-2, FC7823-3, FC7823-4, FC7823-5, FC7823-6, FC7823-7, FC7823-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.03	0.0177	59	40-150
2706-90-3	Perfluoropentanoic acid	0.015	0.0089	59	40-150
307-24-4	Perfluorohexanoic acid	0.0075	0.0055	73	40-150
375-85-9	Perfluoroheptanoic acid	0.0075	0.0043	57	40-150
335-67-1	Perfluorooctanoic acid	0.0075	0.0044	59	40-150
375-95-1	Perfluorononanoic acid	0.0075	0.0044	59	40-150
335-76-2	Perfluorodecanoic acid	0.0075	0.0041	55	40-150
2058-94-8	Perfluoroundecanoic acid	0.0075	0.0046	61	40-150
307-55-1	Perfluorododecanoic acid	0.0075	0.0042	56	40-150
72629-94-8	Perfluorotridecanoic acid	0.0075	0.0040	53	40-150
376-06-7	Perfluorotetradecanoic acid	0.0075	0.0047	63	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00665	0.0040	60	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00706	0.0042	60	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00686	0.0041	60	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00715	0.0044	62	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00696	0.0040	57	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00722	0.0041	57	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00724	0.0037	51	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00728	0.0038	52	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0281	0.0158	56	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0285	0.0167	59	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0288	0.0173	60	40-150
754-91-6	PFOSA	0.0075	0.0045	60	40-150
31506-32-8	MeFOSA	0.015	0.0090	60	40-150
4151-50-2	EtFOSA	0.015	0.0083	55	40-150
2355-31-9	MeFOSAA	0.0075	0.0041	55	40-150
2991-50-6	EtFOSAA	0.0075	0.0041	55	40-150
24448-09-7	MeFOSE	0.0375	0.0202	54	40-150
1691-99-2	EtFOSE	0.0375	0.0210	56	40-150
13252-13-6	HFPO-DA (GenX)	0.015	0.0089	59	40-150
919005-14-4	ADONA	0.0142	0.0089	63	40-150
377-73-1	PFMPA	0.015	0.0093	62	40-150
863090-89-5	PFMBA	0.015	0.0092	61	40-150
151772-58-6	NFDHA	0.015	0.0086	57	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.014	0.0082	58	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0142	0.0084	59	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-LLBS	6Q22711.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7823-1, FC7823-2, FC7823-3, FC7823-4, FC7823-5, FC7823-6, FC7823-7, FC7823-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0134	0.0081	61	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.0375	0.0216	58	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.188	0.113	60	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.188	0.101	54	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	112%	20-150%
	13C5-PFPeA	107%	20-150%
	13C5-PFHxA	109%	20-150%
	13C4-PFHpA	109%	20-150%
	13C8-PFOA	112%	20-150%
	13C9-PFNA	100%	20-150%
	13C6-PFDA	112%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	84%	20-150%
	13C3-PFBS	116%	20-150%
	13C3-PFHxS	115%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	102%	20-150%
	d3-MeFOSA	91%	20-150%
	d5-EtFOSA	95%	20-150%
	d3-MeFOSAA	107%	20-150%
	d5-EtFOSAA	106%	20-150%
	d7-MeFOSE	106%	20-150%
	d9-EtFOSE	105%	20-150%
	13C2-4:2FTS	134%	20-180%
	13C2-6:2FTS	135%	20-180%
	13C2-8:2FTS	127%	20-180%
	13C3-HFPO-DA	102%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-BS	6Q22710.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7823-1, FC7823-2, FC7823-3, FC7823-4, FC7823-5, FC7823-6, FC7823-7, FC7823-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.117	117	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0595	119	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0333	133	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0284	114	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0285	114	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0303	121	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0341	136	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0299	120	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0292	117	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0290	116	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0293	117	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0245	110	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0279	119	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0251	110	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0293	123	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0287	124	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0270	112	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0263	109	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0271	112	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.122	130	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.110	116	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.114	119	40-150
754-91-6	PFOSA	0.025	0.0293	117	40-150
31506-32-8	MeFOSA	0.05	0.0611	122	40-150
4151-50-2	EtFOSA	0.05	0.0598	120	40-150
2355-31-9	MeFOSAA	0.025	0.0264	106	40-150
2991-50-6	EtFOSAA	0.025	0.0303	121	40-150
24448-09-7	MeFOSE	0.125	0.152	122	40-150
1691-99-2	EtFOSE	0.125	0.150	120	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0599	120	40-150
919005-14-4	ADONA	0.0473	0.0635	134	40-150
377-73-1	PFMPA	0.05	0.0613	123	40-150
863090-89-5	PFMBA	0.05	0.0608	122	40-150
151772-58-6	NFDHA	0.05	0.0615	123	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0596	127	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0590	125	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-BS	6Q22710.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7823-1, FC7823-2, FC7823-3, FC7823-4, FC7823-5, FC7823-6, FC7823-7, FC7823-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0554	124	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.142	114	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.713	114	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.713	114	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	104%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	105%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	112%	20-150%
	13C9-PFNA	93%	20-150%
	13C6-PFDA	92%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	94%	20-150%
	13C2-PFTeDA	85%	20-150%
	13C3-PFBS	107%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	103%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSA	79%	20-150%
	d5-EtFOSA	81%	20-150%
	d3-MeFOSAA	103%	20-150%
	d5-EtFOSAA	96%	20-150%
	d7-MeFOSE	92%	20-150%
	d9-EtFOSE	95%	20-150%
	13C2-4:2FTS	105%	20-180%
	13C2-6:2FTS	120%	20-180%
	13C2-8:2FTS	107%	20-180%
	13C3-HFPO-DA	97%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-MS	6Q22715.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330
FC7822-1	6Q22714.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7823-1, FC7823-2, FC7823-3, FC7823-4, FC7823-5, FC7823-6, FC7823-7, FC7823-8

CAS No.	Compound	FC7822-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	ND		0.102	0.131	128	40-150
2706-90-3	Perfluoropentanoic acid	ND		0.051	0.0534	105	40-150
307-24-4	Perfluorohexanoic acid	0.0015	JB	0.0255	0.0312	116	40-150
375-85-9	Perfluoroheptanoic acid	0.0020		0.0255	0.0295	108	40-150
335-67-1	Perfluorooctanoic acid	0.0012	J	0.0255	0.0289	109	40-150
375-95-1	Perfluorononanoic acid	ND		0.0255	0.0285	112	40-150
335-76-2	Perfluorodecanoic acid	ND		0.0255	0.0288	113	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.0255	0.0331	130	40-150
307-55-1	Perfluorododecanoic acid	ND		0.0255	0.0286	112	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.0255	0.0222	87	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.0255	0.0315	123	40-150
375-73-5	Perfluorobutanesulfonic acid	ND		0.0226	0.0266	118	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.024	0.0286	119	40-150
355-46-4	Perfluorohexanesulfonic acid	ND		0.0233	0.0276	118	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0243	0.0270	111	40-150
1763-23-1	Perfluorooctanesulfonic acid	ND		0.0237	0.0243	103	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.0245	0.0245	100	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.0246	0.0227	92	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0247	0.0126	51	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0957	0.125	131	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.0969	0.119	123	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.098	0.105	107	40-150
754-91-6	PFOSA	ND		0.0255	0.0293	115	40-150
31506-32-8	MeFOSA	ND		0.051	0.0563	110	40-150
4151-50-2	EtFOSA	ND		0.051	0.0556	109	40-150
2355-31-9	MeFOSAA	ND		0.0255	0.0297	116	40-150
2991-50-6	EtFOSAA	ND		0.0255	0.0315	123	40-150
24448-09-7	MeFOSE	ND		0.128	0.147	115	40-150
1691-99-2	EtFOSE	ND		0.128	0.149	117	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.051	0.0595	117	40-150
919005-14-4	ADONA	ND		0.0482	0.0650	135	40-150
377-73-1	PFMPA	ND		0.051	0.0238	47	40-150
863090-89-5	PFMBA	ND		0.051	0.0616	121	40-150
151772-58-6	NFDHA	ND		0.051	0.0573	112	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0477	0.0636	133	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0482	0.0509	106	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-MS	6Q22715.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330
FC7822-1	6Q22714.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7823-1, FC7823-2, FC7823-3, FC7823-4, FC7823-5, FC7823-6, FC7823-7, FC7823-8

CAS No.	Compound	FC7822-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	ND		0.0454	0.0545	120	40-150
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.128	0.465	365* [a]	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.638	0.754	118	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.638	0.737	116	40-150

CAS No.	ID Standard Recoveries	MS	FC7822-1	Limits
	13C4-PFBA	16%* [a]	16%* [a]	20-150%
	13C5-PFPeA	99%	94%	20-150%
	13C5-PFHxA	111%	109%	20-150%
	13C4-PFHpA	113%	107%	20-150%
	13C8-PFOA	107%	115%	20-150%
	13C9-PFNA	100%	109%	20-150%
	13C6-PFDA	99%	109%	20-150%
	13C7-PFUnDA	89%	90%	20-150%
	13C2-PFDoDA	78%	72%	20-150%
	13C2-PFTeDA	42%	34%	20-150%
	13C3-PFBS	103%	112%	20-150%
	13C3-PFHxS	98%	114%	20-150%
	13C8-PFOS	112%	102%	20-150%
	13C8-FOSA	102%	97%	20-150%
	d3-MeFOSA	89%	86%	20-150%
	d5-EtFOSA	87%	85%	20-150%
	d3-MeFOSAA	106%	94%	20-150%
	d5-EtFOSAA	99%	94%	20-150%
	d7-MeFOSE	71%	70%	20-150%
	d9-EtFOSE	69%	66%	20-150%
	13C2-4:2FTS	110%	125%	20-180%
	13C2-6:2FTS	104%	128%	20-180%
	13C2-8:2FTS	89%	96%	20-180%
	13C3-HFPO-DA	92%	92%	20-150%

(a) Outside control limits.

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-DUP	6Q22717.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330
FC7822-2	6Q22716.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7823-1, FC7823-2, FC7823-3, FC7823-4, FC7823-5, FC7823-6, FC7823-7, FC7823-8

CAS No.	Compound	FC7822-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	0.0136		0.0132		3	30
2706-90-3	Perfluoropentanoic acid	0.0048		0.0051		6	30
307-24-4	Perfluorohexanoic acid	0.0016	JB	0.0016	J	0	30
375-85-9	Perfluoroheptanoic acid	0.0020		0.0021		5	30
335-67-1	Perfluorooctanoic acid	0.0014	J	0.0012	J	15	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	ND		ND		nc	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC7823
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-DUP	6Q22717.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330
FC7822-2	6Q22716.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7823-1, FC7823-2, FC7823-3, FC7823-4, FC7823-5, FC7823-6, FC7823-7, FC7823-8

CAS No.	Compound	FC7822-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC7822-2	Limits
	13C4-PFBA	13%* [a]	15%* [a]	20-150%
	13C5-PFPeA	91%	87%	20-150%
	13C5-PFHxA	104%	102%	20-150%
	13C4-PFHpA	110%	100%	20-150%
	13C8-PFOA	99%	97%	20-150%
	13C9-PFNA	92%	95%	20-150%
	13C6-PFDA	104%	85%	20-150%
	13C7-PFUnDA	101%	81%	20-150%
	13C2-PFDoDA	82%	69%	20-150%
	13C2-PFTeDA	40%	36%	20-150%
	13C3-PFBS	101%	92%	20-150%
	13C3-PFHxS	97%	95%	20-150%
	13C8-PFOS	99%	109%	20-150%
	13C8-FOSA	98%	97%	20-150%
	d3-MeFOSA	91%	87%	20-150%
	d5-EtFOSA	89%	86%	20-150%
	d3-MeFOSAA	96%	93%	20-150%
	d5-EtFOSAA	100%	91%	20-150%
	d7-MeFOSE	75%	73%	20-150%
	d9-EtFOSE	71%	70%	20-150%
	13C2-4:2FTS	110%	98%	20-180%
	13C2-6:2FTS	99%	94%	20-180%
	13C2-8:2FTS	78%	75%	20-180%
	13C3-HFPO-DA	98%	90%	20-150%

(a) Outside control limits.

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC7824

Sampling Date: 07/11/23



Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
ssuggs@nd.gov

ATTN: Shannon Suggs

Total number of pages in report: 54

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC7824

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FC7824-1	07/11/23	08:45	AS	07/14/23	AQ	Ground Water	LAKE SOURIS 1
FC7824-2	07/11/23	09:20	AS	07/14/23	AQ	Equipment Blank	LAKE SOURIS 2-EB
FC7824-3	07/11/23	09:35	AS	07/14/23	AQ	Field Blank Water	LAKE SOURIS 2-FB
FC7824-4	07/11/23	09:40	AS	07/14/23	AQ	Ground Water	LAKE SOURIS 2
FC7824-5	07/11/23	09:45	AS	07/14/23	AQ	Surface Water	LAKE SOURIS 2-D
FC7824-6	07/11/23	11:03	AS	07/14/23	AQ	Surface Water	LAKE SOURIS 3
FC7824-7	07/11/23	11:46	AS	07/14/23	AQ	Surface Water	KARLSRUHE 1
FC7824-8	07/11/23	12:34	AS	07/14/23	AQ	Surface Water	KARLSRUHE 2
FC7824-9	07/11/23	13:33	AS	07/14/23	AQ	Surface Water	KARLSRUHE 3

Summary of Hits

Job Number: FC7824
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 07/11/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method

FC7824-1 **LAKE SOURIS 1**

No hits reported in this sample.

FC7824-2 **LAKE SOURIS 2-EB**

No hits reported in this sample.

FC7824-3 **LAKE SOURIS 2-FB**

No hits reported in this sample.

FC7824-4 **LAKE SOURIS 2**

No hits reported in this sample.

FC7824-5 **LAKE SOURIS 2-D**

No hits reported in this sample.

FC7824-6 **LAKE SOURIS 3**

No hits reported in this sample.

FC7824-7 **KARLSRUHE 1**

No hits reported in this sample.

FC7824-8 **KARLSRUHE 2**

No hits reported in this sample.

FC7824-9 **KARLSRUHE 3**

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	LAKE SOURIS 1		
Lab Sample ID:	FC7824-1	**Date Sampled:**	07/11/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22744.D	1	08/11/23 14:28	MV	08/03/23 11:30	OP98223	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	475 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.4	4.2	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.2	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.1	0.53	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.1	0.53	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.1	0.53	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.64	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.53	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.63	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.63	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.88	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.53	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.4	4.2	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.4	4.2	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.4	4.3	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE SOURIS 1		
Lab Sample ID:	FC7824-1	**Date Sampled:**	07/11/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	11	ng/l	
1691-99-2	EtFOSE	ND	21	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.4	2.1	ng/l	
919005-14-4	ADONA	ND	8.4	2.1	ng/l	
377-73-1	PFMPA	ND	4.2	1.1	ng/l	
863090-89-5	PFMBA	ND	4.2	1.2	ng/l	
151772-58-6	NFDHA	ND	4.2	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.4	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.4	2.1	ng/l	
113507-82-7	PFEESA	ND	4.2	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.3	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	53	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	53	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	54%		20-150%
	13C5-PFPeA	100%		20-150%
	13C5-PFHxA	104%		20-150%
	13C4-PFHpA	100%		20-150%
	13C8-PFOA	88%		20-150%
	13C9-PFNA	93%		20-150%
	13C6-PFDA	82%		20-150%
	13C7-PFUnDA	67%		20-150%
	13C2-PFDoDA	55%		20-150%
	13C2-PFTeDA	46%		20-150%
	13C3-PFBS	96%		20-150%
	13C3-PFHxS	102%		20-150%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE SOURIS 1		
Lab Sample ID:	FC7824-1	**Date Sampled:**	07/11/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	87%		20-150%
	13C8-FOSA	85%		20-150%
	d3-MeFOSA	53%		20-150%
	d5-EtFOSA	52%		20-150%
	d3-MeFOSAA	73%		20-150%
	d5-EtFOSAA	68%		20-150%
	d7-MeFOSE	56%		20-150%
	d9-EtFOSE	51%		20-150%
	13C2-4:2FTS	89%		20-180%
	13C2-6:2FTS	94%		20-180%
	13C2-8:2FTS	78%		20-180%
	13C3-HFPO-DA	95%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE SOURIS 2-EB		
Lab Sample ID:	FC7824-2	**Date Sampled:**	07/11/23
Matrix:	AQ - Equipment Blank	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22745.D	1	08/11/23 14:43	MV	08/03/23 11:30	OP98223	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	505 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.9	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	0.99	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.60	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.59	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.59	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.83	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	0.99	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	0.99	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	0.99	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	0.99	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	0.99	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	0.99	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.9	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.9	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.9	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	0.99	ng/l	
31506-32-8	MeFOSA	ND	2.0	0.99	ng/l	
4151-50-2	EtFOSA	ND	2.0	0.99	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE SOURIS 2-EB		
Lab Sample ID:	FC7824-2	**Date Sampled:**	07/11/23
Matrix:	AQ - Equipment Blank	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	0.99	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	9.9	ng/l	
1691-99-2	EtFOSE	ND	20	9.9	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.9	2.0	ng/l	
919005-14-4	ADONA	ND	7.9	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	0.99	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.9	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.9	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	0.99	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.9	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	50	9.9	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	9.9	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	101%		20-150%
	13C5-PFPeA	102%		20-150%
	13C5-PFHxA	102%		20-150%
	13C4-PFHpA	103%		20-150%
	13C8-PFOA	95%		20-150%
	13C9-PFNA	100%		20-150%
	13C6-PFDA	90%		20-150%
	13C7-PFUnDA	87%		20-150%
	13C2-PFDoDA	82%		20-150%
	13C2-PFTeDA	75%		20-150%
	13C3-PFBS	103%		20-150%
	13C3-PFHxS	98%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE SOURIS 2-EB		
Lab Sample ID:	FC7824-2	**Date Sampled:**	07/11/23
Matrix:	AQ - Equipment Blank	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%		20-150%
	13C8-FOSA	91%		20-150%
	d3-MeFOSA	79%		20-150%
	d5-EtFOSA	84%		20-150%
	d3-MeFOSAA	98%		20-150%
	d5-EtFOSAA	91%		20-150%
	d7-MeFOSE	88%		20-150%
	d9-EtFOSE	89%		20-150%
	13C2-4:2FTS	108%		20-180%
	13C2-6:2FTS	113%		20-180%
	13C2-8:2FTS	100%		20-180%
	13C3-HFPO-DA	94%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE SOURIS 2-FB		
Lab Sample ID:	FC7824-3	**Date Sampled:**	07/11/23
Matrix:	AQ - Field Blank Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22746.D	1	08/11/23 14:57	MV	08/03/23 11:30	OP98223	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.7	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.8	0.96	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.59	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.81	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.96	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.96	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.96	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.96	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.96	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.96	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.7	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.96	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.96	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.96	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE SOURIS 2-FB		
Lab Sample ID:	FC7824-3	**Date Sampled:**	07/11/23
Matrix:	AQ - Field Blank Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.96	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.6	ng/l	
1691-99-2	EtFOSE	ND	19	9.6	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.7	1.9	ng/l	
919005-14-4	ADONA	ND	7.7	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.96	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.7	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.7	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.96	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.6	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	99%		20-150%
	13C5-PFPeA	102%		20-150%
	13C5-PFHxA	105%		20-150%
	13C4-PFHpA	104%		20-150%
	13C8-PFOA	96%		20-150%
	13C9-PFNA	85%		20-150%
	13C6-PFDA	91%		20-150%
	13C7-PFUnDA	88%		20-150%
	13C2-PFDoDA	87%		20-150%
	13C2-PFTeDA	77%		20-150%
	13C3-PFBS	93%		20-150%
	13C3-PFHxS	88%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE SOURIS 2-FB		
Lab Sample ID:	FC7824-3	**Date Sampled:**	07/11/23
Matrix:	AQ - Field Blank Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	86%		20-150%
	13C8-FOSA	85%		20-150%
	d3-MeFOSA	78%		20-150%
	d5-EtFOSA	82%		20-150%
	d3-MeFOSAA	91%		20-150%
	d5-EtFOSAA	83%		20-150%
	d7-MeFOSE	86%		20-150%
	d9-EtFOSE	86%		20-150%
	13C2-4:2FTS	92%		20-180%
	13C2-6:2FTS	98%		20-180%
	13C2-8:2FTS	85%		20-180%
	13C3-HFPO-DA	94%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE SOURIS 2		
Lab Sample ID:	FC7824-4	**Date Sampled:**	07/11/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22747.D	1	08/11/23 15:11	MV	08/03/23 11:30	OP98223	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	505 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.9	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	0.99	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.60	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.59	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.59	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.83	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	0.99	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	0.99	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	0.99	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	0.99	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	0.99	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	0.99	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.9	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.9	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.9	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	0.99	ng/l	
31506-32-8	MeFOSA	ND	2.0	0.99	ng/l	
4151-50-2	EtFOSA	ND	2.0	0.99	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE SOURIS 2		
Lab Sample ID:	FC7824-4	**Date Sampled:**	07/11/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	0.99	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	9.9	ng/l	
1691-99-2	EtFOSE	ND	20	9.9	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.9	2.0	ng/l	
919005-14-4	ADONA	ND	7.9	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	0.99	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.9	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.9	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	0.99	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.9	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	50	9.9	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	9.9	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	38%		20-150%
	13C5-PFPeA	94%		20-150%
	13C5-PFHxA	96%		20-150%
	13C4-PFHpA	98%		20-150%
	13C8-PFOA	95%		20-150%
	13C9-PFNA	88%		20-150%
	13C6-PFDA	78%		20-150%
	13C7-PFUnDA	74%		20-150%
	13C2-PFDoDA	68%		20-150%
	13C2-PFTeDA	59%		20-150%
	13C3-PFBS	95%		20-150%
	13C3-PFHxS	91%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE SOURIS 2		
Lab Sample ID:	FC7824-4	**Date Sampled:**	07/11/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		20-150%
	13C8-FOSA	88%		20-150%
	d3-MeFOSA	73%		20-150%
	d5-EtFOSA	74%		20-150%
	d3-MeFOSAA	83%		20-150%
	d5-EtFOSAA	78%		20-150%
	d7-MeFOSE	70%		20-150%
	d9-EtFOSE	68%		20-150%
	13C2-4:2FTS	95%		20-180%
	13C2-6:2FTS	98%		20-180%
	13C2-8:2FTS	83%		20-180%
	13C3-HFPO-DA	87%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE SOURIS 2-D		
Lab Sample ID:	FC7824-5	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22748.D	1	08/11/23 15:26	MV	08/03/23 11:30	OP98223	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	495 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.1	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.51	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.51	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.51	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.85	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.1	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.1	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.1	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE SOURIS 2-D		
Lab Sample ID:	FC7824-5	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.1	2.0	ng/l	
919005-14-4	ADONA	ND	8.1	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	1.0	ng/l	
863090-89-5	PFMBA	ND	4.0	1.2	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.1	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.1	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	45%		20-150%
	13C5-PFPeA	93%		20-150%
	13C5-PFHxA	92%		20-150%
	13C4-PFHpA	93%		20-150%
	13C8-PFOA	94%		20-150%
	13C9-PFNA	98%		20-150%
	13C6-PFDA	94%		20-150%
	13C7-PFUnDA	80%		20-150%
	13C2-PFDoDA	75%		20-150%
	13C2-PFTeDA	63%		20-150%
	13C3-PFBS	92%		20-150%
	13C3-PFHxS	87%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE SOURIS 2-D		
Lab Sample ID:	FC7824-5	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%		20-150%
	13C8-FOSA	86%		20-150%
	d3-MeFOSA	70%		20-150%
	d5-EtFOSA	74%		20-150%
	d3-MeFOSAA	85%		20-150%
	d5-EtFOSAA	78%		20-150%
	d7-MeFOSE	72%		20-150%
	d9-EtFOSE	74%		20-150%
	13C2-4:2FTS	94%		20-180%
	13C2-6:2FTS	94%		20-180%
	13C2-8:2FTS	94%		20-180%
	13C3-HFPO-DA	86%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE SOURIS 3		
Lab Sample ID:	FC7824-6	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22749.D	1	08/11/23 15:40	MV	08/03/23 11:30	OP98223	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	500 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.0	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.61	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.60	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.60	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.84	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.0	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.0	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.0	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE SOURIS 3		
Lab Sample ID:	FC7824-6	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.0	2.0	ng/l	
919005-14-4	ADONA	ND	8.0	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	1.0	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.0	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.0	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	50	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	49%		20-150%
	13C5-PFPeA	116%		20-150%
	13C5-PFHxA	118%		20-150%
	13C4-PFHpA	120%		20-150%
	13C8-PFOA	115%		20-150%
	13C9-PFNA	107%		20-150%
	13C6-PFDA	101%		20-150%
	13C7-PFUnDA	88%		20-150%
	13C2-PFDoDA	77%		20-150%
	13C2-PFTeDA	68%		20-150%
	13C3-PFBS	108%		20-150%
	13C3-PFHxS	111%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE SOURIS 3		
Lab Sample ID:	FC7824-6	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	108%		20-150%
	13C8-FOSA	104%		20-150%
	d3-MeFOSA	80%		20-150%
	d5-EtFOSA	77%		20-150%
	d3-MeFOSAA	91%		20-150%
	d5-EtFOSAA	87%		20-150%
	d7-MeFOSE	77%		20-150%
	d9-EtFOSE	73%		20-150%
	13C2-4:2FTS	104%		20-180%
	13C2-6:2FTS	106%		20-180%
	13C2-8:2FTS	99%		20-180%
	13C3-HFPO-DA	108%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	KARLSRUHE 1		
Lab Sample ID:	FC7824-7	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22752.D	1	08/11/23 16:23	MV	08/03/23 11:30	OP98223	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	490 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.2	4.1	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.51	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.51	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.51	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.86	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	KARLSRUHE 1		
Lab Sample ID:	FC7824-7	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.0	ng/l	
919005-14-4	ADONA	ND	8.2	2.0	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.0	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	61%		20-150%
	13C5-PFPeA	107%		20-150%
	13C5-PFHxA	107%		20-150%
	13C4-PFHpA	108%		20-150%
	13C8-PFOA	109%		20-150%
	13C9-PFNA	96%		20-150%
	13C6-PFDA	97%		20-150%
	13C7-PFUnDA	86%		20-150%
	13C2-PFDoDA	70%		20-150%
	13C2-PFTeDA	59%		20-150%
	13C3-PFBS	99%		20-150%
	13C3-PFHxS	94%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	KARLSRUHE 1		
Lab Sample ID:	FC7824-7	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	104%		20-150%
	13C8-FOSA	96%		20-150%
	d3-MeFOSA	68%		20-150%
	d5-EtFOSA	63%		20-150%
	d3-MeFOSAA	90%		20-150%
	d5-EtFOSAA	87%		20-150%
	d7-MeFOSE	63%		20-150%
	d9-EtFOSE	59%		20-150%
	13C2-4:2FTS	89%		20-180%
	13C2-6:2FTS	105%		20-180%
	13C2-8:2FTS	97%		20-180%
	13C3-HFPO-DA	101%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	KARLSRUHE 2		
Lab Sample ID:	FC7824-8	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22753.D	1	08/11/23 16:37	MV	08/03/23 11:30	OP98223	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	515 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.8	3.9	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.9	0.97	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.49	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.49	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.49	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.59	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.49	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.82	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.49	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.97	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.97	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.97	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.97	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.97	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.97	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.8	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.97	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.97	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.97	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	KARLSRUHE 2		
Lab Sample ID:	FC7824-8	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.97	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.7	ng/l	
1691-99-2	EtFOSE	ND	19	9.7	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.8	1.9	ng/l	
919005-14-4	ADONA	ND	7.8	1.9	ng/l	
377-73-1	PFMPA	ND	3.9	0.97	ng/l	
863090-89-5	PFMBA	ND	3.9	1.1	ng/l	
151772-58-6	NFDHA	ND	3.9	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.8	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.8	1.9	ng/l	
113507-82-7	PFEESA	ND	3.9	0.97	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.7	4.9	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	49	9.7	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	49	9.7	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	40%		20-150%
	13C5-PFPeA	98%		20-150%
	13C5-PFHxA	97%		20-150%
	13C4-PFHpA	97%		20-150%
	13C8-PFOA	91%		20-150%
	13C9-PFNA	91%		20-150%
	13C6-PFDA	88%		20-150%
	13C7-PFUnDA	75%		20-150%
	13C2-PFDoDA	63%		20-150%
	13C2-PFTeDA	48%		20-150%
	13C3-PFBS	96%		20-150%
	13C3-PFHxS	91%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	KARLSRUHE 2		
Lab Sample ID:	FC7824-8	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	87%		20-150%
	13C8-FOSA	89%		20-150%
	d3-MeFOSA	58%		20-150%
	d5-EtFOSA	55%		20-150%
	d3-MeFOSAA	85%		20-150%
	d5-EtFOSAA	76%		20-150%
	d7-MeFOSE	60%		20-150%
	d9-EtFOSE	55%		20-150%
	13C2-4:2FTS	88%		20-180%
	13C2-6:2FTS	93%		20-180%
	13C2-8:2FTS	86%		20-180%
	13C3-HFPO-DA	96%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	KARLSRUHE 3		
Lab Sample ID:	FC7824-9	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22755.D	1	08/11/23 17:06	MV	08/03/23 11:30	OP98223	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	495 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.1	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.51	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.51	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.51	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.85	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.1	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.1	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.1	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	KARLSRUHE 3		
Lab Sample ID:	FC7824-9	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.1	2.0	ng/l	
919005-14-4	ADONA	ND	8.1	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	1.0	ng/l	
863090-89-5	PFMBA	ND	4.0	1.2	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.1	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.1	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	45%		20-150%
	13C5-PFPeA	88%		20-150%
	13C5-PFHxA	90%		20-150%
	13C4-PFHpA	88%		20-150%
	13C8-PFOA	83%		20-150%
	13C9-PFNA	86%		20-150%
	13C6-PFDA	83%		20-150%
	13C7-PFUnDA	75%		20-150%
	13C2-PFDoDA	63%		20-150%
	13C2-PFTeDA	53%		20-150%
	13C3-PFBS	88%		20-150%
	13C3-PFHxS	90%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	KARLSRUHE 3		
Lab Sample ID:	FC7824-9	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	79%		20-150%
	13C8-FOSA	84%		20-150%
	d3-MeFOSA	64%		20-150%
	d5-EtFOSA	62%		20-150%
	d3-MeFOSAA	83%		20-150%
	d5-EtFOSAA	75%		20-150%
	d7-MeFOSE	66%		20-150%
	d9-EtFOSE	58%		20-150%
	13C2-4:2FTS	86%		20-180%
	13C2-6:2FTS	91%		20-180%
	13C2-8:2FTS	90%		20-180%
	13C3-HFPO-DA	83%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # SKIFF # FC7824

Client / Reporting Information

Company Name: NDDEQ - PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58504
Project Contact: Shannon Suggs Email: ssuggs@ndi.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed)
Sampler 1: Alyssa Schiral Sampler 2:

Project Information

Project Name: NDDEQ - PFAS
Street 4201 Normandy St
City Bismarck State ND
Project #
Fax #
Client Purchase Order #

Analytical Information

LCID1633 LIST 40

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNA	DI WATER	MEOH	LAB USE ONLY
1	Lake Souris 1	7/11	0845	AS	GW	3										
2	Lake Souris 2-EB	7/11	0920	AS	GW	3										
3	lake Souris 2 - FB	7/11	0935	AS	GW	3										
4	Lake Souris 2	7/11	0940	AS	GW	3										
5	Lake Souris 2-D	7/11	0945	AS	GW	3										
6	Lake Souris 3	7/11	1103	AS	GW	3										
7	Karlsruhe 1	7/11	1146	AS	GW	3										
8	Karlsruhe 2	7/11	1234	AS	GW	3										
9	Karlsruhe 3	7/11	1333	AS	GW	3										

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- ☐ COMMERCIAL "A" (RESULTS ONLY)
- ☐ COMMERCIAL "B" (RESULTS PLUS QC)
- ☐ REDT1 (EPA LEVEL 3)
- ☐ FULLT1 (EPA LEVEL 4)
- ☐ EDD'S

Comments / Remarks

INITIAL ASSESSMENT
LABEL VERIFICATION

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 SSUGGS	7/13	2 Fedex	3 Fed Ex		4 07/14/23 0945
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 4.8° IR#4

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

4.1

4

FC7824: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC7824 **Client:** NDDEQ-PFAS **Project:** NDDEQ-PFAS

Date / Time Received: 7/14/2023 9:45:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7810 8881 7899

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (4.8);

Cooler Temps (Corrected) °C: Cooler 1: (4.6);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230320 pH 10-12 _____ Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP Date: 7/14/2023 9:45:00 AM Reviewer: _____ Date: _____

FC7824: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98223-MB	6Q22743.D	1	08/11/23	MV	08/03/23	OP98223	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7824-1, FC7824-2, FC7824-3, FC7824-4, FC7824-5, FC7824-6, FC7824-7, FC7824-8, FC7824-9

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	0.0014	0.0020	0.00050	ug/l	J
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98223-MB	6Q22743.D	1	08/11/23	MV	08/03/23	OP98223	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7824-1, FC7824-2, FC7824-3, FC7824-4, FC7824-5, FC7824-6, FC7824-7, FC7824-8, FC7824-9

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	113%	20-150%
	13C5-PFPeA	115%	20-150%
	13C5-PFHxA	117%	20-150%
	13C4-PFHpA	120%	20-150%
	13C8-PFOA	110%	20-150%
	13C9-PFNA	102%	20-150%
	13C6-PFDA	109%	20-150%
	13C7-PFUnDA	110%	20-150%
	13C2-PFDoDA	94%	20-150%
	13C2-PFTeDA	73%	20-150%
	13C3-PFBS	115%	20-150%
	13C3-PFHxS	111%	20-150%
	13C8-PFOS	117%	20-150%
	13C8-FOSA	91%	20-150%
	d3-MeFOSA	74%	20-150%
	d5-EtFOSA	75%	20-150%
	d3-MeFOSAA	108%	20-150%
	d5-EtFOSAA	95%	20-150%
	d7-MeFOSE	85%	20-150%
	d9-EtFOSE	86%	20-150%
	13C2-4:2FTS	111%	20-180%
	13C2-6:2FTS	113%	20-180%
	13C2-8:2FTS	112%	20-180%
	13C3-HFPO-DA	112%	20-150%

Instrument Blank

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-IBLK	6Q22648.D	1	08/10/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7824-1, FC7824-2, FC7824-3, FC7824-4, FC7824-5, FC7824-6, FC7824-7, FC7824-8, FC7824-9

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-IBLK	6Q22648.D	1	08/10/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7824-1, FC7824-2, FC7824-3, FC7824-4, FC7824-5, FC7824-6, FC7824-7, FC7824-8, FC7824-9

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	94%	20-150%
	13C9-PFNA	95%	20-150%
	13C6-PFDA	99%	20-150%
	13C7-PFUnDA	96%	20-150%
	13C2-PFDoDA	99%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	105%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	104%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	100%	20-150%
	13C2-4:2FTS	109%	20-180%
	13C2-6:2FTS	110%	20-180%
	13C2-8:2FTS	111%	20-180%

Instrument Blank

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-IBLK	6Q22737.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7824-1, FC7824-2, FC7824-3, FC7824-4, FC7824-5, FC7824-6, FC7824-7, FC7824-8, FC7824-9

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-IBLK	6Q22737.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7824-1, FC7824-2, FC7824-3, FC7824-4, FC7824-5, FC7824-6, FC7824-7, FC7824-8, FC7824-9

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	104%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	95%	20-150%
	13C6-PFDA	103%	20-150%
	13C7-PFUnDA	98%	20-150%
	13C2-PFDoDA	98%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSAA	100%	20-150%
	d5-EtFOSAA	105%	20-150%
	13C2-4:2FTS	102%	20-180%
	13C2-6:2FTS	102%	20-180%
	13C2-8:2FTS	104%	20-180%

Continuing Calibration Blank

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-ICCB	6Q22751.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7824-7, FC7824-8, FC7824-9

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-ICCB	6Q22751.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7824-7, FC7824-8, FC7824-9

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	106%	20-150%
	13C4-PFHpA	104%	20-150%
	13C8-PFOA	105%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	97%	20-150%
	13C7-PFUnDA	99%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	95%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	97%	20-150%
	13C8-PFOS	101%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSAA	110%	20-150%
	d5-EtFOSAA	106%	20-150%
	13C2-4:2FTS	114%	20-180%
	13C2-6:2FTS	102%	20-180%
	13C2-8:2FTS	113%	20-180%

Continuing Calibration Blank

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-ICCB	6Q22733.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q330-IBLK, S6Q330-RT

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-ICCB	6Q22733.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q330-IBLK, S6Q330-RT

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	106%	20-150%
	13C4-PFHpA	100%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	105%	20-150%
	13C2-PFDoDA	103%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	102%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSAA	101%	20-150%
	d5-EtFOSAA	103%	20-150%
	13C2-4:2FTS	102%	20-180%
	13C2-6:2FTS	99%	20-180%
	13C2-8:2FTS	94%	20-180%

Blank Spike Summary

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98223-LLBS	6Q22742.D	1	08/11/23	MV	08/03/23	OP98223	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7824-1, FC7824-2, FC7824-3, FC7824-4, FC7824-5, FC7824-6, FC7824-7, FC7824-8, FC7824-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0170	106	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0087	109	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0053	133	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0046	115	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0041	103	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0046	115	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0039	98	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0045	113	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0044	110	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0040	100	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0040	100	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0041	116	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0040	106	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0039	107	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0047	123	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0043	116	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0040	104	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0038	98	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0040	103	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0176	117	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0180	118	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0160	104	40-150
754-91-6	PFOSA	0.004	0.0045	113	40-150
31506-32-8	MeFOSA	0.008	0.0096	120	40-150
4151-50-2	EtFOSA	0.008	0.0087	109	40-150
2355-31-9	MeFOSAA	0.004	0.0045	113	40-150
2991-50-6	EtFOSAA	0.004	0.0049	123	40-150
24448-09-7	MeFOSE	0.02	0.0217	109	40-150
1691-99-2	EtFOSE	0.02	0.0212	106	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0078	98	40-150
919005-14-4	ADONA	0.00756	0.0086	114	40-150
377-73-1	PFMPA	0.008	0.0090	113	40-150
863090-89-5	PFMBA	0.008	0.0089	111	40-150
151772-58-6	NFDHA	0.008	0.0088	110	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0077	103	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0073	97	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98223-LLBS	6Q22742.D	1	08/11/23	MV	08/03/23	OP98223	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7824-1, FC7824-2, FC7824-3, FC7824-4, FC7824-5, FC7824-6, FC7824-7, FC7824-8, FC7824-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0080	112	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0210	105	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.107	107	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.0963	96	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	104%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	105%	20-150%
	13C4-PFHpA	104%	20-150%
	13C8-PFOA	104%	20-150%
	13C9-PFNA	94%	20-150%
	13C6-PFDA	96%	20-150%
	13C7-PFUnDA	89%	20-150%
	13C2-PFDoDA	87%	20-150%
	13C2-PFTeDA	76%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	87%	20-150%
	13C8-FOSA	84%	20-150%
	d3-MeFOSA	76%	20-150%
	d5-EtFOSA	79%	20-150%
	d3-MeFOSAA	84%	20-150%
	d5-EtFOSAA	85%	20-150%
	d7-MeFOSE	85%	20-150%
	d9-EtFOSE	88%	20-150%
	13C2-4:2FTS	99%	20-180%
	13C2-6:2FTS	98%	20-180%
	13C2-8:2FTS	89%	20-180%
	13C3-HFPO-DA	101%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98223-BS	6Q22741.D	1	08/11/23	MV	08/03/23	OP98223	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7824-1, FC7824-2, FC7824-3, FC7824-4, FC7824-5, FC7824-6, FC7824-7, FC7824-8, FC7824-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.111	111	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0558	112	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0269	108	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0304	122	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0273	109	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0295	118	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0287	115	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0285	114	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0282	113	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0256	102	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0285	114	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0245	110	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0257	109	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0247	108	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0277	116	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0274	118	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0267	111	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0266	110	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0243	100	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.112	119	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.109	115	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.107	111	40-150
754-91-6	PFOSA	0.025	0.0292	117	40-150
31506-32-8	MeFOSA	0.05	0.0614	123	40-150
4151-50-2	EtFOSA	0.05	0.0572	114	40-150
2355-31-9	MeFOSAA	0.025	0.0296	118	40-150
2991-50-6	EtFOSAA	0.025	0.0299	120	40-150
24448-09-7	MeFOSE	0.125	0.142	114	40-150
1691-99-2	EtFOSE	0.125	0.143	114	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0553	111	40-150
919005-14-4	ADONA	0.0473	0.0564	119	40-150
377-73-1	PFMPA	0.05	0.0583	117	40-150
863090-89-5	PFMBA	0.05	0.0573	115	40-150
151772-58-6	NFDHA	0.05	0.0549	110	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0529	113	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0525	111	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98223-BS	6Q22741.D	1	08/11/23	MV	08/03/23	OP98223	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7824-1, FC7824-2, FC7824-3, FC7824-4, FC7824-5, FC7824-6, FC7824-7, FC7824-8, FC7824-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0495	111	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.138	110	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.658	105	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.625	100	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	111%	20-150%
	13C5-PFPeA	113%	20-150%
	13C5-PFHxA	117%	20-150%
	13C4-PFHpA	110%	20-150%
	13C8-PFOA	108%	20-150%
	13C9-PFNA	112%	20-150%
	13C6-PFDA	113%	20-150%
	13C7-PFUnDA	114%	20-150%
	13C2-PFDoDA	106%	20-150%
	13C2-PFTeDA	90%	20-150%
	13C3-PFBS	112%	20-150%
	13C3-PFHxS	114%	20-150%
	13C8-PFOS	108%	20-150%
	13C8-FOSA	93%	20-150%
	d3-MeFOSA	74%	20-150%
	d5-EtFOSA	79%	20-150%
	d3-MeFOSAA	96%	20-150%
	d5-EtFOSAA	91%	20-150%
	d7-MeFOSE	89%	20-150%
	d9-EtFOSE	90%	20-150%
	13C2-4:2FTS	102%	20-180%
	13C2-6:2FTS	106%	20-180%
	13C2-8:2FTS	91%	20-180%
	13C3-HFPO-DA	109%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98223-MS	6Q22754.D	1	08/11/23	MV	08/03/23	OP98223	S6Q330
FC7824-8	6Q22753.D	1	08/11/23	MV	08/03/23	OP98223	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7824-1, FC7824-2, FC7824-3, FC7824-4, FC7824-5, FC7824-6, FC7824-7, FC7824-8, FC7824-9

CAS No.	Compound	FC7824-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	ND		0.0952	0.111	117	40-150
2706-90-3	Perfluoropentanoic acid	ND		0.0476	0.0531	112	40-150
307-24-4	Perfluorohexanoic acid	ND		0.0238	0.0257	108	40-150
375-85-9	Perfluoroheptanoic acid	ND		0.0238	0.0281	118	40-150
335-67-1	Perfluorooctanoic acid	ND		0.0238	0.0269	113	40-150
375-95-1	Perfluorononanoic acid	ND		0.0238	0.0290	122	40-150
335-76-2	Perfluorodecanoic acid	ND		0.0238	0.0252	106	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.0238	0.0286	120	40-150
307-55-1	Perfluorododecanoic acid	ND		0.0238	0.0294	123	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.0238	0.0274	115	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.0238	0.0296	124	40-150
375-73-5	Perfluorobutanesulfonic acid	ND		0.0211	0.0232	110	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0224	0.0261	116	40-150
355-46-4	Perfluorohexanesulfonic acid	ND		0.0218	0.0249	114	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0227	0.0287	126	40-150
1763-23-1	Perfluorooctanesulfonic acid	ND		0.0221	0.0268	121	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.0229	0.0225	98	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.023	0.0221	96	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0231	0.0207	90	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0893	0.112	125	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.0905	0.106	117	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.0914	0.0988	108	40-150
754-91-6	PFOSA	ND		0.0238	0.0291	122	40-150
31506-32-8	MeFOSA	ND		0.0476	0.0564	118	40-150
4151-50-2	EtFOSA	ND		0.0476	0.0601	126	40-150
2355-31-9	MeFOSAA	ND		0.0238	0.0283	119	40-150
2991-50-6	EtFOSAA	ND		0.0238	0.0284	119	40-150
24448-09-7	MeFOSE	ND		0.119	0.147	123	40-150
1691-99-2	EtFOSE	ND		0.119	0.141	118	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.0476	0.0564	118	40-150
919005-14-4	ADONA	ND		0.045	0.0564	125	40-150
377-73-1	PFMPA	ND		0.0476	0.0513	108	40-150
863090-89-5	PFMBA	ND		0.0476	0.0548	115	40-150
151772-58-6	NFDHA	ND		0.0476	0.0536	113	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0445	0.0505	113	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.045	0.0409	91	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98223-MS	6Q22754.D	1	08/11/23	MV	08/03/23	OP98223	S6Q330
FC7824-8	6Q22753.D	1	08/11/23	MV	08/03/23	OP98223	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7824-1, FC7824-2, FC7824-3, FC7824-4, FC7824-5, FC7824-6, FC7824-7, FC7824-8, FC7824-9

CAS No.	Compound	FC7824-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	ND		0.0424	0.0485	114	40-150
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.119	0.236	198*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.595	0.649	109	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.595	0.628	106	40-150

CAS No.	ID Standard Recoveries	MS	FC7824-8	Limits
	13C4-PFBA	49%	40%	20-150%
	13C5-PFPeA	95%	98%	20-150%
	13C5-PFHxA	97%	97%	20-150%
	13C4-PFHpA	94%	97%	20-150%
	13C8-PFOA	90%	91%	20-150%
	13C9-PFNA	88%	91%	20-150%
	13C6-PFDA	89%	88%	20-150%
	13C7-PFUnDA	73%	75%	20-150%
	13C2-PFDoDA	62%	63%	20-150%
	13C2-PFTeDA	54%	48%	20-150%
	13C3-PFBS	97%	96%	20-150%
	13C3-PFHxS	93%	91%	20-150%
	13C8-PFOS	79%	87%	20-150%
	13C8-FOSA	73%	89%	20-150%
	d3-MeFOSA	58%	58%	20-150%
	d5-EtFOSA	51%	55%	20-150%
	d3-MeFOSAA	76%	85%	20-150%
	d5-EtFOSAA	65%	76%	20-150%
	d7-MeFOSE	57%	60%	20-150%
	d9-EtFOSE	54%	55%	20-150%
	13C2-4:2FTS	83%	88%	20-180%
	13C2-6:2FTS	95%	93%	20-180%
	13C2-8:2FTS	84%	86%	20-180%
	13C3-HFPO-DA	87%	96%	20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98223-DUP	6Q22756.D	1	08/11/23	MV	08/03/23	OP98223	S6Q330
FC7824-9	6Q22755.D	1	08/11/23	MV	08/03/23	OP98223	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7824-1, FC7824-2, FC7824-3, FC7824-4, FC7824-5, FC7824-6, FC7824-7, FC7824-8, FC7824-9

CAS No.	Compound	FC7824-9 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	ND		ND		nc	30
2706-90-3	Perfluoropentanoic acid	ND		ND		nc	30
307-24-4	Perfluorohexanoic acid	ND		ND		nc	30
375-85-9	Perfluoroheptanoic acid	ND		ND		nc	30
335-67-1	Perfluorooctanoic acid	ND		ND		nc	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	ND		ND		nc	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC7824
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98223-DUP	6Q22756.D	1	08/11/23	MV	08/03/23	OP98223	S6Q330
FC7824-9	6Q22755.D	1	08/11/23	MV	08/03/23	OP98223	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7824-1, FC7824-2, FC7824-3, FC7824-4, FC7824-5, FC7824-6, FC7824-7, FC7824-8, FC7824-9

CAS No.	Compound	FC7824-9 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC7824-9	Limits
	13C4-PFBA	58%	45%	20-150%
	13C5-PFPeA	97%	88%	20-150%
	13C5-PFHxA	101%	90%	20-150%
	13C4-PFHpA	98%	88%	20-150%
	13C8-PFOA	93%	83%	20-150%
	13C9-PFNA	86%	86%	20-150%
	13C6-PFDA	83%	83%	20-150%
	13C7-PFUnDA	73%	75%	20-150%
	13C2-PFDoDA	66%	63%	20-150%
	13C2-PFTeDA	57%	53%	20-150%
	13C3-PFBS	95%	88%	20-150%
	13C3-PFHxS	93%	90%	20-150%
	13C8-PFOS	94%	79%	20-150%
	13C8-FOSA	93%	84%	20-150%
	d3-MeFOSA	68%	64%	20-150%
	d5-EtFOSA	67%	62%	20-150%
	d3-MeFOSAA	82%	83%	20-150%
	d5-EtFOSAA	82%	75%	20-150%
	d7-MeFOSE	65%	66%	20-150%
	d9-EtFOSE	63%	58%	20-150%
	13C2-4:2FTS	90%	86%	20-180%
	13C2-6:2FTS	95%	91%	20-180%
	13C2-8:2FTS	84%	90%	20-180%
	13C3-HFPO-DA	93%	83%	20-150%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC8049

Sampling Date: 07/18/23



Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
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ATTN: Shannon Suggs

Total number of pages in report: 59

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC8049

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
FC8049-1	07/18/23	07:30	NGSS	07/21/23	AQ	Surface Water	380013
FC8049-2	07/18/23	09:15	NGSS	07/21/23	AQ	Surface Water	380012
FC8049-3	07/18/23	10:30	NGSS	07/21/23	AQ	Surface Water	385169
FC8049-4	07/18/23	12:15	NGSS	07/21/23	AQ	Surface Water	385055
FC8049-5	07/18/23	13:05	NGSS	07/21/23	AQ	Surface Water	380083
FC8049-6	07/18/23	15:31	NGSS	07/21/23	AQ	Surface Water	380153
FC8049-7	07/18/23	16:40	NGSS	07/21/23	AQ	Surface Water	380009
FC8049-8	07/18/23	17:54	NGSS	07/21/23	AQ	Surface Water	384130

Summary of Hits

Job Number: FC8049
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 07/18/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC8049-1	**380013**					
Perfluoroheptanoic acid		1.1 J	2.1	0.53	ng/l	EPA DRAFT 1633
FC8049-2	**380012**					
Perfluoropentanoic acid		1.1 J	4.4	1.1	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.2 J	2.2	0.55	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.1 J	2.2	0.55	ng/l	EPA DRAFT 1633
FC8049-3	**385169**					
Perfluoroheptanoic acid		1.1 J	2.1	0.52	ng/l	EPA DRAFT 1633
FC8049-4	**385055**					
Perfluoropentanoic acid		3.3 J	4.3	1.1	ng/l	EPA DRAFT 1633
FC8049-5	**380083**					
Perfluorohexanoic acid [a]		2.1 B	2.1	0.53	ng/l	EPA DRAFT 1633
FC8049-6	**380153**					
Perfluoropentanoic acid		1.3 J	4.0	1.0	ng/l	EPA DRAFT 1633
FC8049-7	**380009**					
Perfluoropentanoic acid		2.0 J	4.3	1.1	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		1.7 JB	2.2	0.54	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.6 J	2.2	0.54	ng/l	EPA DRAFT 1633
FC8049-8	**384130**					
Perfluoropentanoic acid		1.8 J	4.3	1.1	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.5 J	2.2	0.54	ng/l	EPA DRAFT 1633

(a) rr5x pfba

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	380013		
Lab Sample ID:	FC8049-1	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22906.D	1	08/15/23 00:26	MV	08/11/23 09:10	OP98378	S6Q332
Run #2							

	Initial Volume	Final Volume
Run #1	470 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.5	4.3	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.3	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.1	0.53	ng/l	
375-85-9	Perfluoroheptanoic acid	1.1	2.1	0.53	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.1	0.53	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.65	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.53	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.64	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.64	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.89	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.53	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.5	4.3	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.5	4.3	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.5	4.4	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380013		
Lab Sample ID:	FC8049-1	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	11	ng/l	
1691-99-2	EtFOSE	ND	21	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.5	2.1	ng/l	
919005-14-4	ADONA	ND	8.5	2.1	ng/l	
377-73-1	PFMPA	ND	4.3	1.1	ng/l	
863090-89-5	PFMBA	ND	4.3	1.2	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.5	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.5	2.1	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.3	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	53	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	53	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	23%		20-150%
	13C5-PFPeA	84%		20-150%
	13C5-PFHxA	83%		20-150%
	13C4-PFHpA	82%		20-150%
	13C8-PFOA	71%		20-150%
	13C9-PFNA	70%		20-150%
	13C6-PFDA	68%		20-150%
	13C7-PFUnDA	60%		20-150%
	13C2-PFDoDA	47%		20-150%
	13C2-PFTeDA	31%		20-150%
	13C3-PFBS	71%		20-150%
	13C3-PFHxS	63%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380013		
Lab Sample ID:	FC8049-1	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	56%		20-150%
	13C8-FOSA	96%		20-150%
	d3-MeFOSA	86%		20-150%
	d5-EtFOSA	81%		20-150%
	d3-MeFOSAA	57%		20-150%
	d5-EtFOSAA	47%		20-150%
	d7-MeFOSE	83%		20-150%
	d9-EtFOSE	78%		20-150%
	13C2-4:2FTS	78%		20-180%
	13C2-6:2FTS	74%		20-180%
	13C2-8:2FTS	53%		20-180%
	13C3-HFPO-DA	90%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380012		
Lab Sample ID:	FC8049-2	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22908.D	1	08/15/23 00:55	MV	08/11/23 09:10	OP98378	S6Q332
Run #2							

	Initial Volume	Final Volume
Run #1	455 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.8	4.4	ng/l	
2706-90-3	Perfluoropentanoic acid	1.1	4.4	1.1	ng/l	J
307-24-4	Perfluorohexanoic acid	ND	2.2	0.55	ng/l	
375-85-9	Perfluoroheptanoic acid	1.2	2.2	0.55	ng/l	J
335-67-1	Perfluorooctanoic acid	1.1	2.2	0.55	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.2	0.67	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.55	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.66	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.66	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.92	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.55	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.3	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.8	4.4	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.8	4.4	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.8	4.5	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380012		
Lab Sample ID:	FC8049-2	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.5	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.8	2.2	ng/l	
919005-14-4	ADONA	ND	8.8	2.2	ng/l	
377-73-1	PFMPA	ND	4.4	1.1	ng/l	
863090-89-5	PFMBA	ND	4.4	1.3	ng/l	
151772-58-6	NFDHA	ND	4.4	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.8	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.8	2.2	ng/l	
113507-82-7	PFEESA	ND	4.4	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.5	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	55	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	55	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	33%		20-150%
	13C5-PFPeA	97%		20-150%
	13C5-PFHxA	97%		20-150%
	13C4-PFHpA	101%		20-150%
	13C8-PFOA	101%		20-150%
	13C9-PFNA	95%		20-150%
	13C6-PFDA	96%		20-150%
	13C7-PFUnDA	90%		20-150%
	13C2-PFDoDA	70%		20-150%
	13C2-PFTeDA	45%		20-150%
	13C3-PFBS	98%		20-150%
	13C3-PFHxS	98%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380012		
Lab Sample ID:	FC8049-2	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%		20-150%
	13C8-FOSA	91%		20-150%
	d3-MeFOSA	86%		20-150%
	d5-EtFOSA	78%		20-150%
	d3-MeFOSAA	81%		20-150%
	d5-EtFOSAA	72%		20-150%
	d7-MeFOSE	75%		20-150%
	d9-EtFOSE	75%		20-150%
	13C2-4:2FTS	92%		20-180%
	13C2-6:2FTS	94%		20-180%
	13C2-8:2FTS	72%		20-180%
	13C3-HFPO-DA	100%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	385169		
Lab Sample ID:	FC8049-3	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22909.D	1	08/15/23 01:09	MV	08/11/23 09:10	OP98378	S6Q332
Run #2							

	Initial Volume	Final Volume
Run #1	480 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.3	4.2	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.2	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.1	0.52	ng/l	
375-85-9	Perfluoroheptanoic acid	1.1	2.1	0.52	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.1	0.52	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.64	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.52	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.63	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.63	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.88	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.52	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.3	4.2	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.3	4.2	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.3	4.3	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	385169		
Lab Sample ID:	FC8049-3	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.3	2.1	ng/l	
919005-14-4	ADONA	ND	8.3	2.1	ng/l	
377-73-1	PFMPA	ND	4.2	1.0	ng/l	
863090-89-5	PFMBA	ND	4.2	1.2	ng/l	
151772-58-6	NFDHA	ND	4.2	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.3	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.3	2.1	ng/l	
113507-82-7	PFEESA	ND	4.2	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.2	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	21%		20-150%
	13C5-PFPeA	91%		20-150%
	13C5-PFHxA	88%		20-150%
	13C4-PFHpA	89%		20-150%
	13C8-PFOA	88%		20-150%
	13C9-PFNA	75%		20-150%
	13C6-PFDA	88%		20-150%
	13C7-PFUnDA	80%		20-150%
	13C2-PFDoDA	65%		20-150%
	13C2-PFTeDA	48%		20-150%
	13C3-PFBS	82%		20-150%
	13C3-PFHxS	77%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	385169		
Lab Sample ID:	FC8049-3	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	81%		20-150%
	13C8-FOSA	94%		20-150%
	d3-MeFOSA	91%		20-150%
	d5-EtFOSA	91%		20-150%
	d3-MeFOSAA	69%		20-150%
	d5-EtFOSAA	65%		20-150%
	d7-MeFOSE	87%		20-150%
	d9-EtFOSE	86%		20-150%
	13C2-4:2FTS	80%		20-180%
	13C2-6:2FTS	83%		20-180%
	13C2-8:2FTS	68%		20-180%
	13C3-HFPO-DA	98%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	385055		
Lab Sample ID:	FC8049-4	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q23029.D	1	08/16/23 09:36	MV	08/11/23 09:10	OP98378	S6Q333
Run #2							

	Initial Volume	Final Volume
Run #1	460 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.7	4.3	ng/l	
2706-90-3	Perfluoropentanoic acid	3.3	4.3	1.1	ng/l	J
307-24-4	Perfluorohexanoic acid	ND	2.2	0.54	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.2	0.54	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.2	0.54	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	0.66	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.54	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.65	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.65	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.91	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.54	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.7	4.3	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.7	4.3	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.7	4.5	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	385055		
Lab Sample ID:	FC8049-4	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.7	2.2	ng/l	
919005-14-4	ADONA	ND	8.7	2.2	ng/l	
377-73-1	PFMPA	ND	4.3	1.1	ng/l	
863090-89-5	PFMBA	ND	4.3	1.2	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.7	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.7	2.2	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.4	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	54	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	54	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	20%		20-150%
	13C5-PFPeA	72%		20-150%
	13C5-PFHxA	71%		20-150%
	13C4-PFHpA	69%		20-150%
	13C8-PFOA	71%		20-150%
	13C9-PFNA	59%		20-150%
	13C6-PFDA	73%		20-150%
	13C7-PFUnDA	62%		20-150%
	13C2-PFDoDA	46%		20-150%
	13C2-PFTeDA	21%		20-150%
	13C3-PFBS	66%		20-150%
	13C3-PFHxS	58%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	385055		
Lab Sample ID:	FC8049-4	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	57%		20-150%
	13C8-FOSA	86%		20-150%
	d3-MeFOSA	82%		20-150%
	d5-EtFOSA	78%		20-150%
	d3-MeFOSAA	54%		20-150%
	d5-EtFOSAA	50%		20-150%
	d7-MeFOSE	66%		20-150%
	d9-EtFOSE	64%		20-150%
	13C2-4:2FTS	71%		20-180%
	13C2-6:2FTS	70%		20-180%
	13C2-8:2FTS	61%		20-180%
	13C3-HFPO-DA	81%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380083		
Lab Sample ID:	FC8049-5	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	6Q22914.D	1	08/15/23 02:21	MV	08/11/23 09:10	OP98378	S6Q332
Run #2 [b]	6Q23031.D	5	08/16/23 10:04	MV	08/11/23 09:10	OP98378	S6Q333

	Initial Volume	Final Volume
Run #1	470 ml	5.0 ml
Run #2	470 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [c]	ND [d]	43	21	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.3	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	2.1	2.1	0.53	ng/l	B
375-85-9	Perfluoroheptanoic acid	ND	2.1	0.53	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.1	0.53	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.65	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.53	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.64	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.64	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.89	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.53	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.5	4.3	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.5	4.3	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.5	4.4	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380083		
Lab Sample ID:	FC8049-5	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	11	ng/l	
1691-99-2	EtFOSE	ND	21	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.5	2.1	ng/l	
919005-14-4	ADONA	ND	8.5	2.1	ng/l	
377-73-1	PFMPA	ND	4.3	1.1	ng/l	
863090-89-5	PFMBA	ND	4.3	1.2	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.5	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.5	2.1	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.3	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	53	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	53	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	19% [e]	19% [e]	20-150%
	13C5-PFPeA	68%	66%	20-150%
	13C5-PFHxA	65%	67%	20-150%
	13C4-PFHpA	64%	65%	20-150%
	13C8-PFOA	60%	61%	20-150%
	13C9-PFNA	63%	58%	20-150%
	13C6-PFDA	58%	60%	20-150%
	13C7-PFUnDA	57%	51%	20-150%
	13C2-PFDoDA	44%	44%	20-150%
	13C2-PFTeDA	24%	29%	20-150%
	13C3-PFBS	57%	63%	20-150%
	13C3-PFHxS	54%	56%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380083		
Lab Sample ID:	FC8049-5	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	57%	54%	20-150%
	13C8-FOSA	94%	89%	20-150%
	d3-MeFOSA	91%	84%	20-150%
	d5-EtFOSA	89%	86%	20-150%
	d3-MeFOSAA	54%	56%	20-150%
	d5-EtFOSAA	46%	50%	20-150%
	d7-MeFOSE	80%	82%	20-150%
	d9-EtFOSE	82%	79%	20-150%
	13C2-4:2FTS	64%	67%	20-180%
	13C2-6:2FTS	70%	71%	20-180%
	13C2-8:2FTS	52%	58%	20-180%
	13C3-HFPO-DA	72%	72%	20-150%

(a) rr5x pfba
(b) Dilution required (ID recovery standard failure).
(c) Associated ID Standard outside control limits.
(d) Result is from Run# 2
(e) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380153		
Lab Sample ID:	FC8049-6	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22915.D	1	08/15/23 02:35	MV	08/11/23 09:10	OP98378	S6Q332
Run #2 [a]	6Q23032.D	5	08/16/23 10:17	MV	08/11/23 09:10	OP98378	S6Q333

	Initial Volume	Final Volume
Run #1	495 ml	5.0 ml
Run #2	495 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND [c]	40	20	ng/l	
2706-90-3	Perfluoropentanoic acid	1.3	4.0	1.0	ng/l	J
307-24-4	Perfluorohexanoic acid	ND	2.0	0.51	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.51	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.51	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.85	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.1	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.1	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.1	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380153		
Lab Sample ID:	FC8049-6	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.1	2.0	ng/l	
919005-14-4	ADONA	ND	8.1	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	1.0	ng/l	
863090-89-5	PFMBA	ND	4.0	1.2	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.1	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.1	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16% [d]	16% [d]	20-150%
	13C5-PFPeA	79%	78%	20-150%
	13C5-PFHxA	85%	80%	20-150%
	13C4-PFHpA	83%	80%	20-150%
	13C8-PFOA	84%	85%	20-150%
	13C9-PFNA	79%	67%	20-150%
	13C6-PFDA	83%	68%	20-150%
	13C7-PFUnDA	71%	73%	20-150%
	13C2-PFDoDA	59%	56%	20-150%
	13C2-PFTeDA	32%	30%	20-150%
	13C3-PFBS	81%	76%	20-150%
	13C3-PFHxS	73%	71%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380153		
Lab Sample ID:	FC8049-6	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	66%	68%	20-150%
	13C8-FOSA	94%	90%	20-150%
	d3-MeFOSA	92%	85%	20-150%
	d5-EtFOSA	95%	85%	20-150%
	d3-MeFOSAA	67%	69%	20-150%
	d5-EtFOSAA	57%	56%	20-150%
	d7-MeFOSE	83%	80%	20-150%
	d9-EtFOSE	84%	80%	20-150%
	13C2-4:2FTS	85%	82%	20-180%
	13C2-6:2FTS	85%	101%	20-180%
	13C2-8:2FTS	66%	82%	20-180%
	13C3-HFPO-DA	93%	93%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Associated ID Standard outside control limits.
(c) Result is from Run# 2
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380009		
Lab Sample ID:	FC8049-7	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22916.D	1	08/15/23 02:50	MV	08/11/23 09:10	OP98378	S6Q332
Run #2							

	Initial Volume	Final Volume
Run #1	460 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.7	4.3	ng/l	
2706-90-3	Perfluoropentanoic acid	2.0	4.3	1.1	ng/l	J
307-24-4	Perfluorohexanoic acid	1.7	2.2	0.54	ng/l	JB
375-85-9	Perfluoroheptanoic acid	1.6	2.2	0.54	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.2	0.54	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	0.66	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.54	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.65	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.65	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.91	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.54	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.7	4.3	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.7	4.3	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.7	4.5	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380009		
Lab Sample ID:	FC8049-7	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.7	2.2	ng/l	
919005-14-4	ADONA	ND	8.7	2.2	ng/l	
377-73-1	PFMPA	ND	4.3	1.1	ng/l	
863090-89-5	PFMBA	ND	4.3	1.2	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.7	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.7	2.2	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.4	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	54	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	54	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	20%		20-150%
	13C5-PFPeA	90%		20-150%
	13C5-PFHxA	99%		20-150%
	13C4-PFHpA	98%		20-150%
	13C8-PFOA	90%		20-150%
	13C9-PFNA	85%		20-150%
	13C6-PFDA	94%		20-150%
	13C7-PFUnDA	85%		20-150%
	13C2-PFDoDA	66%		20-150%
	13C2-PFTeDA	39%		20-150%
	13C3-PFBS	89%		20-150%
	13C3-PFHxS	77%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380009		
Lab Sample ID:	FC8049-7	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	78%		20-150%
	13C8-FOSA	99%		20-150%
	d3-MeFOSA	96%		20-150%
	d5-EtFOSA	92%		20-150%
	d3-MeFOSAA	74%		20-150%
	d5-EtFOSAA	61%		20-150%
	d7-MeFOSE	85%		20-150%
	d9-EtFOSE	90%		20-150%
	13C2-4:2FTS	88%		20-180%
	13C2-6:2FTS	101%		20-180%
	13C2-8:2FTS	78%		20-180%
	13C3-HFPO-DA	96%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	384130		
Lab Sample ID:	FC8049-8	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22917.D	1	08/15/23 03:04	MV	08/11/23 09:10	OP98378	S6Q332
Run #2 [a]	6Q23034.D	5	08/16/23 10:45	MV	08/11/23 09:10	OP98378	S6Q333

	Initial Volume	Final Volume
Run #1	465 ml	5.0 ml
Run #2	465 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND	8.6	4.3	ng/l	
2706-90-3	Perfluoropentanoic acid	1.8	4.3	1.1	ng/l	J
307-24-4	Perfluorohexanoic acid	ND	2.2	0.54	ng/l	
375-85-9	Perfluoroheptanoic acid	1.5	2.2	0.54	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.2	0.54	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	0.66	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.54	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.65	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.65	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.90	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.54	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.6	4.3	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.6	4.3	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.6	4.4	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	384130		
Lab Sample ID:	FC8049-8	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.6	2.2	ng/l	
919005-14-4	ADONA	ND	8.6	2.2	ng/l	
377-73-1	PFMPA	ND	4.3	1.1	ng/l	
863090-89-5	PFMBA	ND	4.3	1.2	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.6	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.6	2.2	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.4	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	54	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	54	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	19% [c]	20%	20-150%
	13C5-PFPeA	87%	89%	20-150%
	13C5-PFHxA	98%	98%	20-150%
	13C4-PFHpA	98%	99%	20-150%
	13C8-PFOA	94%	96%	20-150%
	13C9-PFNA	91%	96%	20-150%
	13C6-PFDA	96%	104%	20-150%
	13C7-PFUnDA	89%	89%	20-150%
	13C2-PFDoDA	77%	84%	20-150%
	13C2-PFTeDA	62%	59%	20-150%
	13C3-PFBS	92%	94%	20-150%
	13C3-PFHxS	86%	88%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	384130		
Lab Sample ID:	FC8049-8	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%	88%	20-150%
	13C8-FOSA	91%	91%	20-150%
	d3-MeFOSA	91%	90%	20-150%
	d5-EtFOSA	90%	90%	20-150%
	d3-MeFOSAA	85%	91%	20-150%
	d5-EtFOSAA	76%	83%	20-150%
	d7-MeFOSE	88%	85%	20-150%
	d9-EtFOSE	88%	88%	20-150%
	13C2-4:2FTS	86%	88%	20-180%
	13C2-6:2FTS	90%	108%	20-180%
	13C2-8:2FTS	76%	92%	20-180%
	13C3-HFPO-DA	94%	108%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Associated ID Standard outside control limits.
(c) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # SKIFF # FC8049

Client / Reporting Information

Company Name: NDDEQ PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58503
Project Contact: Shannon Suggs Email: ssuggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed)
Sampler 1: Sampler 2:

Project Information

Project Name: NDDEQ PFAS
Street: 4201 Normandy St
City: Bismarck State: ND
Project #
Fax #
Client Purchase Order #

Analytical Information

LCID1633LIST40

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LAB USE ONLY
1	380013	7/18	0730	NG	SW	3										
2	380012	7/18	0915	NG												
3	385169	7/18	1030	NG												
4	385055	7/18	1215													
5	380083	7/18	1305													
6	380153	7/18	1531													
7	380009	7/18	1640													
8	384130	7/18	1754													

INITIAL ASSESSMENT

LABEL VERIFICATION

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- ☐ COMMERCIAL "A" (RESULTS ONLY)
- ☐ COMMERCIAL "B" (RESULTS PLUS QC)
- ☐ REDT1 (EPA LEVEL 3)
- ☐ FULLT1 (EPA LEVEL 4)
- ☐ EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 SSuggs	7/20	2 Fed Ex	3 Fed Ex		4 [signature] 07/21/23 1015
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 3.0 TR #1

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

4.1

4

FC8049: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC8049 **Client:** NDDEQ PFAS **Project:** NDDEQ PFAS

Date / Time Received: 7/21/2023 10:15:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7814 0649 8734

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.8);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230320 pH 10-12 _____ Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP Date: 7/21/2023 10:15:00 A Reviewer: _____ Date: _____

FC8049: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98378-MB	6Q22903.D	1	08/14/23	MV	08/11/23	OP98378	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-1, FC8049-2, FC8049-3, FC8049-4, FC8049-5, FC8049-6, FC8049-7, FC8049-8

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	0.0013	0.0020	0.00050	ug/l	J
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98378-MB	6Q22903.D	1	08/14/23	MV	08/11/23	OP98378	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-1, FC8049-2, FC8049-3, FC8049-4, FC8049-5, FC8049-6, FC8049-7, FC8049-8

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	104%	20-150%
	13C5-PFHxA	103%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	100%	20-150%
	13C6-PFDA	107%	20-150%
	13C7-PFUnDA	106%	20-150%
	13C2-PFDoDA	89%	20-150%
	13C2-PFTeDA	75%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	107%	20-150%
	13C8-FOSA	90%	20-150%
	d3-MeFOSA	67%	20-150%
	d5-EtFOSA	74%	20-150%
	d3-MeFOSAA	99%	20-150%
	d5-EtFOSAA	92%	20-150%
	d7-MeFOSE	96%	20-150%
	d9-EtFOSE	105%	20-150%
	13C2-4:2FTS	104%	20-180%
	13C2-6:2FTS	113%	20-180%
	13C2-8:2FTS	88%	20-180%
	13C3-HFPO-DA	100%	20-150%

Instrument Blank

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q332-IBLK	6Q22852.D	1	08/14/23	MV	n/a	n/a	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-1, FC8049-2, FC8049-3, FC8049-5, FC8049-6, FC8049-7, FC8049-8

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q332-IBLK	6Q22852.D	1	08/14/23	MV	n/a	n/a	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-1, FC8049-2, FC8049-3, FC8049-5, FC8049-6, FC8049-7, FC8049-8

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	103%	20-150%
	13C9-PFNA	106%	20-150%
	13C6-PFDA	113%	20-150%
	13C7-PFUnDA	106%	20-150%
	13C2-PFDoDA	107%	20-150%
	13C2-PFTeDA	101%	20-150%
	13C3-PFBS	95%	20-150%
	13C3-PFHxS	98%	20-150%
	13C8-PFOS	97%	20-150%
	13C8-FOSA	89%	20-150%
	d3-MeFOSA	93%	20-150%
	d5-EtFOSA	92%	20-150%
	d3-MeFOSAA	91%	20-150%
	d5-EtFOSAA	85%	20-150%
	d7-MeFOSE	98%	20-150%
	d9-EtFOSE	99%	20-150%
	13C2-4:2FTS	99%	20-180%
	13C2-6:2FTS	101%	20-180%
	13C2-8:2FTS	85%	20-180%
	13C3-HFPO-DA	106%	20-150%

Instrument Blank

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-IBLK	6Q22930.D	1	08/15/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-4, FC8049-5, FC8049-6, FC8049-8

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-IBLK	6Q22930.D	1	08/15/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-4, FC8049-5, FC8049-6, FC8049-8

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	100%	20-150%
	13C6-PFDA	98%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	98%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	96%	20-150%
	13C3-PFHxS	95%	20-150%
	13C8-PFOS	101%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSA	97%	20-150%
	d5-EtFOSA	98%	20-150%
	d3-MeFOSAA	107%	20-150%
	d5-EtFOSAA	96%	20-150%
	d7-MeFOSE	105%	20-150%
	d9-EtFOSE	104%	20-150%
	13C2-4:2FTS	110%	20-180%
	13C2-6:2FTS	100%	20-180%
	13C2-8:2FTS	96%	20-180%
	13C3-HFPO-DA	106%	20-150%

Instrument Blank

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-IBLK	6Q23026.D	1	08/16/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-4, FC8049-5, FC8049-6, FC8049-8

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-IBLK	6Q23026.D	1	08/16/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-4, FC8049-5, FC8049-6, FC8049-8

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	99%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	94%	20-150%
	13C6-PFDA	98%	20-150%
	13C7-PFUnDA	107%	20-150%
	13C2-PFDoDA	95%	20-150%
	13C2-PFTeDA	97%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	92%	20-150%
	13C8-PFOS	107%	20-150%
	13C8-FOSA	101%	20-150%
	d3-MeFOSA	107%	20-150%
	d5-EtFOSA	109%	20-150%
	d3-MeFOSAA	113%	20-150%
	d5-EtFOSAA	103%	20-150%
	d7-MeFOSE	117%	20-150%
	d9-EtFOSE	122%	20-150%
	13C2-4:2FTS	105%	20-180%
	13C2-6:2FTS	110%	20-180%
	13C2-8:2FTS	103%	20-180%
	13C3-HFPO-DA	107%	20-150%

Continuing Calibration Blank

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q332-ICCB	6Q22900.D	1	08/14/23	MV	n/a	n/a	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-1, FC8049-2, FC8049-3

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q332-ICCB	6Q22900.D	1	08/14/23	MV	n/a	n/a	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-1, FC8049-2, FC8049-3

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	97%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	100%	20-150%
	13C6-PFDA	108%	20-150%
	13C7-PFUnDA	105%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	100%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	103%	20-150%
	13C8-FOSA	95%	20-150%
	d3-MeFOSA	97%	20-150%
	d5-EtFOSA	101%	20-150%
	d3-MeFOSAA	100%	20-150%
	d5-EtFOSAA	89%	20-150%
	d7-MeFOSE	108%	20-150%
	d9-EtFOSE	113%	20-150%
	13C2-4:2FTS	111%	20-180%
	13C2-6:2FTS	113%	20-180%
	13C2-8:2FTS	94%	20-180%
	13C3-HFPO-DA	100%	20-150%

Continuing Calibration Blank

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q332-ICCB	6Q22912.D	1	08/15/23	MV	n/a	n/a	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-5, FC8049-6, FC8049-7, FC8049-8

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q332-ICCB	6Q22912.D	1	08/15/23	MV	n/a	n/a	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-5, FC8049-6, FC8049-7, FC8049-8

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	96%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	97%	20-150%
	13C6-PFDA	99%	20-150%
	13C7-PFUnDA	96%	20-150%
	13C2-PFDoDA	103%	20-150%
	13C2-PFTeDA	94%	20-150%
	13C3-PFBS	96%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSA	93%	20-150%
	d5-EtFOSA	94%	20-150%
	d3-MeFOSAA	96%	20-150%
	d5-EtFOSAA	86%	20-150%
	d7-MeFOSE	106%	20-150%
	d9-EtFOSE	104%	20-150%
	13C2-4:2FTS	102%	20-180%
	13C2-6:2FTS	110%	20-180%
	13C2-8:2FTS	86%	20-180%
	13C3-HFPO-DA	107%	20-150%

Continuing Calibration Blank

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q332-ICCB	6Q22924.D	1	08/15/23	MV	n/a	n/a	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-5, FC8049-6, FC8049-7, FC8049-8

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q332-ICCB	6Q22924.D	1	08/15/23	MV	n/a	n/a	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-5, FC8049-6, FC8049-7, FC8049-8

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	105%	20-150%
	13C9-PFNA	105%	20-150%
	13C6-PFDA	95%	20-150%
	13C7-PFUnDA	97%	20-150%
	13C2-PFDoDA	99%	20-150%
	13C2-PFTeDA	90%	20-150%
	13C3-PFBS	98%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSA	93%	20-150%
	d5-EtFOSA	97%	20-150%
	d3-MeFOSAA	96%	20-150%
	d5-EtFOSAA	91%	20-150%
	d7-MeFOSE	101%	20-150%
	d9-EtFOSE	100%	20-150%
	13C2-4:2FTS	110%	20-180%
	13C2-6:2FTS	108%	20-180%
	13C2-8:2FTS	98%	20-180%
	13C3-HFPO-DA	103%	20-150%

Continuing Calibration Blank

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-ICCB	6Q23038.D	1	08/16/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-4, FC8049-5, FC8049-6, FC8049-8

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-ICCB	6Q23038.D	1	08/16/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-4, FC8049-5, FC8049-6, FC8049-8

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	102%	20-150%
	13C6-PFDA	106%	20-150%
	13C7-PFUnDA	108%	20-150%
	13C2-PFDoDA	105%	20-150%
	13C2-PFTeDA	105%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	97%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSA	101%	20-150%
	d5-EtFOSA	101%	20-150%
	d3-MeFOSAA	107%	20-150%
	d5-EtFOSAA	98%	20-150%
	d7-MeFOSE	115%	20-150%
	d9-EtFOSE	115%	20-150%
	13C2-4:2FTS	109%	20-180%
	13C2-6:2FTS	115%	20-180%
	13C2-8:2FTS	106%	20-180%
	13C3-HFPO-DA	107%	20-150%

Continuing Calibration Blank

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-ICCB	6Q23016.D	1	08/16/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q333-IBLK, S6Q333-RT

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-ICCB	6Q23016.D	1	08/16/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q333-IBLK, S6Q333-RT

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	91%	20-150%
	13C6-PFDA	103%	20-150%
	13C7-PFUnDA	113%	20-150%
	13C2-PFDoDA	113%	20-150%
	13C2-PFTeDA	131%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	121%	20-150%
	d3-MeFOSA	98%	20-150%
	d5-EtFOSA	97%	20-150%
	d3-MeFOSAA	117%	20-150%
	d5-EtFOSAA	124%	20-150%
	d7-MeFOSE	144%	20-150%
	d9-EtFOSE	134%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	118%	20-180%
	13C2-8:2FTS	124%	20-180%
	13C3-HFPO-DA	108%	20-150%

Blank Spike Summary

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98378-LLBS	6Q22902.D	1	08/14/23	MV	08/11/23	OP98378	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-1, FC8049-2, FC8049-3, FC8049-4, FC8049-5, FC8049-6, FC8049-7, FC8049-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0186	116	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0095	119	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0065	163*	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0046	115	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0045	113	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0048	120	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0047	118	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0049	123	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0047	118	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0047	118	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0047	118	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0043	121	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0048	128	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0048	131	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0048	126	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0051	137	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0042	109	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0046	119	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0053	137	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0187	125	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0173	114	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0221	144	40-150
754-91-6	PFOSA	0.004	0.0051	128	40-150
31506-32-8	MeFOSA	0.008	0.0088	110	40-150
4151-50-2	EtFOSA	0.008	0.0084	105	40-150
2355-31-9	MeFOSAA	0.004	0.0047	118	40-150
2991-50-6	EtFOSAA	0.004	0.0044	110	40-150
24448-09-7	MeFOSE	0.02	0.0246	123	40-150
1691-99-2	EtFOSE	0.02	0.0229	115	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0093	116	40-150
919005-14-4	ADONA	0.00756	0.0090	119	40-150
377-73-1	PFMPA	0.008	0.0095	119	40-150
863090-89-5	PFMBA	0.008	0.0095	119	40-150
151772-58-6	NFDHA	0.008	0.0099	124	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0089	119	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0086	114	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98378-LLBS	6Q22902.D	1	08/14/23	MV	08/11/23	OP98378	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-1, FC8049-2, FC8049-3, FC8049-4, FC8049-5, FC8049-6, FC8049-7, FC8049-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0079	111	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0179	90	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.107	107	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.0990	99	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	106%	20-150%
	13C5-PFPeA	104%	20-150%
	13C5-PFHxA	107%	20-150%
	13C4-PFHpA	104%	20-150%
	13C8-PFOA	108%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	105%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	100%	20-150%
	13C2-PFTeDA	85%	20-150%
	13C3-PFBS	108%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	107%	20-150%
	13C8-FOSA	93%	20-150%
	d3-MeFOSA	76%	20-150%
	d5-EtFOSA	83%	20-150%
	d3-MeFOSAA	103%	20-150%
	d5-EtFOSAA	95%	20-150%
	d7-MeFOSE	100%	20-150%
	d9-EtFOSE	110%	20-150%
	13C2-4:2FTS	112%	20-180%
	13C2-6:2FTS	125%	20-180%
	13C2-8:2FTS	87%	20-180%
	13C3-HFPO-DA	107%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98378-BS	6Q22901.D	1	08/14/23	MV	08/11/23	OP98378	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-1, FC8049-2, FC8049-3, FC8049-4, FC8049-5, FC8049-6, FC8049-7, FC8049-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.122	122	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0627	125	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0337	135	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0308	123	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0291	116	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0319	128	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0291	116	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0317	127	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0318	127	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0309	124	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0298	119	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0281	127	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0293	125	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0282	123	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0285	120	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0289	125	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0268	111	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0255	106	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0279	115	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.119	127	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.116	122	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.119	124	40-150
754-91-6	PFOSA	0.025	0.0301	120	40-150
31506-32-8	MeFOSA	0.05	0.0574	115	40-150
4151-50-2	EtFOSA	0.05	0.0571	114	40-150
2355-31-9	MeFOSAA	0.025	0.0323	129	40-150
2991-50-6	EtFOSAA	0.025	0.0290	116	40-150
24448-09-7	MeFOSE	0.125	0.154	123	40-150
1691-99-2	EtFOSE	0.125	0.149	119	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0600	120	40-150
919005-14-4	ADONA	0.0473	0.0605	128	40-150
377-73-1	PFMPA	0.05	0.0618	124	40-150
863090-89-5	PFMBA	0.05	0.0615	123	40-150
151772-58-6	NFDHA	0.05	0.0634	127	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0595	127	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0581	123	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98378-BS	6Q22901.D	1	08/14/23	MV	08/11/23	OP98378	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-1, FC8049-2, FC8049-3, FC8049-4, FC8049-5, FC8049-6, FC8049-7, FC8049-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0563	127	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.124	99	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.741	119	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.707	113	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	106%	20-150%
	13C5-PFHxA	105%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	104%	20-150%
	13C9-PFNA	94%	20-150%
	13C6-PFDA	100%	20-150%
	13C7-PFUnDA	98%	20-150%
	13C2-PFDoDA	88%	20-150%
	13C2-PFTeDA	83%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	107%	20-150%
	13C8-FOSA	87%	20-150%
	d3-MeFOSA	74%	20-150%
	d5-EtFOSA	74%	20-150%
	d3-MeFOSAA	97%	20-150%
	d5-EtFOSAA	89%	20-150%
	d7-MeFOSE	92%	20-150%
	d9-EtFOSE	99%	20-150%
	13C2-4:2FTS	109%	20-180%
	13C2-6:2FTS	111%	20-180%
	13C2-8:2FTS	90%	20-180%
	13C3-HFPO-DA	108%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98378-MS	6Q22907.D	1	08/15/23	MV	08/11/23	OP98378	S6Q332
FC8049-1	6Q22906.D	1	08/15/23	MV	08/11/23	OP98378	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-1, FC8049-2, FC8049-3, FC8049-4, FC8049-5, FC8049-6, FC8049-7, FC8049-8

CAS No.	Compound	FC8049-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	ND		0.112	0.151	134	40-150
2706-90-3	Perfluoropentanoic acid	ND		0.0562	0.0737	131	40-150
307-24-4	Perfluorohexanoic acid	ND		0.0281	0.0351	125	40-150
375-85-9	Perfluoroheptanoic acid	0.0011	J	0.0281	0.0361	125	40-150
335-67-1	Perfluorooctanoic acid	ND		0.0281	0.0343	122	40-150
375-95-1	Perfluorononanoic acid	ND		0.0281	0.0370	132	40-150
335-76-2	Perfluorodecanoic acid	ND		0.0281	0.0362	129	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.0281	0.0382	136	40-150
307-55-1	Perfluorododecanoic acid	ND		0.0281	0.0341	121	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.0281	0.0289	103	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.0281	0.0373	133	40-150
375-73-5	Perfluorobutanesulfonic acid	ND		0.0249	0.0293	118	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0264	0.0355	134	40-150
355-46-4	Perfluorohexanesulfonic acid	ND		0.0257	0.0340	132	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0268	0.0343	128	40-150
1763-23-1	Perfluorooctanesulfonic acid	ND		0.0261	0.0362	139	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.027	0.0272	101	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.0271	0.0241	89	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0272	0.0170	62	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.105	0.138	131	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.107	0.135	126	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.108	0.137	127	40-150
754-91-6	PFOSA	ND		0.0281	0.0359	128	40-150
31506-32-8	MeFOSA	ND		0.0562	0.0670	119	40-150
4151-50-2	EtFOSA	ND		0.0562	0.0685	122	40-150
2355-31-9	MeFOSAA	ND		0.0281	0.0375	133	40-150
2991-50-6	EtFOSAA	ND		0.0281	0.0332	118	40-150
24448-09-7	MeFOSE	ND		0.14	0.176	125	40-150
1691-99-2	EtFOSE	ND		0.14	0.176	125	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.0562	0.0713	127	40-150
919005-14-4	ADONA	ND		0.0531	0.0638	120	40-150
377-73-1	PFMPA	ND		0.0562	0.0462	82	40-150
863090-89-5	PFMBA	ND		0.0562	0.0719	128	40-150
151772-58-6	NFDHA	ND		0.0562	0.0740	132	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0525	0.0531	101	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0531	0.0370	70	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98378-MS	6Q22907.D	1	08/15/23	MV	08/11/23	OP98378	S6Q332
FC8049-1	6Q22906.D	1	08/15/23	MV	08/11/23	OP98378	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-1, FC8049-2, FC8049-3, FC8049-4, FC8049-5, FC8049-6, FC8049-7, FC8049-8

CAS No.	Compound	FC8049-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	ND		0.05	0.0644	129	40-150
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.14	0.341	243*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.702	0.880	125	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.702	0.788	112	40-150

CAS No.	ID Standard Recoveries	MS	FC8049-1	Limits
	13C4-PFBA	26%	23%	20-150%
	13C5-PFPeA	91%	84%	20-150%
	13C5-PFHxA	92%	83%	20-150%
	13C4-PFHpA	91%	82%	20-150%
	13C8-PFOA	88%	71%	20-150%
	13C9-PFNA	84%	70%	20-150%
	13C6-PFDA	87%	68%	20-150%
	13C7-PFUnDA	76%	60%	20-150%
	13C2-PFDoDA	66%	47%	20-150%
	13C2-PFTeDA	41%	31%	20-150%
	13C3-PFBS	95%	71%	20-150%
	13C3-PFHxS	84%	63%	20-150%
	13C8-PFOS	85%	56%	20-150%
	13C8-FOSA	101%	96%	20-150%
	d3-MeFOSA	90%	86%	20-150%
	d5-EtFOSA	83%	81%	20-150%
	d3-MeFOSAA	75%	57%	20-150%
	d5-EtFOSAA	64%	47%	20-150%
	d7-MeFOSE	83%	83%	20-150%
	d9-EtFOSE	81%	78%	20-150%
	13C2-4:2FTS	94%	78%	20-180%
	13C2-6:2FTS	92%	74%	20-180%
	13C2-8:2FTS	69%	53%	20-180%
	13C3-HFPO-DA	96%	90%	20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98378-DUP	6Q22910.D	1	08/15/23	MV	08/11/23	OP98378	S6Q332
FC8049-3	6Q22909.D	1	08/15/23	MV	08/11/23	OP98378	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-1, FC8049-2, FC8049-3, FC8049-4, FC8049-5, FC8049-6, FC8049-7, FC8049-8

CAS No.	Compound	FC8049-3 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	ND		ND		nc	30
2706-90-3	Perfluoropentanoic acid	ND		ND		nc	30
307-24-4	Perfluorohexanoic acid	ND		ND		nc	30
375-85-9	Perfluoroheptanoic acid	0.0011	J	0.0012	J	9	30
335-67-1	Perfluorooctanoic acid	ND		ND		nc	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	ND		ND		nc	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC8049
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98378-DUP	6Q22910.D	1	08/15/23	MV	08/11/23	OP98378	S6Q332
FC8049-3	6Q22909.D	1	08/15/23	MV	08/11/23	OP98378	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8049-1, FC8049-2, FC8049-3, FC8049-4, FC8049-5, FC8049-6, FC8049-7, FC8049-8

CAS No.	Compound	FC8049-3 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC8049-3	Limits
	13C4-PFBA	19%* [a]	21%	20-150%
	13C5-PFPeA	92%	91%	20-150%
	13C5-PFHxA	92%	88%	20-150%
	13C4-PFHpA	93%	89%	20-150%
	13C8-PFOA	88%	88%	20-150%
	13C9-PFNA	86%	75%	20-150%
	13C6-PFDA	89%	88%	20-150%
	13C7-PFUnDA	79%	80%	20-150%
	13C2-PFDoDA	64%	65%	20-150%
	13C2-PFTeDA	49%	48%	20-150%
	13C3-PFBS	81%	82%	20-150%
	13C3-PFHxS	83%	77%	20-150%
	13C8-PFOS	85%	81%	20-150%
	13C8-FOSA	100%	94%	20-150%
	d3-MeFOSA	91%	91%	20-150%
	d5-EtFOSA	83%	91%	20-150%
	d3-MeFOSAA	83%	69%	20-150%
	d5-EtFOSAA	66%	65%	20-150%
	d7-MeFOSE	82%	87%	20-150%
	d9-EtFOSE	82%	86%	20-150%
	13C2-4:2FTS	89%	80%	20-180%
	13C2-6:2FTS	87%	83%	20-180%
	13C2-8:2FTS	70%	68%	20-180%
	13C3-HFPO-DA	101%	98%	20-150%

(a) Outside control limits.

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC7822

Sampling Dates: 07/10/23 - 07/11/23



Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
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ATTN: Shannon Suggs

Total number of pages in report: 57

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC7822

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FC7822-1	07/10/23	13:20	GKW	07/14/23	AQ	Surface Water	SOURIS VALLEY 1
FC7822-2	07/10/23	13:50	GKW	07/14/23	AQ	Surface Water	SOURIS RIVER 2
FC7822-3	07/11/23	11:23	GKW	07/14/23	AQ	Ground Water	OAKES EAST
FC7822-4	07/11/23	11:26	GKW	07/14/23	AQ	Field Blank Water	FIELD BLANK
FC7822-5	07/11/23	11:40	GKW	07/14/23	AQ	Equipment Blank	EQUIPMENT BLANK
FC7822-6	07/11/23	11:55	GKW	07/14/23	AQ	Ground Water	OAKES WEST
FC7822-7	07/11/23	12:15	GKW	07/14/23	AQ	Surface Water	OAKES NORTH

Summary of Hits

Job Number: FC7822
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 07/10/23 thru 07/11/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC7822-1	**SOURIS VALLEY 1**					
Perfluorohexanoic acid		1.5 JB	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		2.0	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.2 J	2.0	0.50	ng/l	EPA DRAFT 1633
FC7822-2	**SOURIS RIVER 2**					
Perfluoropentanoic acid		4.8	4.1	1.0	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		1.6 JB	2.0	0.51	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		2.0	2.0	0.51	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.4 J	2.0	0.51	ng/l	EPA DRAFT 1633
FC7822-3	**OAKES EAST**					
No hits reported in this sample.						
FC7822-4	**FIELD BLANK**					
No hits reported in this sample.						
FC7822-5	**EQUIPMENT BLANK**					
No hits reported in this sample.						
FC7822-6	**OAKES WEST**					
No hits reported in this sample.						
FC7822-7	**OAKES NORTH**					
Perfluoropentanoic acid		5.9	3.9	0.97	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		1.0 J	1.9	0.49	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.8 J	1.9	0.49	ng/l	EPA DRAFT 1633

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SOURIS VALLEY 1		
Lab Sample ID:	FC7822-1	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22714.D	1	08/11/23 07:18	MV	08/03/23 11:35	OP98222	S6Q330
Run #2	6Q23106.D	1	08/17/23 04:17	MV	08/15/23 11:00	OP98428	S6Q334

	Initial Volume	Final Volume
Run #1	500 ml	5.0 ml
Run #2	60.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND [a]	67	33	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	1.5	2.0	0.50	ng/l	JB
375-85-9	Perfluoroheptanoic acid	2.0	2.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	1.2	2.0	0.50	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.0	0.61	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.60	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.60	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.84	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.0	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.0	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.0	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SOURIS VALLEY 1		
Lab Sample ID:	FC7822-1	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.0	2.0	ng/l	
919005-14-4	ADONA	ND	8.0	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	1.0	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.0	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.0	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	50	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16% [b]	99%	20-150%
	13C5-PFPeA	94%	102%	20-150%
	13C5-PFHxA	109%	102%	20-150%
	13C4-PFHpA	107%	105%	20-150%
	13C8-PFOA	115%	97%	20-150%
	13C9-PFNA	109%	90%	20-150%
	13C6-PFDA	109%	97%	20-150%
	13C7-PFUnDA	90%	92%	20-150%
	13C2-PFDoDA	72%	81%	20-150%
	13C2-PFTeDA	34%	66%	20-150%
	13C3-PFBS	112%	96%	20-150%
	13C3-PFHxS	114%	92%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SOURIS VALLEY 1		
Lab Sample ID:	FC7822-1	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%	94%	20-150%
	13C8-FOSA	97%	84%	20-150%
	d3-MeFOSA	86%	83%	20-150%
	d5-EtFOSA	85%	84%	20-150%
	d3-MeFOSAA	94%	88%	20-150%
	d5-EtFOSAA	94%	79%	20-150%
	d7-MeFOSE	70%	82%	20-150%
	d9-EtFOSE	66%	83%	20-150%
	13C2-4:2FTS	125%	89%	20-180%
	13C2-6:2FTS	128%	92%	20-180%
	13C2-8:2FTS	96%	77%	20-180%
	13C3-HFPO-DA	92%	102%	20-150%

(a) Result is from Run# 2
(b) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SOURIS RIVER 2		
Lab Sample ID:	FC7822-2	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22716.D	1	08/11/23 07:47	MV	08/03/23 11:35	OP98222	S6Q330
Run #2	6Q23107.D	1	08/17/23 04:30	MV	08/15/23 11:00	OP98428	S6Q334

	Initial Volume	Final Volume
Run #1	490 ml	5.0 ml
Run #2	60.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND [a]	67	33	ng/l	
2706-90-3	Perfluoropentanoic acid	4.8	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	1.6	2.0	0.51	ng/l	JB
375-85-9	Perfluoroheptanoic acid	2.0	2.0	0.51	ng/l	
335-67-1	Perfluorooctanoic acid	1.4	2.0	0.51	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.86	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SOURIS RIVER 2		
Lab Sample ID:	FC7822-2	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.0	ng/l	
919005-14-4	ADONA	ND	8.2	2.0	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.0	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	15% [b]	107%	20-150%
	13C5-PFPeA	87%	108%	20-150%
	13C5-PFHxA	102%	109%	20-150%
	13C4-PFHpA	100%	114%	20-150%
	13C8-PFOA	97%	114%	20-150%
	13C9-PFNA	95%	106%	20-150%
	13C6-PFDA	85%	111%	20-150%
	13C7-PFUnDA	81%	110%	20-150%
	13C2-PFDoDA	69%	107%	20-150%
	13C2-PFTeDA	36%	79%	20-150%
	13C3-PFBS	92%	111%	20-150%
	13C3-PFHxS	95%	104%	20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SOURIS RIVER 2		
Lab Sample ID:	FC7822-2	**Date Sampled:**	07/10/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	109%	101%	20-150%
	13C8-FOSA	97%	86%	20-150%
	d3-MeFOSA	87%	89%	20-150%
	d5-EtFOSA	86%	92%	20-150%
	d3-MeFOSAA	93%	94%	20-150%
	d5-EtFOSAA	91%	89%	20-150%
	d7-MeFOSE	73%	91%	20-150%
	d9-EtFOSE	70%	100%	20-150%
	13C2-4:2FTS	98%	97%	20-180%
	13C2-6:2FTS	94%	114%	20-180%
	13C2-8:2FTS	75%	105%	20-180%
	13C3-HFPO-DA	90%	106%	20-150%

(a) Result is from Run# 2
(b) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OAKES EAST		
Lab Sample ID:	FC7822-3	**Date Sampled:**	07/11/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22718.D	1	08/11/23 08:16	MV	08/03/23 11:35	OP98222	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	515 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.8	3.9	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.9	0.97	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.49	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.49	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.49	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.59	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.49	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.82	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.49	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.97	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.97	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.97	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.97	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.97	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.97	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.8	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.97	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.97	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.97	ng/l	

ND = Not detected MDL = Method Detection Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OAKES EAST		
Lab Sample ID:	FC7822-3	**Date Sampled:**	07/11/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.97	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.7	ng/l	
1691-99-2	EtFOSE	ND	19	9.7	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.8	1.9	ng/l	
919005-14-4	ADONA	ND	7.8	1.9	ng/l	
377-73-1	PFMPA	ND	3.9	0.97	ng/l	
863090-89-5	PFMBA	ND	3.9	1.1	ng/l	
151772-58-6	NFDHA	ND	3.9	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.8	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.8	1.9	ng/l	
113507-82-7	PFEESA	ND	3.9	0.97	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.7	4.9	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	49	9.7	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	49	9.7	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	77%		20-150%
	13C5-PFPeA	112%		20-150%
	13C5-PFHxA	117%		20-150%
	13C4-PFHpA	114%		20-150%
	13C8-PFOA	113%		20-150%
	13C9-PFNA	105%		20-150%
	13C6-PFDA	102%		20-150%
	13C7-PFUnDA	90%		20-150%
	13C2-PFDoDA	84%		20-150%
	13C2-PFTeDA	75%		20-150%
	13C3-PFBS	113%		20-150%
	13C3-PFHxS	110%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OAKES EAST		
Lab Sample ID:	FC7822-3	**Date Sampled:**	07/11/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%		20-150%
	13C8-FOSA	100%		20-150%
	d3-MeFOSA	86%		20-150%
	d5-EtFOSA	81%		20-150%
	d3-MeFOSAA	95%		20-150%
	d5-EtFOSAA	89%		20-150%
	d7-MeFOSE	82%		20-150%
	d9-EtFOSE	77%		20-150%
	13C2-4:2FTS	105%		20-180%
	13C2-6:2FTS	109%		20-180%
	13C2-8:2FTS	105%		20-180%
	13C3-HFPO-DA	106%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	FC7822-4	**Date Sampled:**	07/11/23
Matrix:	AQ - Field Blank Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22719.D	1	08/11/23 08:30	MV	08/03/23 11:35	OP98222	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	495 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.1	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.51	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.51	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.51	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.85	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.1	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.1	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.1	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	FC7822-4	**Date Sampled:**	07/11/23
Matrix:	AQ - Field Blank Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.1	2.0	ng/l	
919005-14-4	ADONA	ND	8.1	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	1.0	ng/l	
863090-89-5	PFMBA	ND	4.0	1.2	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.1	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.1	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	96%		20-150%
	13C5-PFPeA	95%		20-150%
	13C5-PFHxA	98%		20-150%
	13C4-PFHpA	93%		20-150%
	13C8-PFOA	95%		20-150%
	13C9-PFNA	79%		20-150%
	13C6-PFDA	87%		20-150%
	13C7-PFUnDA	79%		20-150%
	13C2-PFDoDA	78%		20-150%
	13C2-PFTeDA	68%		20-150%
	13C3-PFBS	97%		20-150%
	13C3-PFHxS	88%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	FC7822-4	**Date Sampled:**	07/11/23
Matrix:	AQ - Field Blank Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	84%		20-150%
	13C8-FOSA	85%		20-150%
	d3-MeFOSA	79%		20-150%
	d5-EtFOSA	81%		20-150%
	d3-MeFOSAA	85%		20-150%
	d5-EtFOSAA	86%		20-150%
	d7-MeFOSE	84%		20-150%
	d9-EtFOSE	84%		20-150%
	13C2-4:2FTS	94%		20-180%
	13C2-6:2FTS	101%		20-180%
	13C2-8:2FTS	80%		20-180%
	13C3-HFPO-DA	87%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	FC7822-5	**Date Sampled:**	07/11/23
Matrix:	AQ - Equipment Blank	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22722.D	1	08/11/23 09:13	MV	08/03/23 11:35	OP98222	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	495 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.1	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.51	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.51	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.51	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.85	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.1	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.1	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.1	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	FC7822-5	**Date Sampled:**	07/11/23
Matrix:	AQ - Equipment Blank	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.1	2.0	ng/l	
919005-14-4	ADONA	ND	8.1	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	1.0	ng/l	
863090-89-5	PFMBA	ND	4.0	1.2	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.1	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.1	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	97%		20-150%
	13C5-PFPeA	99%		20-150%
	13C5-PFHxA	98%		20-150%
	13C4-PFHpA	102%		20-150%
	13C8-PFOA	101%		20-150%
	13C9-PFNA	95%		20-150%
	13C6-PFDA	98%		20-150%
	13C7-PFUnDA	94%		20-150%
	13C2-PFDoDA	80%		20-150%
	13C2-PFTeDA	67%		20-150%
	13C3-PFBS	100%		20-150%
	13C3-PFHxS	95%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	FC7822-5	**Date Sampled:**	07/11/23
Matrix:	AQ - Equipment Blank	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		20-150%
	13C8-FOSA	71%		20-150%
	d3-MeFOSA	60%		20-150%
	d5-EtFOSA	64%		20-150%
	d3-MeFOSAA	83%		20-150%
	d5-EtFOSAA	75%		20-150%
	d7-MeFOSE	66%		20-150%
	d9-EtFOSE	62%		20-150%
	13C2-4:2FTS	106%		20-180%
	13C2-6:2FTS	111%		20-180%
	13C2-8:2FTS	97%		20-180%
	13C3-HFPO-DA	91%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OAKES WEST		
Lab Sample ID:	FC7822-6	**Date Sampled:**	07/11/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22723.D	1	08/11/23 09:27	MV	08/03/23 11:35	OP98222	S6Q330
Run #2							

	Initial Volume	Final Volume
Run #1	500 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.0	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.61	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.60	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.60	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.84	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.0	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.0	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.0	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OAKES WEST		
Lab Sample ID:	FC7822-6	**Date Sampled:**	07/11/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.0	2.0	ng/l	
919005-14-4	ADONA	ND	8.0	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	1.0	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.0	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.0	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	50	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	36%		20-150%
	13C5-PFPeA	101%		20-150%
	13C5-PFHxA	103%		20-150%
	13C4-PFHpA	101%		20-150%
	13C8-PFOA	92%		20-150%
	13C9-PFNA	90%		20-150%
	13C6-PFDA	94%		20-150%
	13C7-PFUnDA	77%		20-150%
	13C2-PFDoDA	71%		20-150%
	13C2-PFTeDA	64%		20-150%
	13C3-PFBS	103%		20-150%
	13C3-PFHxS	98%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OAKES WEST		
Lab Sample ID:	FC7822-6	**Date Sampled:**	07/11/23
Matrix:	AQ - Ground Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%		20-150%
	13C8-FOSA	92%		20-150%
	d3-MeFOSA	74%		20-150%
	d5-EtFOSA	72%		20-150%
	d3-MeFOSAA	80%		20-150%
	d5-EtFOSAA	83%		20-150%
	d7-MeFOSE	66%		20-150%
	d9-EtFOSE	66%		20-150%
	13C2-4:2FTS	95%		20-180%
	13C2-6:2FTS	100%		20-180%
	13C2-8:2FTS	90%		20-180%
	13C3-HFPO-DA	96%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OAKES NORTH		
Lab Sample ID:	FC7822-7	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22724.D	1	08/11/23 09:42	MV	08/03/23 11:35	OP98222	S6Q330
Run #2 [a]	6Q23166.D	1	08/17/23 22:45	MV	08/16/23 11:00	OP98457	S6Q335

	Initial Volume	Final Volume
Run #1	515 ml	5.0 ml
Run #2	460 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.8	3.9	ng/l	
2706-90-3	Perfluoropentanoic acid	5.9	3.9	0.97	ng/l	
307-24-4	Perfluorohexanoic acid	1.0	1.9	0.49	ng/l	J
375-85-9	Perfluoroheptanoic acid	1.8	1.9	0.49	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	1.9	0.49	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.59	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.49	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.82	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.49	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.97	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.97	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.97	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.97	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.97	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.97	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.8	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.97	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.97	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.97	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OAKES NORTH		
Lab Sample ID:	FC7822-7	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.97	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.7	ng/l	
1691-99-2	EtFOSE	ND	19	9.7	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.8	1.9	ng/l	
919005-14-4	ADONA	ND	7.8	1.9	ng/l	
377-73-1	PFMPA	ND	3.9	0.97	ng/l	
863090-89-5	PFMBA	ND	3.9	1.1	ng/l	
151772-58-6	NFDHA	ND	3.9	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.8	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.8	1.9	ng/l	
113507-82-7	PFEESA	ND	3.9	0.97	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.7	4.9	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	49	9.7	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	49	9.7	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10%	17%	20-150%
	13C5-PFPeA	81%	85%	20-150%
	13C5-PFHxA	105%	105%	20-150%
	13C4-PFHpA	102%	104%	20-150%
	13C8-PFOA	108%	110%	20-150%
	13C9-PFNA	92%	106%	20-150%
	13C6-PFDA	100%	98%	20-150%
	13C7-PFUnDA	86%	81%	20-150%
	13C2-PFDoDA	67%	73%	20-150%
	13C2-PFTeDA	38%	54%	20-150%
	13C3-PFBS	113%	110%	20-150%
	13C3-PFHxS	111%	109%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OAKES NORTH		
Lab Sample ID:	FC7822-7	**Date Sampled:**	07/11/23
Matrix:	AQ - Surface Water	**Date Received:**	07/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%	96%	20-150%
	13C8-FOSA	96%	87%	20-150%
	d3-MeFOSA	86%	86%	20-150%
	d5-EtFOSA	83%	82%	20-150%
	d3-MeFOSAA	97%	92%	20-150%
	d5-EtFOSAA	93%	76%	20-150%
	d7-MeFOSE	67%	73%	20-150%
	d9-EtFOSE	64%	72%	20-150%
	13C2-4:2FTS	105%	110%	20-180%
	13C2-6:2FTS	112%	107%	20-180%
	13C2-8:2FTS	92%	87%	20-180%
	13C3-HFPO-DA	90%	105%	20-150%

(a) Confirmation run.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # SKIFF # FC7822

Client / Reporting Information

Company Name: North Dakota Dept. of Env. Quality
Address: 4201 Normandy St.
City: Bismarck State: Zip: 58503
Project Contact: Shannon Suggs Email: ssuggs@nd.gov
Phone #:
Sampler(s) Name(s) (Printed) Sampler 1: Casey Gleich Sampler 2: Ryan Kritzberger Tanner Woutat

Project Information

Project Name: NDDEQ-PFAS
Street: 4201 Normandy St
City: Bismarck State: ND
Project #
Fax #
Client Purchase Order #

Analytical Information

LCID 1633 LIST

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNA	DI WATER	MEOH	LCID 1633 LIST	LAB USE ONLY
1	Souris Valley 1	7/10/23	1320	CG,RK,TW	SW	3		X								X	
2	Souris River 2	7/10/23	1350	CG,RK,TW	SW	3		X								X	
3	Oakes East	7/11/23	1123	CG,RK,TW	GW	3		X								X	
4	Field Blank	7/11/23	1126	CG,RK,TW	GW	3		X								X	
5	Equipment Blank	7/11/23	1140	CG,RK,TW	GW	3		X								X	
6	Oakes West	7/11/23	1155	CG/RK/TW	GW	3		X								X	
7	Oakes North	7/11/23	1215	CG/RK/TW	SW	3		X								X	

INITIAL ASSESSMENT

LABEL VERIFICATION

4.2°
~~1 ~~

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- ☐ COMMERCIAL "A" (RESULTS ONLY)
- ☐ COMMERCIAL "B" (RESULTS PLUS QC)
- ☐ REDT1 (EPA LEVEL 3)
- ☐ FULLT1 (EPA LEVEL 4)
- ☐ EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 7/13 SS	7/13	2 Fedex	3 Fed Ex		4 07/14/23 0945
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

4.1
4

FC7822: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC7822 **Client:** NORTH DAKOTA DEPT. OF ENV. QUALIT **Project:** NDDEQ-PFAS

Date / Time Received: 7/14/2023 9:45:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7810 8881 7914

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (4.2);

Cooler Temps (Corrected) °C: Cooler 1: (4.0);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230320 pH 10-12 _____ Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP Date: 7/14/2023 9:45:00 AM Reviewer: _____ Date: _____

FC7822: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-MB	6Q22712.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2, FC7822-3, FC7822-4, FC7822-5, FC7822-6, FC7822-7

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	0.0012	0.0020	0.00050	ug/l	J
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-MB	6Q22712.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2, FC7822-3, FC7822-4, FC7822-5, FC7822-6, FC7822-7

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	108%	20-150%
	13C5-PFPeA	109%	20-150%
	13C5-PFHxA	113%	20-150%
	13C4-PFHpA	110%	20-150%
	13C8-PFOA	109%	20-150%
	13C9-PFNA	105%	20-150%
	13C6-PFDA	102%	20-150%
	13C7-PFUnDA	103%	20-150%
	13C2-PFDoDA	101%	20-150%
	13C2-PFTeDA	93%	20-150%
	13C3-PFBS	110%	20-150%
	13C3-PFHxS	104%	20-150%
	13C8-PFOS	103%	20-150%
	13C8-FOSA	98%	20-150%
	d3-MeFOSA	76%	20-150%
	d5-EtFOSA	79%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	100%	20-150%
	d7-MeFOSE	100%	20-150%
	d9-EtFOSE	96%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	128%	20-180%
	13C2-8:2FTS	123%	20-180%
	13C3-HFPO-DA	100%	20-150%

Method Blank Summary

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98428-MB	6Q23105.D	1	08/17/23	MV	08/15/23	OP98428	S6Q334

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	100%	20-150%
	13C6-PFDA	103%	20-150%
	13C7-PFUnDA	108%	20-150%
	13C2-PFDoDA	101%	20-150%
	13C2-PFTeDA	90%	20-150%
	13C3-PFBS	98%	20-150%
	13C3-PFHxS	94%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	86%	20-150%
	d3-MeFOSA	88%	20-150%
	d5-EtFOSA	88%	20-150%
	d3-MeFOSAA	97%	20-150%
	d5-EtFOSAA	89%	20-150%
	d7-MeFOSE	90%	20-150%
	d9-EtFOSE	99%	20-150%
	13C2-4:2FTS	108%	20-180%
	13C2-6:2FTS	117%	20-180%
	13C2-8:2FTS	106%	20-180%
	13C3-HFPO-DA	101%	20-150%

Instrument Blank

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-IBLK	6Q22648.D	1	08/10/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2, FC7822-3, FC7822-4, FC7822-5, FC7822-6, FC7822-7

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-IBLK	6Q22648.D	1	08/10/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2, FC7822-3, FC7822-4, FC7822-5, FC7822-6, FC7822-7

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	94%	20-150%
	13C9-PFNA	95%	20-150%
	13C6-PFDA	99%	20-150%
	13C7-PFUnDA	96%	20-150%
	13C2-PFDoDA	99%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	105%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	104%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	100%	20-150%
	13C2-4:2FTS	109%	20-180%
	13C2-6:2FTS	110%	20-180%
	13C2-8:2FTS	111%	20-180%

Instrument Blank

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-IBLK	6Q22737.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2, FC7822-3, FC7822-4, FC7822-5, FC7822-6, FC7822-7

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-IBLK	6Q22737.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2, FC7822-3, FC7822-4, FC7822-5, FC7822-6, FC7822-7

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	104%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	95%	20-150%
	13C6-PFDA	103%	20-150%
	13C7-PFUnDA	98%	20-150%
	13C2-PFDoDA	98%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSAA	100%	20-150%
	d5-EtFOSAA	105%	20-150%
	13C2-4:2FTS	102%	20-180%
	13C2-6:2FTS	102%	20-180%
	13C2-8:2FTS	104%	20-180%

Instrument Blank

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q334-IBLK	6Q23045.D	1	08/16/23	MV	n/a	n/a	S6Q334

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	103%	20-150%
	13C4-PFHpA	100%	20-150%
	13C8-PFOA	104%	20-150%
	13C9-PFNA	97%	20-150%
	13C6-PFDA	103%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	99%	20-150%
	13C2-PFTeDA	99%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	93%	20-150%
	13C8-PFOS	107%	20-150%
	13C8-FOSA	103%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	104%	20-150%
	13C2-4:2FTS	107%	20-180%
	13C2-6:2FTS	113%	20-180%
	13C2-8:2FTS	103%	20-180%

Continuing Calibration Blank

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-ICCB	6Q22709.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2, FC7822-3, FC7822-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-ICCB	6Q22709.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2, FC7822-3, FC7822-4

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	97%	20-150%
	13C8-PFOA	103%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	102%	20-150%
	13C7-PFUnDA	104%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	95%	20-150%
	13C3-PFHxS	94%	20-150%
	13C8-PFOS	103%	20-150%
	13C8-FOSA	106%	20-150%
	d3-MeFOSAA	112%	20-150%
	d5-EtFOSAA	103%	20-150%
	13C2-4:2FTS	107%	20-180%
	13C2-6:2FTS	115%	20-180%
	13C2-8:2FTS	114%	20-180%

Continuing Calibration Blank

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-ICCB	6Q22721.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-5, FC7822-6, FC7822-7

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-ICCB	6Q22721.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-5, FC7822-6, FC7822-7

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	100%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	95%	20-150%
	13C6-PFDA	99%	20-150%
	13C7-PFUnDA	104%	20-150%
	13C2-PFDoDA	100%	20-150%
	13C2-PFTeDA	99%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	103%	20-150%
	d3-MeFOSAA	111%	20-150%
	d5-EtFOSAA	105%	20-150%
	13C2-4:2FTS	100%	20-180%
	13C2-6:2FTS	111%	20-180%
	13C2-8:2FTS	105%	20-180%

Continuing Calibration Blank

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q334-ICCB	6Q23102.D	1	08/17/23	MV	n/a	n/a	S6Q334

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	100%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	100%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	109%	20-150%
	13C7-PFUnDA	105%	20-150%
	13C2-PFDoDA	101%	20-150%
	13C2-PFTeDA	102%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	109%	20-150%
	13C8-FOSA	104%	20-150%
	d3-MeFOSAA	103%	20-150%
	d5-EtFOSAA	98%	20-150%
	13C2-4:2FTS	113%	20-180%
	13C2-6:2FTS	113%	20-180%
	13C2-8:2FTS	110%	20-180%

Continuing Calibration Blank

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q334-ICCB	6Q23111.D	1	08/17/23	MV	n/a	n/a	S6Q334

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	102%	20-150%
	13C6-PFDA	99%	20-150%
	13C7-PFUnDA	107%	20-150%
	13C2-PFDoDA	101%	20-150%
	13C2-PFTeDA	99%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	111%	20-150%
	13C8-FOSA	105%	20-150%
	d3-MeFOSAA	113%	20-150%
	d5-EtFOSAA	99%	20-150%
	13C2-4:2FTS	109%	20-180%
	13C2-6:2FTS	114%	20-180%
	13C2-8:2FTS	106%	20-180%

Continuing Calibration Blank

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q335-ICCB	6Q23162.D	1	08/17/23	MV	n/a	n/a	S6Q335

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-7

CAS No.	Compound	Result	RL	MDL	Units	Q

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	100%	20-150%
	13C8-PFOA	106%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	100%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	98%	20-150%
	13C2-PFTeDA	94%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	97%	20-150%
	13C8-PFOS	117%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	104%	20-150%
	13C2-4:2FTS	118%	20-180%
	13C2-6:2FTS	121%	20-180%
	13C2-8:2FTS	115%	20-180%

Continuing Calibration Blank

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-ICCB	6Q22733.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q330-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q330-ICCB	6Q22733.D	1	08/11/23	MV	n/a	n/a	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q330-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	106%	20-150%
	13C4-PFHpA	100%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	105%	20-150%
	13C2-PFDoDA	103%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	102%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSAA	101%	20-150%
	d5-EtFOSAA	103%	20-150%
	13C2-4:2FTS	102%	20-180%
	13C2-6:2FTS	99%	20-180%
	13C2-8:2FTS	94%	20-180%

Blank Spike Summary

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98428-LLBS	6Q23104.D	1	08/17/23	MV	08/15/23	OP98428	S6Q334

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0194	121	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	103%	20-150%
	13C5-PFPeA	108%	20-150%
	13C5-PFHxA	106%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	103%	20-150%
	13C9-PFNA	95%	20-150%
	13C6-PFDA	96%	20-150%
	13C7-PFUnDA	86%	20-150%
	13C2-PFDoDA	86%	20-150%
	13C2-PFTeDA	82%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	97%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	84%	20-150%
	d3-MeFOSA	83%	20-150%
	d5-EtFOSA	81%	20-150%
	d3-MeFOSAA	92%	20-150%
	d5-EtFOSAA	85%	20-150%
	d7-MeFOSE	87%	20-150%
	d9-EtFOSE	94%	20-150%
	13C2-4:2FTS	112%	20-180%
	13C2-6:2FTS	119%	20-180%
	13C2-8:2FTS	110%	20-180%
	13C3-HFPO-DA	107%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-LLBS	6Q22711.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2, FC7822-3, FC7822-4, FC7822-5, FC7822-6, FC7822-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.03	0.0177	59	40-150
2706-90-3	Perfluoropentanoic acid	0.015	0.0089	59	40-150
307-24-4	Perfluorohexanoic acid	0.0075	0.0055	73	40-150
375-85-9	Perfluoroheptanoic acid	0.0075	0.0043	57	40-150
335-67-1	Perfluorooctanoic acid	0.0075	0.0044	59	40-150
375-95-1	Perfluorononanoic acid	0.0075	0.0044	59	40-150
335-76-2	Perfluorodecanoic acid	0.0075	0.0041	55	40-150
2058-94-8	Perfluoroundecanoic acid	0.0075	0.0046	61	40-150
307-55-1	Perfluorododecanoic acid	0.0075	0.0042	56	40-150
72629-94-8	Perfluorotridecanoic acid	0.0075	0.0040	53	40-150
376-06-7	Perfluorotetradecanoic acid	0.0075	0.0047	63	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00665	0.0040	60	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00706	0.0042	60	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00686	0.0041	60	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00715	0.0044	62	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00696	0.0040	57	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00722	0.0041	57	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00724	0.0037	51	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00728	0.0038	52	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0281	0.0158	56	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0285	0.0167	59	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0288	0.0173	60	40-150
754-91-6	PFOSA	0.0075	0.0045	60	40-150
31506-32-8	MeFOSA	0.015	0.0090	60	40-150
4151-50-2	EtFOSA	0.015	0.0083	55	40-150
2355-31-9	MeFOSAA	0.0075	0.0041	55	40-150
2991-50-6	EtFOSAA	0.0075	0.0041	55	40-150
24448-09-7	MeFOSE	0.0375	0.0202	54	40-150
1691-99-2	EtFOSE	0.0375	0.0210	56	40-150
13252-13-6	HFPO-DA (GenX)	0.015	0.0089	59	40-150
919005-14-4	ADONA	0.0142	0.0089	63	40-150
377-73-1	PFMPA	0.015	0.0093	62	40-150
863090-89-5	PFMBA	0.015	0.0092	61	40-150
151772-58-6	NFDHA	0.015	0.0086	57	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.014	0.0082	58	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0142	0.0084	59	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-LLBS	6Q22711.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2, FC7822-3, FC7822-4, FC7822-5, FC7822-6, FC7822-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0134	0.0081	61	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.0375	0.0216	58	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.188	0.113	60	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.188	0.101	54	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	112%	20-150%
	13C5-PFPeA	107%	20-150%
	13C5-PFHxA	109%	20-150%
	13C4-PFHpA	109%	20-150%
	13C8-PFOA	112%	20-150%
	13C9-PFNA	100%	20-150%
	13C6-PFDA	112%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	84%	20-150%
	13C3-PFBS	116%	20-150%
	13C3-PFHxS	115%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	102%	20-150%
	d3-MeFOSA	91%	20-150%
	d5-EtFOSA	95%	20-150%
	d3-MeFOSAA	107%	20-150%
	d5-EtFOSAA	106%	20-150%
	d7-MeFOSE	106%	20-150%
	d9-EtFOSE	105%	20-150%
	13C2-4:2FTS	134%	20-180%
	13C2-6:2FTS	135%	20-180%
	13C2-8:2FTS	127%	20-180%
	13C3-HFPO-DA	102%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-BS	6Q22710.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2, FC7822-3, FC7822-4, FC7822-5, FC7822-6, FC7822-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.117	117	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0595	119	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0333	133	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0284	114	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0285	114	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0303	121	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0341	136	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0299	120	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0292	117	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0290	116	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0293	117	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0245	110	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0279	119	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0251	110	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0293	123	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0287	124	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0270	112	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0263	109	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0271	112	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.122	130	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.110	116	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.114	119	40-150
754-91-6	PFOSA	0.025	0.0293	117	40-150
31506-32-8	MeFOSA	0.05	0.0611	122	40-150
4151-50-2	EtFOSA	0.05	0.0598	120	40-150
2355-31-9	MeFOSAA	0.025	0.0264	106	40-150
2991-50-6	EtFOSAA	0.025	0.0303	121	40-150
24448-09-7	MeFOSE	0.125	0.152	122	40-150
1691-99-2	EtFOSE	0.125	0.150	120	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0599	120	40-150
919005-14-4	ADONA	0.0473	0.0635	134	40-150
377-73-1	PFMPA	0.05	0.0613	123	40-150
863090-89-5	PFMBA	0.05	0.0608	122	40-150
151772-58-6	NFDHA	0.05	0.0615	123	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0596	127	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0590	125	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-BS	6Q22710.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2, FC7822-3, FC7822-4, FC7822-5, FC7822-6, FC7822-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0554	124	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.142	114	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.713	114	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.713	114	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	104%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	105%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	112%	20-150%
	13C9-PFNA	93%	20-150%
	13C6-PFDA	92%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	94%	20-150%
	13C2-PFTeDA	85%	20-150%
	13C3-PFBS	107%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	103%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSA	79%	20-150%
	d5-EtFOSA	81%	20-150%
	d3-MeFOSAA	103%	20-150%
	d5-EtFOSAA	96%	20-150%
	d7-MeFOSE	92%	20-150%
	d9-EtFOSE	95%	20-150%
	13C2-4:2FTS	105%	20-180%
	13C2-6:2FTS	120%	20-180%
	13C2-8:2FTS	107%	20-180%
	13C3-HFPO-DA	97%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98428-BS [a]	6Q23103.D	1	08/17/23	MV	08/15/23	OP98428	S6Q334

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.122	122	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	103%	20-150%
	13C5-PFPeA	106%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	107%	20-150%
	13C8-PFOA	103%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	103%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	93%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	97%	20-150%
	13C8-PFOS	107%	20-150%
	13C8-FOSA	91%	20-150%
	d3-MeFOSA	87%	20-150%
	d5-EtFOSA	90%	20-150%
	d3-MeFOSAA	105%	20-150%
	d5-EtFOSAA	93%	20-150%
	d7-MeFOSE	94%	20-150%
	d9-EtFOSE	95%	20-150%
	13C2-4:2FTS	107%	20-180%
	13C2-6:2FTS	121%	20-180%
	13C2-8:2FTS	107%	20-180%
	13C3-HFPO-DA	104%	20-150%

(a) Insufficient sample for MS/MSD.

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-MS	6Q22715.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330
FC7822-1	6Q22714.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2, FC7822-3, FC7822-4, FC7822-5, FC7822-6, FC7822-7

CAS No.	Compound	FC7822-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	ND		0.102	0.131	128	40-150
2706-90-3	Perfluoropentanoic acid	ND		0.051	0.0534	105	40-150
307-24-4	Perfluorohexanoic acid	0.0015	JB	0.0255	0.0312	116	40-150
375-85-9	Perfluoroheptanoic acid	0.0020		0.0255	0.0295	108	40-150
335-67-1	Perfluorooctanoic acid	0.0012	J	0.0255	0.0289	109	40-150
375-95-1	Perfluorononanoic acid	ND		0.0255	0.0285	112	40-150
335-76-2	Perfluorodecanoic acid	ND		0.0255	0.0288	113	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.0255	0.0331	130	40-150
307-55-1	Perfluorododecanoic acid	ND		0.0255	0.0286	112	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.0255	0.0222	87	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.0255	0.0315	123	40-150
375-73-5	Perfluorobutanesulfonic acid	ND		0.0226	0.0266	118	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.024	0.0286	119	40-150
355-46-4	Perfluorohexanesulfonic acid	ND		0.0233	0.0276	118	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0243	0.0270	111	40-150
1763-23-1	Perfluorooctanesulfonic acid	ND		0.0237	0.0243	103	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.0245	0.0245	100	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.0246	0.0227	92	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0247	0.0126	51	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0957	0.125	131	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.0969	0.119	123	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.098	0.105	107	40-150
754-91-6	PFOSA	ND		0.0255	0.0293	115	40-150
31506-32-8	MeFOSA	ND		0.051	0.0563	110	40-150
4151-50-2	EtFOSA	ND		0.051	0.0556	109	40-150
2355-31-9	MeFOSAA	ND		0.0255	0.0297	116	40-150
2991-50-6	EtFOSAA	ND		0.0255	0.0315	123	40-150
24448-09-7	MeFOSE	ND		0.128	0.147	115	40-150
1691-99-2	EtFOSE	ND		0.128	0.149	117	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.051	0.0595	117	40-150
919005-14-4	ADONA	ND		0.0482	0.0650	135	40-150
377-73-1	PFMPA	ND		0.051	0.0238	47	40-150
863090-89-5	PFMBA	ND		0.051	0.0616	121	40-150
151772-58-6	NFDHA	ND		0.051	0.0573	112	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0477	0.0636	133	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0482	0.0509	106	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-MS	6Q22715.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330
FC7822-1	6Q22714.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2, FC7822-3, FC7822-4, FC7822-5, FC7822-6, FC7822-7

CAS No.	Compound	FC7822-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	ND		0.0454	0.0545	120	40-150
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.128	0.465	365* [a]	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.638	0.754	118	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.638	0.737	116	40-150

CAS No.	ID Standard Recoveries	MS	FC7822-1	Limits
	13C4-PFBA	16%* [a]	16%* [a]	20-150%
	13C5-PFPeA	99%	94%	20-150%
	13C5-PFHxA	111%	109%	20-150%
	13C4-PFHpA	113%	107%	20-150%
	13C8-PFOA	107%	115%	20-150%
	13C9-PFNA	100%	109%	20-150%
	13C6-PFDA	99%	109%	20-150%
	13C7-PFUnDA	89%	90%	20-150%
	13C2-PFDoDA	78%	72%	20-150%
	13C2-PFTeDA	42%	34%	20-150%
	13C3-PFBS	103%	112%	20-150%
	13C3-PFHxS	98%	114%	20-150%
	13C8-PFOS	112%	102%	20-150%
	13C8-FOSA	102%	97%	20-150%
	d3-MeFOSA	89%	86%	20-150%
	d5-EtFOSA	87%	85%	20-150%
	d3-MeFOSAA	106%	94%	20-150%
	d5-EtFOSAA	99%	94%	20-150%
	d7-MeFOSE	71%	70%	20-150%
	d9-EtFOSE	69%	66%	20-150%
	13C2-4:2FTS	110%	125%	20-180%
	13C2-6:2FTS	104%	128%	20-180%
	13C2-8:2FTS	89%	96%	20-180%
	13C3-HFPO-DA	92%	92%	20-150%

(a) Outside control limits.

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-DUP	6Q22717.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330
FC7822-2	6Q22716.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2, FC7822-3, FC7822-4, FC7822-5, FC7822-6, FC7822-7

CAS No.	Compound	FC7822-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	0.0136		0.0132		3	30
2706-90-3	Perfluoropentanoic acid	0.0048		0.0051		6	30
307-24-4	Perfluorohexanoic acid	0.0016	JB	0.0016	J	0	30
375-85-9	Perfluoroheptanoic acid	0.0020		0.0021		5	30
335-67-1	Perfluorooctanoic acid	0.0014	J	0.0012	J	15	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	ND		ND		nc	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC7822
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98222-DUP	6Q22717.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330
FC7822-2	6Q22716.D	1	08/11/23	MV	08/03/23	OP98222	S6Q330

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7822-1, FC7822-2, FC7822-3, FC7822-4, FC7822-5, FC7822-6, FC7822-7

CAS No.	Compound	FC7822-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC7822-2	Limits
	13C4-PFBA	13%* [a]	15%* [a]	20-150%
	13C5-PFPeA	91%	87%	20-150%
	13C5-PFHxA	104%	102%	20-150%
	13C4-PFHpA	110%	100%	20-150%
	13C8-PFOA	99%	97%	20-150%
	13C9-PFNA	92%	95%	20-150%
	13C6-PFDA	104%	85%	20-150%
	13C7-PFUnDA	101%	81%	20-150%
	13C2-PFDoDA	82%	69%	20-150%
	13C2-PFTeDA	40%	36%	20-150%
	13C3-PFBS	101%	92%	20-150%
	13C3-PFHxS	97%	95%	20-150%
	13C8-PFOS	99%	109%	20-150%
	13C8-FOSA	98%	97%	20-150%
	d3-MeFOSA	91%	87%	20-150%
	d5-EtFOSA	89%	86%	20-150%
	d3-MeFOSAA	96%	93%	20-150%
	d5-EtFOSAA	100%	91%	20-150%
	d7-MeFOSE	75%	73%	20-150%
	d9-EtFOSE	71%	70%	20-150%
	13C2-4:2FTS	110%	98%	20-180%
	13C2-6:2FTS	99%	94%	20-180%
	13C2-8:2FTS	78%	75%	20-180%
	13C3-HFPO-DA	98%	90%	20-150%

(a) Outside control limits.

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC8461

Sampling Date: 08/01/23



Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
ssuggs@nd.gov

ATTN: Shannon Suggs

Total number of pages in report: 30

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC8461

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FC8461-1	08/01/23	10:18	MK	08/05/23	AQ	Water	AMBER WAVES

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

Summary of Hits

Job Number: FC8461
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 08/01/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC8461-1	**AMBER WAVES**					
Perfluoroheptanoic acid		0.98 J	2.6	0.64	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.6 J	2.6	0.64	ng/l	EPA DRAFT 1633
Perfluorononanoic acid		1.5 J	2.6	0.78	ng/l	EPA DRAFT 1633

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	AMBER WAVES		
Lab Sample ID:	FC8461-1	**Date Sampled:**	08/01/23
Matrix:	AQ - Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49480.D	1	08/25/23 00:58	AL	08/19/23 09:55	OP98527	S4Q724
Run #2 [a]	4Q49527.D	5	08/25/23 17:17	AL	08/19/23 09:55	OP98527	S4Q725

	Initial Volume	Final Volume
Run #1	390 ml	5.0 ml
Run #2	390 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND	10	5.1	ng/l	
2706-90-3	Perfluoropentanoic acid [b]	ND	5.1	1.3	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.6	0.64	ng/l	
375-85-9	Perfluoroheptanoic acid	0.98	2.6	0.64	ng/l	J
335-67-1	Perfluorooctanoic acid	1.6	2.6	0.64	ng/l	J
375-95-1	Perfluorononanoic acid	1.5	2.6	0.78	ng/l	J
335-76-2	Perfluorodecanoic acid	ND	2.6	0.64	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.6	0.77	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.6	0.77	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.6	1.1	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.6	0.64	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.6	1.3	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.6	1.4	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.6	1.3	ng/l	
375-92-8	Perfluoroheptanesulfonic acid [c]	ND	2.6	1.3	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.6	1.3	ng/l	
68259-12-1	Perfluorononanesulfonic acid [c]	ND	2.6	1.3	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.6	1.3	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.6	1.5	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	10	5.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	10	5.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	10	5.3	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.6	1.3	ng/l	
31506-32-8	MeFOSA	ND	2.6	1.3	ng/l	
4151-50-2	EtFOSA	ND	2.6	1.3	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AMBER WAVES		
Lab Sample ID:	FC8461-1	**Date Sampled:**	08/01/23
Matrix:	AQ - Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.6	1.3	ng/l	
2991-50-6	EtFOSAA	ND	2.6	1.7	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	26	13	ng/l	
1691-99-2	EtFOSE	ND	26	13	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	10	2.6	ng/l	
919005-14-4	ADONA	ND	10	2.6	ng/l	
377-73-1	PFMPA [b]	ND	5.1	1.3	ng/l	
863090-89-5	PFMBA [b]	ND	5.1	1.5	ng/l	
151772-58-6	NFDHA	ND	5.1	1.5	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	10	2.6	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	10	2.6	ng/l	
113507-82-7	PFEESA	ND	5.1	1.3	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [b]	ND	13	6.4	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	64	13	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	64	13	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	4% [d]	3% [d]	20-150%
	13C5-PFPeA	14% [d]	12% [d]	20-150%
	13C5-PFHxA	80%	61%	20-150%
	13C4-PFHpA	114%	91%	20-150%
	13C8-PFOA	112%	96%	20-150%
	13C9-PFNA	99%	98%	20-150%
	13C6-PFDA	113%	104%	20-150%
	13C7-PFUnDA	95%	97%	20-150%
	13C2-PFDoDA	72%	64%	20-150%
	13C2-PFTeDA	63%	51%	20-150%
	13C3-PFBS	95%	88%	20-150%
	13C3-PFHxS	99%	93%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AMBER WAVES		
Lab Sample ID:	FC8461-1	**Date Sampled:**	08/01/23
Matrix:	AQ - Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	89%	74%	20-150%
	13C8-FOSA	71%	78%	20-150%
	d3-MeFOSA	62%	60%	20-150%
	d5-EtFOSA	55%	48%	20-150%
	d3-MeFOSAA	121%	101%	20-150%
	d5-EtFOSAA	140%	89%	20-150%
	d7-MeFOSE	31%	42%	20-150%
	d9-EtFOSE	39%	43%	20-150%
	13C2-4:2FTS	32%	32%	20-180%
	13C2-6:2FTS	168%	109%	20-180%
	13C2-8:2FTS	151%	128%	20-180%
	13C3-HFPO-DA	62%	50%	20-150%

(a) Confirmation run.
(b) Associated ID Standard outside control limits.
(c) Associated Low Level BS outside of control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FC8461

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: NDDES @ PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58503
Project Contact: SSuggs Email: Ssuggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed)
Sampler 1: Sampler 2:

Project Information

Project Name: NDDES @ PFAS
Street: 4201 Normandy St
City: Bismarck State: ND
Project #
Fax #
Client Purchase Order #

Analytical Information

EPA 1633 LIST 40

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NACH+ZNAC	DI WATER	MEOH	LAB USE ONLY
1	Amber Waves	8-1-23	10:18	MLK	WW	3										1

INITIAL ASSESSMENT
LABEL VERIFICATION
3.2 IR#1

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	S Suggs	8/3/23	2 Fed Ex	3	0915	4 SGS 05AUG2023
5	Relinquished by/Affiliation	Date Time:	6 Received By/Affiliation	7 Relinquished By/Affiliation	Date Time:	8 Received By/Affiliation

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 3.2 IR#1

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

FC8461: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC8461 **Client:** NDDEQ PFAS **Project:** NDDEQ PFAS

Date / Time Received: 8/5/2023 9:15:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7820 6357 4960

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.2);

Cooler Temps (Corrected) °C: Cooler 1: (3.0);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230320 pH 10-12 _____ Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: TORYW Date: 8/5/2023 9:15:00 AM Reviewer: _____ Date: _____

FC8461: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-MB	4Q49455.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8461-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	0.00090	0.0020	0.00050	ug/l	J
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-MB	4Q49455.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8461-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	118%	20-150%
	13C5-PFPeA	112%	20-150%
	13C5-PFHxA	125%	20-150%
	13C4-PFHpA	112%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	97%	20-150%
	13C6-PFDA	108%	20-150%
	13C7-PFUnDA	118%	20-150%
	13C2-PFDoDA	93%	20-150%
	13C2-PFTeDA	97%	20-150%
	13C3-PFBS	112%	20-150%
	13C3-PFHxS	107%	20-150%
	13C8-PFOS	96%	20-150%
	13C8-FOSA	65%	20-150%
	d3-MeFOSA	79%	20-150%
	d5-EtFOSA	71%	20-150%
	d3-MeFOSAA	108%	20-150%
	d5-EtFOSAA	110%	20-150%
	d7-MeFOSE	66%	20-150%
	d9-EtFOSE	69%	20-150%
	13C2-4:2FTS	127%	20-180%
	13C2-6:2FTS	140%	20-180%
	13C2-8:2FTS	124%	20-180%
	13C3-HFPO-DA	98%	20-150%

Instrument Blank

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-IBLK	4Q49434.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8461-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	0.0032	0.0080	0.0010	ug/l	J
4151-50-2	EtFOSA	0.0047	0.0080	0.0010	ug/l	J
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	0.0069	0.040	0.0044	ug/l	J
1691-99-2	EtFOSE	0.0094	0.040	0.0074	ug/l	J
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-IBLK	4Q49434.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8461-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	104%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	106%	20-150%
	13C6-PFDA	101%	20-150%
	13C7-PFUnDA	106%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	115%	20-150%
	13C3-PFBS	98%	20-150%
	13C3-PFHxS	89%	20-150%
	13C8-PFOS	94%	20-150%
	13C8-FOSA	112%	20-150%
	d3-MeFOSAA	114%	20-150%
	d5-EtFOSAA	113%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	116%	20-180%
	13C2-8:2FTS	111%	20-180%

Continuing Calibration Blank

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49472.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8461-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49472.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8461-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	108%	20-150%
	13C5-PFPeA	100%	20-150%
	13C5-PFHxA	111%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	95%	20-150%
	13C9-PFNA	88%	20-150%
	13C6-PFDA	108%	20-150%
	13C7-PFUnDA	118%	20-150%
	13C2-PFDoDA	103%	20-150%
	13C2-PFTeDA	112%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	91%	20-150%
	13C8-FOSA	91%	20-150%
	d3-MeFOSAA	108%	20-150%
	d5-EtFOSAA	104%	20-150%
	13C2-4:2FTS	134%	20-180%
	13C2-6:2FTS	131%	20-180%
	13C2-8:2FTS	120%	20-180%

Continuing Calibration Blank

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49448.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98527-BS, OP98527-LLBS, OP98527-MB

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49448.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98527-BS, OP98527-LLBS, OP98527-MB

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	107%	20-150%
	13C5-PFPeA	100%	20-150%
	13C5-PFHxA	108%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	89%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	116%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	115%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	103%	20-150%
	13C8-PFOS	92%	20-150%
	13C8-FOSA	93%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	106%	20-150%
	13C2-4:2FTS	113%	20-180%
	13C2-6:2FTS	126%	20-180%
	13C2-8:2FTS	110%	20-180%

Continuing Calibration Blank

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49460.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98527-DUP, OP98527-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49460.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98527-DUP, OP98527-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	107%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	112%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	94%	20-150%
	13C9-PFNA	88%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	113%	20-150%
	13C2-PFDoDA	103%	20-150%
	13C2-PFTeDA	115%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	97%	20-150%
	13C8-PFOS	88%	20-150%
	13C8-FOSA	87%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	102%	20-150%
	13C2-4:2FTS	108%	20-180%
	13C2-6:2FTS	116%	20-180%
	13C2-8:2FTS	117%	20-180%

Blank Spike Summary

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-LLBS	4Q49454.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8461-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0186	116	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0101	126	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0056	140	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0045	113	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0052	130	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0054	135	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0048	120	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0047	118	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0047	118	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0052	130	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0042	105	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0052	147	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0052	138	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0054	148	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0058	152*	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0048	129	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0060	156*	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0052	135	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0040	103	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0198	132	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0189	124	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0202	132	40-150
754-91-6	PFOSA	0.004	0.0050	125	40-150
31506-32-8	MeFOSA	0.008	0.0085	106	40-150
4151-50-2	EtFOSA	0.008	0.0110	138	40-150
2355-31-9	MeFOSAA	0.004	0.0045	113	40-150
2991-50-6	EtFOSAA	0.004	0.0044	110	40-150
24448-09-7	MeFOSE	0.02	0.0251	126	40-150
1691-99-2	EtFOSE	0.02	0.0279	140	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0090	113	40-150
919005-14-4	ADONA	0.00756	0.0100	132	40-150
377-73-1	PFMPA	0.008	0.0092	115	40-150
863090-89-5	PFMBA	0.008	0.0096	120	40-150
151772-58-6	NFDHA	0.008	0.0085	106	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0107	143	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0088	116	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-LLBS	4Q49454.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8461-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0071	100	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0176	88	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.108	108	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.110	110	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	114%	20-150%
	13C5-PFPeA	107%	20-150%
	13C5-PFHxA	119%	20-150%
	13C4-PFHpA	111%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	107%	20-150%
	13C7-PFUnDA	117%	20-150%
	13C2-PFDoDA	91%	20-150%
	13C2-PFTeDA	90%	20-150%
	13C3-PFBS	109%	20-150%
	13C3-PFHxS	105%	20-150%
	13C8-PFOS	93%	20-150%
	13C8-FOSA	70%	20-150%
	d3-MeFOSA	77%	20-150%
	d5-EtFOSA	64%	20-150%
	d3-MeFOSAA	102%	20-150%
	d5-EtFOSAA	107%	20-150%
	d7-MeFOSE	65%	20-150%
	d9-EtFOSE	69%	20-150%
	13C2-4:2FTS	121%	20-180%
	13C2-6:2FTS	133%	20-180%
	13C2-8:2FTS	119%	20-180%
	13C3-HFPO-DA	93%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-BS	4Q49453.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8461-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.126	126	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0671	134	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0304	122	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0311	124	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0353	141	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0363	145	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0355	142	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0297	119	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0328	131	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0330	132	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0303	121	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0306	138	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0326	139	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0337	147	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0328	138	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0302	130	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0349	145	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0315	131	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0275	113	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.126	134	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.114	120	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.125	130	40-150
754-91-6	PFOSA	0.025	0.0356	142	40-150
31506-32-8	MeFOSA	0.05	0.0582	116	40-150
4151-50-2	EtFOSA	0.05	0.0690	138	40-150
2355-31-9	MeFOSAA	0.025	0.0322	129	40-150
2991-50-6	EtFOSAA	0.025	0.0318	127	40-150
24448-09-7	MeFOSE	0.125	0.155	124	40-150
1691-99-2	EtFOSE	0.125	0.177	142	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0605	121	40-150
919005-14-4	ADONA	0.0473	0.0711	150	40-150
377-73-1	PFMPA	0.05	0.0344	69	40-150
863090-89-5	PFMBA	0.05	0.0635	127	40-150
151772-58-6	NFDHA	0.05	0.0477	95	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0698	149	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0623	132	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-BS	4Q49453.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8461-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0471	106	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.177	142	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.738	118	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.759	121	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	38%	20-150%
	13C5-PFPeA	109%	20-150%
	13C5-PFHxA	125%	20-150%
	13C4-PFHpA	112%	20-150%
	13C8-PFOA	108%	20-150%
	13C9-PFNA	88%	20-150%
	13C6-PFDA	110%	20-150%
	13C7-PFUnDA	121%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	96%	20-150%
	13C3-PFBS	113%	20-150%
	13C3-PFHxS	108%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	78%	20-150%
	d3-MeFOSA	91%	20-150%
	d5-EtFOSA	73%	20-150%
	d3-MeFOSAA	100%	20-150%
	d5-EtFOSAA	107%	20-150%
	d7-MeFOSE	70%	20-150%
	d9-EtFOSE	72%	20-150%
	13C2-4:2FTS	114%	20-180%
	13C2-6:2FTS	134%	20-180%
	13C2-8:2FTS	122%	20-180%
	13C3-HFPO-DA	94%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-MS	4Q49467.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724
FC8472-1	4Q49466.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8461-1

CAS No.	Compound	FC8472-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	ND		0.104	0.129	124	40-150
2706-90-3	Perfluoropentanoic acid	ND		0.0521	0.0717	138	40-150
307-24-4	Perfluorohexanoic acid	ND		0.026	0.0302	116	40-150
375-85-9	Perfluoroheptanoic acid	ND		0.026	0.0324	124	40-150
335-67-1	Perfluorooctanoic acid	ND		0.026	0.0357	137	40-150
375-95-1	Perfluorononanoic acid	ND		0.026	0.0383	147	40-150
335-76-2	Perfluorodecanoic acid	ND		0.026	0.0342	131	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.026	0.0304	117	40-150
307-55-1	Perfluorododecanoic acid	ND		0.026	0.0353	136	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.026	0.0373	143	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.026	0.0296	114	40-150
375-73-5	Perfluorobutanesulfonic acid	ND		0.0231	0.0329	142	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0245	0.0333	136	40-150
355-46-4	Perfluorohexanesulfonic acid	ND		0.0238	0.0330	139	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0248	0.0349	141	40-150
1763-23-1	Perfluorooctanesulfonic acid	ND		0.0242	0.0293	121	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.0251	0.0334	133	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.0251	0.0296	118	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0253	0.0266	105	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0977	0.134	137	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.099	0.115	116	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.1	0.130	130	40-150
754-91-6	PFOSA	ND		0.026	0.0360	138	40-150
31506-32-8	MeFOSA	ND		0.0521	0.0600	115	40-150
4151-50-2	EtFOSA	ND		0.0521	0.0676	130	40-150
2355-31-9	MeFOSAA	ND		0.026	0.0310	119	40-150
2991-50-6	EtFOSAA	ND		0.026	0.0353	136	40-150
24448-09-7	MeFOSE	ND		0.13	0.161	124	40-150
1691-99-2	EtFOSE	ND		0.13	0.181	139	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.0521	0.0625	120	40-150
919005-14-4	ADONA	ND		0.0492	0.0718	146	40-150
377-73-1	PFMPA	ND		0.0521	0.0651	125	40-150
863090-89-5	PFMBA	ND		0.0521	0.0661	127	40-150
151772-58-6	NFDHA	ND		0.0521	0.0532	102	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0487	0.0681	140	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0492	0.0560	114	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-MS	4Q49467.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724
FC8472-1	4Q49466.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8461-1

CAS No.	Compound	FC8472-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	ND		0.0464	0.0506	109	40-150
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.13	0.123	94	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.651	0.786	121	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.651	0.789	121	40-150

CAS No.	ID Standard Recoveries	MS	FC8472-1	Limits
	13C4-PFBA	110%	114%	20-150%
	13C5-PFPeA	100%	104%	20-150%
	13C5-PFHxA	114%	121%	20-150%
	13C4-PFHpA	103%	108%	20-150%
	13C8-PFOA	104%	103%	20-150%
	13C9-PFNA	87%	86%	20-150%
	13C6-PFDA	104%	107%	20-150%
	13C7-PFUnDA	107%	106%	20-150%
	13C2-PFDoDA	80%	84%	20-150%
	13C2-PFTeDA	86%	86%	20-150%
	13C3-PFBS	102%	106%	20-150%
	13C3-PFHxS	98%	104%	20-150%
	13C8-PFOS	92%	98%	20-150%
	13C8-FOSA	67%	67%	20-150%
	d3-MeFOSA	68%	66%	20-150%
	d5-EtFOSA	58%	60%	20-150%
	d3-MeFOSAA	98%	96%	20-150%
	d5-EtFOSAA	92%	88%	20-150%
	d7-MeFOSE	57%	60%	20-150%
	d9-EtFOSE	56%	61%	20-150%
	13C2-4:2FTS	104%	114%	20-180%
	13C2-6:2FTS	132%	118%	20-180%
	13C2-8:2FTS	109%	109%	20-180%
	13C3-HFPO-DA	90%	94%	20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-DUP	4Q49469.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724
FC8472-2	4Q49468.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8461-1

CAS No.	Compound	FC8472-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	ND		ND		nc	30
2706-90-3	Perfluoropentanoic acid	ND		ND		nc	30
307-24-4	Perfluorohexanoic acid	0.0032		0.0032		0	30
375-85-9	Perfluoroheptanoic acid	ND		ND		nc	30
335-67-1	Perfluorooctanoic acid	0.0029		0.0030		3	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	0.0012	J	0.0012	J	0	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC8461
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-DUP	4Q49469.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724
FC8472-2	4Q49468.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8461-1

CAS No.	Compound	FC8472-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC8472-2	Limits
	13C4-PFBA	111%	115%	20-150%
	13C5-PFPeA	104%	106%	20-150%
	13C5-PFHxA	116%	122%	20-150%
	13C4-PFHpA	105%	110%	20-150%
	13C8-PFOA	102%	108%	20-150%
	13C9-PFNA	88%	87%	20-150%
	13C6-PFDA	106%	109%	20-150%
	13C7-PFUnDA	116%	114%	20-150%
	13C2-PFDoDA	91%	90%	20-150%
	13C2-PFTeDA	80%	78%	20-150%
	13C3-PFBS	103%	101%	20-150%
	13C3-PFHxS	100%	105%	20-150%
	13C8-PFOS	98%	86%	20-150%
	13C8-FOSA	68%	66%	20-150%
	d3-MeFOSA	77%	69%	20-150%
	d5-EtFOSA	57%	52%	20-150%
	d3-MeFOSAA	98%	92%	20-150%
	d5-EtFOSAA	91%	84%	20-150%
	d7-MeFOSE	60%	57%	20-150%
	d9-EtFOSE	57%	55%	20-150%
	13C2-4:2FTS	116%	118%	20-180%
	13C2-6:2FTS	121%	130%	20-180%
	13C2-8:2FTS	111%	102%	20-180%
	13C3-HFPO-DA	92%	97%	20-150%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

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Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC8460

Sampling Date: 08/01/23



Report to:

North Dakota DEQ
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Bismark, ND 58503
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ATTN: Shannon Suggs

Total number of pages in report: 33

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC8460

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FC8460-1	08/01/23	11:00	MM	08/05/23	AQ	Surface Water	LAKE METIGOSHE 1
FC8460-2	08/01/23	11:05	MM	08/05/23	AQ	Surface Water	LAKE METIGOSHE 2

Summary of Hits

Job Number: FC8460
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 08/01/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC8460-1	**LAKE METIGOSHE 1**					
Perfluorohexanoic acid		1.6 J	2.0	0.49	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		2.4	2.0	0.49	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		2.5	2.0	0.49	ng/l	EPA DRAFT 1633
Perfluorononanoic acid		0.86 J	2.0	0.60	ng/l	EPA DRAFT 1633
FC8460-2	**LAKE METIGOSHE 2**					
Perfluoropentanoic acid		1.6 J	4.0	1.0	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		1.5 J	2.0	0.51	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		2.2	2.0	0.51	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		2.5	2.0	0.51	ng/l	EPA DRAFT 1633

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	LAKE METIGOSHE 1		
Lab Sample ID:	FC8460-1	**Date Sampled:**	08/01/23
Matrix:	AQ - Surface Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49478.D	1	08/25/23 00:29	AL	08/19/23 09:55	OP98527	S4Q724
Run #2 [a]	4Q49526.D	5	08/25/23 17:02	AL	08/19/23 09:55	OP98527	S4Q725

	Initial Volume	Final Volume
Run #1	510 ml	5.0 ml
Run #2	510 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND	7.8	3.9	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.9	0.98	ng/l	
307-24-4	Perfluorohexanoic acid	1.6	2.0	0.49	ng/l	J
375-85-9	Perfluoroheptanoic acid	2.4	2.0	0.49	ng/l	
335-67-1	Perfluorooctanoic acid	2.5	2.0	0.49	ng/l	
375-95-1	Perfluorononanoic acid	0.86	2.0	0.60	ng/l	J
335-76-2	Perfluorodecanoic acid	ND	2.0	0.49	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.59	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.59	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.82	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.49	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	0.98	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	0.98	ng/l	
375-92-8	Perfluoroheptanesulfonic acid [c]	ND	2.0	0.98	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	0.98	ng/l	
68259-12-1	Perfluorononanesulfonic acid [c]	ND	2.0	0.98	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	0.98	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.8	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	0.98	ng/l	
31506-32-8	MeFOSA	ND	2.0	0.98	ng/l	
4151-50-2	EtFOSA	ND	2.0	0.98	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE METIGOSHE 1		
Lab Sample ID:	FC8460-1	**Date Sampled:**	08/01/23
Matrix:	AQ - Surface Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	0.98	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	9.8	ng/l	
1691-99-2	EtFOSE	ND	20	9.8	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.8	2.0	ng/l	
919005-14-4	ADONA	ND	7.8	2.0	ng/l	
377-73-1	PFMPA	ND	3.9	0.98	ng/l	
863090-89-5	PFMBA	ND	3.9	1.1	ng/l	
151772-58-6	NFDHA	ND	3.9	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.8	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.8	2.0	ng/l	
113507-82-7	PFEESA	ND	3.9	0.98	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.8	4.9	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	49	9.8	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	49	9.8	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	19% [d]	18% [d]	20-150%
	13C5-PFPeA	91%	89%	20-150%
	13C5-PFHxA	115%	105%	20-150%
	13C4-PFHpA	109%	103%	20-150%
	13C8-PFOA	101%	96%	20-150%
	13C9-PFNA	92%	80%	20-150%
	13C6-PFDA	104%	106%	20-150%
	13C7-PFUnDA	112%	101%	20-150%
	13C2-PFDoDA	72%	69%	20-150%
	13C2-PFTeDA	67%	66%	20-150%
	13C3-PFBS	103%	90%	20-150%
	13C3-PFHxS	104%	93%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE METIGOSHE 1		
Lab Sample ID:	FC8460-1	**Date Sampled:**	08/01/23
Matrix:	AQ - Surface Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%	84%	20-150%
	13C8-FOSA	93%	92%	20-150%
	d3-MeFOSA	73%	67%	20-150%
	d5-EtFOSA	57%	48%	20-150%
	d3-MeFOSAA	115%	109%	20-150%
	d5-EtFOSAA	123%	113%	20-150%
	d7-MeFOSE	48%	49%	20-150%
	d9-EtFOSE	47%	49%	20-150%
	13C2-4:2FTS	113%	104%	20-180%
	13C2-6:2FTS	103%	99%	20-180%
	13C2-8:2FTS	113%	94%	20-180%
	13C3-HFPO-DA	95%	84%	20-150%

(a) Confirmation run.
(b) Associated ID Standard outside control limits.
(c) Associated Low Level BS outside of control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE METIGOSHE 2		
Lab Sample ID:	FC8460-2	**Date Sampled:**	08/01/23
Matrix:	AQ - Surface Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49479.D	1	08/25/23 00:43	AL	08/19/23 09:55	OP98527	S4Q724
Run #2							

	Initial Volume	Final Volume
Run #1	495 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.1	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	1.6	4.0	1.0	ng/l	J
307-24-4	Perfluorohexanoic acid	1.5	2.0	0.51	ng/l	J
375-85-9	Perfluoroheptanoic acid	2.2	2.0	0.51	ng/l	
335-67-1	Perfluorooctanoic acid	2.5	2.0	0.51	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.85	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid [a]	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid [a]	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.1	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.1	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.1	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE METIGOSHE 2		
Lab Sample ID:	FC8460-2	**Date Sampled:**	08/01/23
Matrix:	AQ - Surface Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.1	2.0	ng/l	
919005-14-4	ADONA	ND	8.1	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	1.0	ng/l	
863090-89-5	PFMBA	ND	4.0	1.2	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.1	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.1	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	20%		20-150%
	13C5-PFPeA	94%		20-150%
	13C5-PFHxA	119%		20-150%
	13C4-PFHpA	108%		20-150%
	13C8-PFOA	105%		20-150%
	13C9-PFNA	95%		20-150%
	13C6-PFDA	102%		20-150%
	13C7-PFUnDA	104%		20-150%
	13C2-PFDoDA	79%		20-150%
	13C2-PFTeDA	72%		20-150%
	13C3-PFBS	104%		20-150%
	13C3-PFHxS	105%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LAKE METIGOSHE 2		
Lab Sample ID:	FC8460-2	**Date Sampled:**	08/01/23
Matrix:	AQ - Surface Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		20-150%
	13C8-FOSA	95%		20-150%
	d3-MeFOSA	93%		20-150%
	d5-EtFOSA	71%		20-150%
	d3-MeFOSAA	100%		20-150%
	d5-EtFOSAA	102%		20-150%
	d7-MeFOSE	69%		20-150%
	d9-EtFOSE	68%		20-150%
	13C2-4:2FTS	123%		20-180%
	13C2-6:2FTS	116%		20-180%
	13C2-8:2FTS	89%		20-180%
	13C3-HFPO-DA	95%		20-150%

(a) Associated Low Level BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FC8460

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: NDDEQ PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58503
Project Contact: SSuggs Email: SSuggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed)
Sampler 1: Sampler 2:

Project Information

Project Name: NDDEQ PFAS
Street: 4201 Normandy St
City: Bismarck State: ND
Project #
Fax #
Client Purchase Order #

Analytical Information

LCID 16331 LIST 40

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION: OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NH4OH+ZnAc	DI WATER	MEOH	LAB USE ONLY
1	Lake Metigoshe 1	8/1/23	11:00	MM	SW	3										
2	Lake Metigoshe 2	8/1/23	11:05	MM	SW	3										

INITIAL ASSESSMENT

LABEL VERIFICATION

3.2 IR#1

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Labilnk

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	SSuggs	8/3/23	2 FedEx	3 FedEx	0915	4 05 AUG 23
5	Relinquished by/Affiliation	Date Time:	6 Received By/Affiliation	7 Relinquished By/Affiliation	Date Time:	8 Received By/Affiliation

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

FC8460: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC8460 **Client:** NDDEQ PFAS **Project:** NDDEQ PFAS

Date / Time Received: 8/5/2023 9:15:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7820 6357 4960

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.2);

Cooler Temps (Corrected) °C: Cooler 1: (3.0);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230320 pH 10-12 _____ Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: TORYW Date: 8/5/2023 9:15:00 AM Reviewer: _____ Date: _____

FC8460: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-MB	4Q49455.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8460-1, FC8460-2

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	0.00090	0.0020	0.00050	ug/l	J
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-MB	4Q49455.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8460-1, FC8460-2

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	118%	20-150%
	13C5-PFPeA	112%	20-150%
	13C5-PFHxA	125%	20-150%
	13C4-PFHpA	112%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	97%	20-150%
	13C6-PFDA	108%	20-150%
	13C7-PFUnDA	118%	20-150%
	13C2-PFDoDA	93%	20-150%
	13C2-PFTeDA	97%	20-150%
	13C3-PFBS	112%	20-150%
	13C3-PFHxS	107%	20-150%
	13C8-PFOS	96%	20-150%
	13C8-FOSA	65%	20-150%
	d3-MeFOSA	79%	20-150%
	d5-EtFOSA	71%	20-150%
	d3-MeFOSAA	108%	20-150%
	d5-EtFOSAA	110%	20-150%
	d7-MeFOSE	66%	20-150%
	d9-EtFOSE	69%	20-150%
	13C2-4:2FTS	127%	20-180%
	13C2-6:2FTS	140%	20-180%
	13C2-8:2FTS	124%	20-180%
	13C3-HFPO-DA	98%	20-150%

Instrument Blank

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-IBLK	4Q49434.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8460-1, FC8460-2

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	0.0032	0.0080	0.0010	ug/l	J
4151-50-2	EtFOSA	0.0047	0.0080	0.0010	ug/l	J
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	0.0069	0.040	0.0044	ug/l	J
1691-99-2	EtFOSE	0.0094	0.040	0.0074	ug/l	J
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-IBLK	4Q49434.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8460-1, FC8460-2

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	104%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	106%	20-150%
	13C6-PFDA	101%	20-150%
	13C7-PFUnDA	106%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	115%	20-150%
	13C3-PFBS	98%	20-150%
	13C3-PFHxS	89%	20-150%
	13C8-PFOS	94%	20-150%
	13C8-FOSA	112%	20-150%
	d3-MeFOSAA	114%	20-150%
	d5-EtFOSAA	113%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	116%	20-180%
	13C2-8:2FTS	111%	20-180%

Continuing Calibration Blank

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49472.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8460-1, FC8460-2

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49472.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8460-1, FC8460-2

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	108%	20-150%
	13C5-PFPeA	100%	20-150%
	13C5-PFHxA	111%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	95%	20-150%
	13C9-PFNA	88%	20-150%
	13C6-PFDA	108%	20-150%
	13C7-PFUnDA	118%	20-150%
	13C2-PFDoDA	103%	20-150%
	13C2-PFTeDA	112%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	91%	20-150%
	13C8-FOSA	91%	20-150%
	d3-MeFOSAA	108%	20-150%
	d5-EtFOSAA	104%	20-150%
	13C2-4:2FTS	134%	20-180%
	13C2-6:2FTS	131%	20-180%
	13C2-8:2FTS	120%	20-180%

Continuing Calibration Blank

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49448.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98527-BS, OP98527-LLBS, OP98527-MB

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49448.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98527-BS, OP98527-LLBS, OP98527-MB

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	107%	20-150%
	13C5-PFPeA	100%	20-150%
	13C5-PFHxA	108%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	89%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	116%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	115%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	103%	20-150%
	13C8-PFOS	92%	20-150%
	13C8-FOSA	93%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	106%	20-150%
	13C2-4:2FTS	113%	20-180%
	13C2-6:2FTS	126%	20-180%
	13C2-8:2FTS	110%	20-180%

Continuing Calibration Blank

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49460.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98527-DUP, OP98527-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49460.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98527-DUP, OP98527-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	107%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	112%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	94%	20-150%
	13C9-PFNA	88%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	113%	20-150%
	13C2-PFDoDA	103%	20-150%
	13C2-PFTeDA	115%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	97%	20-150%
	13C8-PFOS	88%	20-150%
	13C8-FOSA	87%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	102%	20-150%
	13C2-4:2FTS	108%	20-180%
	13C2-6:2FTS	116%	20-180%
	13C2-8:2FTS	117%	20-180%

Blank Spike Summary

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-LLBS	4Q49454.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8460-1, FC8460-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0186	116	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0101	126	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0056	140	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0045	113	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0052	130	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0054	135	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0048	120	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0047	118	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0047	118	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0052	130	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0042	105	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0052	147	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0052	138	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0054	148	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0058	152*	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0048	129	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0060	156*	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0052	135	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0040	103	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0198	132	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0189	124	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0202	132	40-150
754-91-6	PFOSA	0.004	0.0050	125	40-150
31506-32-8	MeFOSA	0.008	0.0085	106	40-150
4151-50-2	EtFOSA	0.008	0.0110	138	40-150
2355-31-9	MeFOSAA	0.004	0.0045	113	40-150
2991-50-6	EtFOSAA	0.004	0.0044	110	40-150
24448-09-7	MeFOSE	0.02	0.0251	126	40-150
1691-99-2	EtFOSE	0.02	0.0279	140	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0090	113	40-150
919005-14-4	ADONA	0.00756	0.0100	132	40-150
377-73-1	PFMPA	0.008	0.0092	115	40-150
863090-89-5	PFMBA	0.008	0.0096	120	40-150
151772-58-6	NFDHA	0.008	0.0085	106	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0107	143	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0088	116	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-LLBS	4Q49454.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8460-1, FC8460-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0071	100	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0176	88	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.108	108	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.110	110	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	114%	20-150%
	13C5-PFPeA	107%	20-150%
	13C5-PFHxA	119%	20-150%
	13C4-PFHpA	111%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	107%	20-150%
	13C7-PFUnDA	117%	20-150%
	13C2-PFDoDA	91%	20-150%
	13C2-PFTeDA	90%	20-150%
	13C3-PFBS	109%	20-150%
	13C3-PFHxS	105%	20-150%
	13C8-PFOS	93%	20-150%
	13C8-FOSA	70%	20-150%
	d3-MeFOSA	77%	20-150%
	d5-EtFOSA	64%	20-150%
	d3-MeFOSAA	102%	20-150%
	d5-EtFOSAA	107%	20-150%
	d7-MeFOSE	65%	20-150%
	d9-EtFOSE	69%	20-150%
	13C2-4:2FTS	121%	20-180%
	13C2-6:2FTS	133%	20-180%
	13C2-8:2FTS	119%	20-180%
	13C3-HFPO-DA	93%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-BS	4Q49453.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8460-1, FC8460-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.126	126	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0671	134	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0304	122	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0311	124	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0353	141	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0363	145	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0355	142	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0297	119	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0328	131	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0330	132	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0303	121	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0306	138	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0326	139	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0337	147	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0328	138	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0302	130	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0349	145	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0315	131	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0275	113	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.126	134	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.114	120	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.125	130	40-150
754-91-6	PFOSA	0.025	0.0356	142	40-150
31506-32-8	MeFOSA	0.05	0.0582	116	40-150
4151-50-2	EtFOSA	0.05	0.0690	138	40-150
2355-31-9	MeFOSAA	0.025	0.0322	129	40-150
2991-50-6	EtFOSAA	0.025	0.0318	127	40-150
24448-09-7	MeFOSE	0.125	0.155	124	40-150
1691-99-2	EtFOSE	0.125	0.177	142	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0605	121	40-150
919005-14-4	ADONA	0.0473	0.0711	150	40-150
377-73-1	PFMPA	0.05	0.0344	69	40-150
863090-89-5	PFMBA	0.05	0.0635	127	40-150
151772-58-6	NFDHA	0.05	0.0477	95	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0698	149	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0623	132	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-BS	4Q49453.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8460-1, FC8460-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0471	106	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.177	142	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.738	118	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.759	121	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	38%	20-150%
	13C5-PFPeA	109%	20-150%
	13C5-PFHxA	125%	20-150%
	13C4-PFHpA	112%	20-150%
	13C8-PFOA	108%	20-150%
	13C9-PFNA	88%	20-150%
	13C6-PFDA	110%	20-150%
	13C7-PFUnDA	121%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	96%	20-150%
	13C3-PFBS	113%	20-150%
	13C3-PFHxS	108%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	78%	20-150%
	d3-MeFOSA	91%	20-150%
	d5-EtFOSA	73%	20-150%
	d3-MeFOSAA	100%	20-150%
	d5-EtFOSAA	107%	20-150%
	d7-MeFOSE	70%	20-150%
	d9-EtFOSE	72%	20-150%
	13C2-4:2FTS	114%	20-180%
	13C2-6:2FTS	134%	20-180%
	13C2-8:2FTS	122%	20-180%
	13C3-HFPO-DA	94%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-MS	4Q49467.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724
FC8472-1	4Q49466.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8460-1, FC8460-2

CAS No.	Compound	FC8472-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	ND		0.104	0.129	124	40-150
2706-90-3	Perfluoropentanoic acid	ND		0.0521	0.0717	138	40-150
307-24-4	Perfluorohexanoic acid	ND		0.026	0.0302	116	40-150
375-85-9	Perfluoroheptanoic acid	ND		0.026	0.0324	124	40-150
335-67-1	Perfluorooctanoic acid	ND		0.026	0.0357	137	40-150
375-95-1	Perfluorononanoic acid	ND		0.026	0.0383	147	40-150
335-76-2	Perfluorodecanoic acid	ND		0.026	0.0342	131	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.026	0.0304	117	40-150
307-55-1	Perfluorododecanoic acid	ND		0.026	0.0353	136	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.026	0.0373	143	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.026	0.0296	114	40-150
375-73-5	Perfluorobutanesulfonic acid	ND		0.0231	0.0329	142	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0245	0.0333	136	40-150
355-46-4	Perfluorohexanesulfonic acid	ND		0.0238	0.0330	139	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0248	0.0349	141	40-150
1763-23-1	Perfluorooctanesulfonic acid	ND		0.0242	0.0293	121	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.0251	0.0334	133	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.0251	0.0296	118	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0253	0.0266	105	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0977	0.134	137	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.099	0.115	116	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.1	0.130	130	40-150
754-91-6	PFOSA	ND		0.026	0.0360	138	40-150
31506-32-8	MeFOSA	ND		0.0521	0.0600	115	40-150
4151-50-2	EtFOSA	ND		0.0521	0.0676	130	40-150
2355-31-9	MeFOSAA	ND		0.026	0.0310	119	40-150
2991-50-6	EtFOSAA	ND		0.026	0.0353	136	40-150
24448-09-7	MeFOSE	ND		0.13	0.161	124	40-150
1691-99-2	EtFOSE	ND		0.13	0.181	139	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.0521	0.0625	120	40-150
919005-14-4	ADONA	ND		0.0492	0.0718	146	40-150
377-73-1	PFMPA	ND		0.0521	0.0651	125	40-150
863090-89-5	PFMBA	ND		0.0521	0.0661	127	40-150
151772-58-6	NFDHA	ND		0.0521	0.0532	102	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0487	0.0681	140	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0492	0.0560	114	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-MS	4Q49467.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724
FC8472-1	4Q49466.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8460-1, FC8460-2

CAS No.	Compound	FC8472-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	ND		0.0464	0.0506	109	40-150
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.13	0.123	94	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.651	0.786	121	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.651	0.789	121	40-150

CAS No.	ID Standard Recoveries	MS	FC8472-1	Limits
	13C4-PFBA	110%	114%	20-150%
	13C5-PFPeA	100%	104%	20-150%
	13C5-PFHxA	114%	121%	20-150%
	13C4-PFHpA	103%	108%	20-150%
	13C8-PFOA	104%	103%	20-150%
	13C9-PFNA	87%	86%	20-150%
	13C6-PFDA	104%	107%	20-150%
	13C7-PFUnDA	107%	106%	20-150%
	13C2-PFDoDA	80%	84%	20-150%
	13C2-PFTeDA	86%	86%	20-150%
	13C3-PFBS	102%	106%	20-150%
	13C3-PFHxS	98%	104%	20-150%
	13C8-PFOS	92%	98%	20-150%
	13C8-FOSA	67%	67%	20-150%
	d3-MeFOSA	68%	66%	20-150%
	d5-EtFOSA	58%	60%	20-150%
	d3-MeFOSAA	98%	96%	20-150%
	d5-EtFOSAA	92%	88%	20-150%
	d7-MeFOSE	57%	60%	20-150%
	d9-EtFOSE	56%	61%	20-150%
	13C2-4:2FTS	104%	114%	20-180%
	13C2-6:2FTS	132%	118%	20-180%
	13C2-8:2FTS	109%	109%	20-180%
	13C3-HFPO-DA	90%	94%	20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-DUP	4Q49469.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724
FC8472-2	4Q49468.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8460-1, FC8460-2

CAS No.	Compound	FC8472-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	ND		ND		nc	30
2706-90-3	Perfluoropentanoic acid	ND		ND		nc	30
307-24-4	Perfluorohexanoic acid	0.0032		0.0032		0	30
375-85-9	Perfluoroheptanoic acid	ND		ND		nc	30
335-67-1	Perfluorooctanoic acid	0.0029		0.0030		3	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	0.0012	J	0.0012	J	0	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC8460
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-DUP	4Q49469.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724
FC8472-2	4Q49468.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8460-1, FC8460-2

CAS No.	Compound	FC8472-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC8472-2	Limits
	13C4-PFBA	111%	115%	20-150%
	13C5-PFPeA	104%	106%	20-150%
	13C5-PFHxA	116%	122%	20-150%
	13C4-PFHpA	105%	110%	20-150%
	13C8-PFOA	102%	108%	20-150%
	13C9-PFNA	88%	87%	20-150%
	13C6-PFDA	106%	109%	20-150%
	13C7-PFUnDA	116%	114%	20-150%
	13C2-PFDoDA	91%	90%	20-150%
	13C2-PFTeDA	80%	78%	20-150%
	13C3-PFBS	103%	101%	20-150%
	13C3-PFHxS	100%	105%	20-150%
	13C8-PFOS	98%	86%	20-150%
	13C8-FOSA	68%	66%	20-150%
	d3-MeFOSA	77%	69%	20-150%
	d5-EtFOSA	57%	52%	20-150%
	d3-MeFOSAA	98%	92%	20-150%
	d5-EtFOSAA	91%	84%	20-150%
	d7-MeFOSE	60%	57%	20-150%
	d9-EtFOSE	57%	55%	20-150%
	13C2-4:2FTS	116%	118%	20-180%
	13C2-6:2FTS	121%	130%	20-180%
	13C2-8:2FTS	111%	102%	20-180%
	13C3-HFPO-DA	92%	97%	20-150%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

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Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC8270

Sampling Dates: 07/25/23 - 07/28/23



Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
ssuggs@nd.gov

ATTN: Shannon Suggs

Total number of pages in report: 49

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

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Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC8270

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FC8270-1	07/25/23	07:45	EB	07/29/23	AQ	Field Blank Water	PATTERSON LAKE BLANK
FC8270-2	07/25/23	07:50	EB	07/29/23	AQ	Surface Water	PATTERSON LAKE
FC8270-3	07/25/23	07:55	EB	07/29/23	AQ	Surface Water	PATTERSON LAKE DUPLICATE
FC8270-4	07/25/23	11:05	EB	07/29/23	AQ	Surface Water	380860 OPLAND DAM
FC8270-5	07/27/23	09:45	EB	07/29/23	AQ	Surface Water	BOWMAN-HALEY DAM
FC8270-6	07/27/23	12:10	EB	07/29/23	AQ	Surface Water	380630 MIRROR LAKE
FC8270-7	07/27/23	17:00	EB	07/29/23	AQ	Surface Water	380950-TSCHIDA-DEEPEST
FC8270-8	07/28/23	10:00	EB	07/29/23	AQ	Surface Water	380840-NELSON LAKE-DEEPEST

Summary of Hits

Job Number: FC8270
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 07/25/23 thru 07/28/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC8270-1	**PATTERSON LAKE BLANK**					
No hits reported in this sample.						
FC8270-2	**PATTERSON LAKE**					
Perfluoropentanoic acid		1.3 J	4.2	1.0	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		1.0 J	2.1	0.52	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.2 J	2.1	0.52	ng/l	EPA DRAFT 1633
FC8270-3	**PATTERSON LAKE DUPLICATE**					
Perfluoroheptanoic acid		1.4 J	2.1	0.52	ng/l	EPA DRAFT 1633
FC8270-4	**380860 OPLAND DAM**					
Perfluorohexanoic acid		2.2	2.0	0.51	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.4 J	2.0	0.51	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.9 J	2.0	0.51	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		1.1 J	2.0	1.0	ng/l	EPA DRAFT 1633
FC8270-5	**BOWMAN-HALEY DAM**					
Perfluorohexanoic acid		1.4 J	2.2	0.54	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		2.0 J	2.2	0.54	ng/l	EPA DRAFT 1633
FC8270-6	**380630 MIRROR LAKE**					
Perfluoroheptanoic acid		1.2 J	2.2	0.54	ng/l	EPA DRAFT 1633
FC8270-7	**380950-TSCHIDA-DEEPEST**					
Perfluoropentanoic acid		2.1 J	4.3	1.1	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		1.3 J	2.2	0.54	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.2 J	2.2	0.54	ng/l	EPA DRAFT 1633
FC8270-8	**380840-NELSON LAKE-DEEPEST**					
Perfluorohexanoic acid		1.6 J	2.2	0.54	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.9 J	2.2	0.54	ng/l	EPA DRAFT 1633

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	PATTERSON LAKE BLANK		
Lab Sample ID:	FC8270-1	**Date Sampled:**	07/25/23
Matrix:	AQ - Field Blank Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49456.D	1	08/24/23 19:04	AL	08/19/23 09:55	OP98527	S4Q724
Run #2							

	Initial Volume	Final Volume
Run #1	490 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.2	4.1	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.51	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.51	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.51	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.86	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid [a]	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid [a]	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PATTERSON LAKE BLANK		
Lab Sample ID:	FC8270-1	**Date Sampled:**	07/25/23
Matrix:	AQ - Field Blank Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.0	ng/l	
919005-14-4	ADONA	ND	8.2	2.0	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.0	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	110%		20-150%
	13C5-PFPeA	101%		20-150%
	13C5-PFHxA	111%		20-150%
	13C4-PFHpA	101%		20-150%
	13C8-PFOA	100%		20-150%
	13C9-PFNA	85%		20-150%
	13C6-PFDA	99%		20-150%
	13C7-PFUnDA	97%		20-150%
	13C2-PFDoDA	85%		20-150%
	13C2-PFTeDA	85%		20-150%
	13C3-PFBS	110%		20-150%
	13C3-PFHxS	105%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PATTERSON LAKE BLANK		
Lab Sample ID:	FC8270-1	**Date Sampled:**	07/25/23
Matrix:	AQ - Field Blank Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	89%		20-150%
	13C8-FOSA	69%		20-150%
	d3-MeFOSA	76%		20-150%
	d5-EtFOSA	66%		20-150%
	d3-MeFOSAA	94%		20-150%
	d5-EtFOSAA	90%		20-150%
	d7-MeFOSE	65%		20-150%
	d9-EtFOSE	65%		20-150%
	13C2-4:2FTS	135%		20-180%
	13C2-6:2FTS	139%		20-180%
	13C2-8:2FTS	110%		20-180%
	13C3-HFPO-DA	85%		20-150%

(a) Associated Low Level BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PATTERSON LAKE		
Lab Sample ID:	FC8270-2	**Date Sampled:**	07/25/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49457.D	1	08/24/23 19:19	AL	08/19/23 09:55	OP98527	S4Q724
Run #2							

	Initial Volume	Final Volume
Run #1	480 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.3	4.2	ng/l	
2706-90-3	Perfluoropentanoic acid	1.3	4.2	1.0	ng/l	J
307-24-4	Perfluorohexanoic acid	1.0	2.1	0.52	ng/l	J
375-85-9	Perfluoroheptanoic acid	1.2	2.1	0.52	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.1	0.52	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.64	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.52	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.63	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.63	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.88	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.52	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid [a]	ND	2.1	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid [a]	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.3	4.2	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.3	4.2	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.3	4.3	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PATTERSON LAKE		
Lab Sample ID:	FC8270-2	**Date Sampled:**	07/25/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.3	2.1	ng/l	
919005-14-4	ADONA	ND	8.3	2.1	ng/l	
377-73-1	PFMPA	ND	4.2	1.0	ng/l	
863090-89-5	PFMBA	ND	4.2	1.2	ng/l	
151772-58-6	NFDHA	ND	4.2	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.3	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.3	2.1	ng/l	
113507-82-7	PFEESA	ND	4.2	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.2	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	48%		20-150%
	13C5-PFPeA	111%		20-150%
	13C5-PFHxA	131%		20-150%
	13C4-PFHpA	122%		20-150%
	13C8-PFOA	111%		20-150%
	13C9-PFNA	97%		20-150%
	13C6-PFDA	111%		20-150%
	13C7-PFUnDA	108%		20-150%
	13C2-PFDoDA	81%		20-150%
	13C2-PFTeDA	43%		20-150%
	13C3-PFBS	109%		20-150%
	13C3-PFHxS	105%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PATTERSON LAKE		
Lab Sample ID:	FC8270-2	**Date Sampled:**	07/25/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		20-150%
	13C8-FOSA	82%		20-150%
	d3-MeFOSA	87%		20-150%
	d5-EtFOSA	67%		20-150%
	d3-MeFOSAA	94%		20-150%
	d5-EtFOSAA	98%		20-150%
	d7-MeFOSE	56%		20-150%
	d9-EtFOSE	50%		20-150%
	13C2-4:2FTS	113%		20-180%
	13C2-6:2FTS	97%		20-180%
	13C2-8:2FTS	77%		20-180%
	13C3-HFPO-DA	101%		20-150%

(a) Associated Low Level BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PATTERSON LAKE DUPLICATE		
Lab Sample ID:	FC8270-3	**Date Sampled:**	07/25/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49458.D	1	08/24/23 19:34	AL	08/19/23 09:55	OP98527	S4Q724
Run #2							

	Initial Volume	Final Volume
Run #1	485 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.2	4.1	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.1	0.52	ng/l	
375-85-9	Perfluoroheptanoic acid	1.4	2.1	0.52	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.1	0.52	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.63	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.52	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.62	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.62	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.87	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.52	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid [a]	ND	2.1	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid [a]	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PATTERSON LAKE DUPLICATE		
Lab Sample ID:	FC8270-3	**Date Sampled:**	07/25/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.1	ng/l	
919005-14-4	ADONA	ND	8.2	2.1	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.1	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.2	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	55%		20-150%
	13C5-PFPeA	116%		20-150%
	13C5-PFHxA	140%		20-150%
	13C4-PFHpA	128%		20-150%
	13C8-PFOA	117%		20-150%
	13C9-PFNA	108%		20-150%
	13C6-PFDA	139%		20-150%
	13C7-PFUnDA	139%		20-150%
	13C2-PFDoDA	101%		20-150%
	13C2-PFTeDA	70%		20-150%
	13C3-PFBS	122%		20-150%
	13C3-PFHxS	119%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PATTERSON LAKE DUPLICATE		
Lab Sample ID:	FC8270-3	**Date Sampled:**	07/25/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	104%		20-150%
	13C8-FOSA	102%		20-150%
	d3-MeFOSA	93%		20-150%
	d5-EtFOSA	65%		20-150%
	d3-MeFOSAA	105%		20-150%
	d5-EtFOSAA	110%		20-150%
	d7-MeFOSE	68%		20-150%
	d9-EtFOSE	62%		20-150%
	13C2-4:2FTS	130%		20-180%
	13C2-6:2FTS	108%		20-180%
	13C2-8:2FTS	85%		20-180%
	13C3-HFPO-DA	103%		20-150%

(a) Associated Low Level BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380860 OPLAND DAM		
Lab Sample ID:	FC8270-4	**Date Sampled:**	07/25/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49461.D	1	08/24/23 20:18	AL	08/19/23 09:55	OP98527	S4Q724
Run #2 [a]	4Q49512.D	5	08/25/23 13:36	AL	08/19/23 09:55	OP98527	S4Q725

	Initial Volume	Final Volume
Run #1	490 ml	5.0 ml
Run #2	490 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND	8.2	4.1	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	2.2	2.0	0.51	ng/l	
375-85-9	Perfluoroheptanoic acid	1.4	2.0	0.51	ng/l	J
335-67-1	Perfluorooctanoic acid	1.9	2.0	0.51	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.86	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	1.1	2.0	1.0	ng/l	J
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid [c]	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid [c]	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380860 OPLAND DAM		
Lab Sample ID:	FC8270-4	**Date Sampled:**	07/25/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.0	ng/l	
919005-14-4	ADONA	ND	8.2	2.0	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.0	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13% [d]	12% [d]	20-150%
	13C5-PFPeA	76%	79%	20-150%
	13C5-PFHxA	128%	109%	20-150%
	13C4-PFHpA	119%	111%	20-150%
	13C8-PFOA	110%	100%	20-150%
	13C9-PFNA	97%	108%	20-150%
	13C6-PFDA	115%	97%	20-150%
	13C7-PFUnDA	115%	86%	20-150%
	13C2-PFDoDA	77%	76%	20-150%
	13C2-PFTeDA	40%	32%	20-150%
	13C3-PFBS	101%	121%	20-150%
	13C3-PFHxS	107%	102%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380860 OPLAND DAM		
Lab Sample ID:	FC8270-4	**Date Sampled:**	07/25/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%	110%	20-150%
	13C8-FOSA	92%	107%	20-150%
	d3-MeFOSA	95%	106%	20-150%
	d5-EtFOSA	74%	85%	20-150%
	d3-MeFOSAA	101%	99%	20-150%
	d5-EtFOSAA	92%	114%	20-150%
	d7-MeFOSE	59%	71%	20-150%
	d9-EtFOSE	50%	62%	20-150%
	13C2-4:2FTS	121%	150%	20-180%
	13C2-6:2FTS	107%	134%	20-180%
	13C2-8:2FTS	75%	106%	20-180%
	13C3-HFPO-DA	96%	90%	20-150%

(a) Confirmation run.
(b) Associated ID Standard outside control limits.
(c) Associated Low Level BS outside of control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BOWMAN-HALEY DAM		
Lab Sample ID:	FC8270-5	**Date Sampled:**	07/27/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49462.D	1	08/24/23 20:33	AL	08/19/23 09:55	OP98527	S4Q724
Run #2 [a]	4Q49513.D	5	08/25/23 13:50	AL	08/19/23 09:55	OP98527	S4Q725

	Initial Volume	Final Volume
Run #1	460 ml	5.0 ml
Run #2	460 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND	8.7	4.3	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.3	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	1.4	2.2	0.54	ng/l	J
375-85-9	Perfluoroheptanoic acid	2.0	2.2	0.54	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.2	0.54	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	0.66	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.54	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.65	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.65	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.91	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.54	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid [c]	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid [c]	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.7	4.3	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.7	4.3	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.7	4.5	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BOWMAN-HALEY DAM		
Lab Sample ID:	FC8270-5	**Date Sampled:**	07/27/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.7	2.2	ng/l	
919005-14-4	ADONA	ND	8.7	2.2	ng/l	
377-73-1	PFMPA	ND	4.3	1.1	ng/l	
863090-89-5	PFMBA	ND	4.3	1.2	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.7	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.7	2.2	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.4	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	54	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	54	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	11% [d]	10% [d]	20-150%
	13C5-PFPeA	77%	76%	20-150%
	13C5-PFHxA	131%	105%	20-150%
	13C4-PFHpA	122%	111%	20-150%
	13C8-PFOA	111%	103%	20-150%
	13C9-PFNA	101%	112%	20-150%
	13C6-PFDA	114%	112%	20-150%
	13C7-PFUnDA	122%	103%	20-150%
	13C2-PFDoDA	82%	82%	20-150%
	13C2-PFTeDA	43%	37%	20-150%
	13C3-PFBS	114%	95%	20-150%
	13C3-PFHxS	108%	87%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BOWMAN-HALEY DAM		
Lab Sample ID:	FC8270-5	**Date Sampled:**	07/27/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	111%	114%	20-150%
	13C8-FOSA	78%	79%	20-150%
	d3-MeFOSA	97%	86%	20-150%
	d5-EtFOSA	79%	93%	20-150%
	d3-MeFOSAA	113%	92%	20-150%
	d5-EtFOSAA	112%	113%	20-150%
	d7-MeFOSE	58%	62%	20-150%
	d9-EtFOSE	56%	62%	20-150%
	13C2-4:2FTS	117%	118%	20-180%
	13C2-6:2FTS	107%	145%	20-180%
	13C2-8:2FTS	85%	108%	20-180%
	13C3-HFPO-DA	101%	87%	20-150%

(a) Confirmation run.
(b) Associated ID Standard outside control limits.
(c) Associated Low Level BS outside of control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380630 MIRROR LAKE		
Lab Sample ID:	FC8270-6	**Date Sampled:**	07/27/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49463.D	1	08/24/23 20:48	AL	08/19/23 09:55	OP98527	S4Q724
Run #2 [a]	4Q49514.D	5	08/25/23 14:05	AL	08/19/23 09:55	OP98527	S4Q725

	Initial Volume	Final Volume
Run #1	460 ml	5.0 ml
Run #2	460 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND	8.7	4.3	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.3	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.2	0.54	ng/l	
375-85-9	Perfluoroheptanoic acid	1.2	2.2	0.54	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.2	0.54	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	0.66	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.54	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.65	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.65	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.91	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.54	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid [c]	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid [c]	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.7	4.3	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.7	4.3	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.7	4.5	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380630 MIRROR LAKE		
Lab Sample ID:	FC8270-6	**Date Sampled:**	07/27/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.7	2.2	ng/l	
919005-14-4	ADONA	ND	8.7	2.2	ng/l	
377-73-1	PFMPA	ND	4.3	1.1	ng/l	
863090-89-5	PFMBA	ND	4.3	1.2	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.7	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.7	2.2	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.4	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	54	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	54	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18% [d]	16% [d]	20-150%
	13C5-PFPeA	87%	91%	20-150%
	13C5-PFHxA	124%	108%	20-150%
	13C4-PFHpA	115%	111%	20-150%
	13C8-PFOA	112%	110%	20-150%
	13C9-PFNA	87%	116%	20-150%
	13C6-PFDA	106%	97%	20-150%
	13C7-PFUnDA	107%	98%	20-150%
	13C2-PFDoDA	76%	78%	20-150%
	13C2-PFTeDA	47%	38%	20-150%
	13C3-PFBS	113%	109%	20-150%
	13C3-PFHxS	109%	105%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380630 MIRROR LAKE		
Lab Sample ID:	FC8270-6	**Date Sampled:**	07/27/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%	94%	20-150%
	13C8-FOSA	90%	95%	20-150%
	d3-MeFOSA	93%	88%	20-150%
	d5-EtFOSA	70%	87%	20-150%
	d3-MeFOSAA	98%	91%	20-150%
	d5-EtFOSAA	96%	100%	20-150%
	d7-MeFOSE	56%	61%	20-150%
	d9-EtFOSE	52%	56%	20-150%
	13C2-4:2FTS	133%	141%	20-180%
	13C2-6:2FTS	120%	127%	20-180%
	13C2-8:2FTS	75%	106%	20-180%
	13C3-HFPO-DA	96%	87%	20-150%

(a) Confirmation run.
(b) Associated ID Standard outside control limits.
(c) Associated Low Level BS outside of control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380950-TSCHIDA-DEEPEST		
Lab Sample ID:	FC8270-7	**Date Sampled:**	07/27/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49464.D	1	08/24/23 21:02	AL	08/19/23 09:55	OP98527	S4Q724
Run #2 [a]	4Q49515.D	5	08/25/23 14:20	AL	08/19/23 09:55	OP98527	S4Q725

	Initial Volume	Final Volume
Run #1	460 ml	5.0 ml
Run #2	460 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND	8.7	4.3	ng/l	
2706-90-3	Perfluoropentanoic acid	2.1	4.3	1.1	ng/l	J
307-24-4	Perfluorohexanoic acid	1.3	2.2	0.54	ng/l	J
375-85-9	Perfluoroheptanoic acid	1.2	2.2	0.54	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.2	0.54	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	0.66	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.54	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.65	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.65	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.91	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.54	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid [c]	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid [c]	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.7	4.3	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.7	4.3	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.7	4.5	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380950-TSCHIDA-DEEPEST		
Lab Sample ID:	FC8270-7	**Date Sampled:**	07/27/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.7	2.2	ng/l	
919005-14-4	ADONA	ND	8.7	2.2	ng/l	
377-73-1	PFMPA	ND	4.3	1.1	ng/l	
863090-89-5	PFMBA	ND	4.3	1.2	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.7	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.7	2.2	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.4	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	54	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	54	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18% [d]	16% [d]	20-150%
	13C5-PFPeA	89%	92%	20-150%
	13C5-PFHxA	117%	104%	20-150%
	13C4-PFHpA	113%	109%	20-150%
	13C8-PFOA	105%	108%	20-150%
	13C9-PFNA	95%	114%	20-150%
	13C6-PFDA	108%	117%	20-150%
	13C7-PFUnDA	102%	88%	20-150%
	13C2-PFDoDA	67%	82%	20-150%
	13C2-PFTeDA	59%	54%	20-150%
	13C3-PFBS	103%	113%	20-150%
	13C3-PFHxS	100%	104%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380950-TSCHIDA-DEEPEST		
Lab Sample ID:	FC8270-7	**Date Sampled:**	07/27/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%	90%	20-150%
	13C8-FOSA	93%	84%	20-150%
	d3-MeFOSA	91%	87%	20-150%
	d5-EtFOSA	71%	74%	20-150%
	d3-MeFOSAA	95%	99%	20-150%
	d5-EtFOSAA	89%	85%	20-150%
	d7-MeFOSE	60%	59%	20-150%
	d9-EtFOSE	54%	59%	20-150%
	13C2-4:2FTS	104%	147%	20-180%
	13C2-6:2FTS	93%	159%	20-180%
	13C2-8:2FTS	73%	124%	20-180%
	13C3-HFPO-DA	97%	92%	20-150%

(a) Confirmation run.
(b) Associated ID Standard outside control limits.
(c) Associated Low Level BS outside of control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380840-NELSON LAKE-DEEPEST		
Lab Sample ID:	FC8270-8	**Date Sampled:**	07/28/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49465.D	1	08/24/23 21:17	AL	08/19/23 09:55	OP98527	S4Q724
Run #2 [a]	4Q49516.D	5	08/25/23 14:35	AL	08/19/23 09:55	OP98527	S4Q725

	Initial Volume	Final Volume
Run #1	465 ml	5.0 ml
Run #2	465 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND	8.6	4.3	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.3	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	1.6	2.2	0.54	ng/l	J
375-85-9	Perfluoroheptanoic acid	1.9	2.2	0.54	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.2	0.54	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	0.66	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.54	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.65	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.65	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.90	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.54	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid [c]	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid [c]	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.6	4.3	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.6	4.3	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.6	4.4	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380840-NELSON LAKE-DEEPEST		
Lab Sample ID:	FC8270-8	**Date Sampled:**	07/28/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.6	2.2	ng/l	
919005-14-4	ADONA	ND	8.6	2.2	ng/l	
377-73-1	PFMPA	ND	4.3	1.1	ng/l	
863090-89-5	PFMBA	ND	4.3	1.2	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.6	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.6	2.2	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.4	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	54	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	54	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14% [d]	12% [d]	20-150%
	13C5-PFPeA	92%	82%	20-150%
	13C5-PFHxA	142%	108%	20-150%
	13C4-PFHpA	128%	114%	20-150%
	13C8-PFOA	120%	104%	20-150%
	13C9-PFNA	102%	91%	20-150%
	13C6-PFDA	133%	120%	20-150%
	13C7-PFUnDA	129%	104%	20-150%
	13C2-PFDoDA	89%	94%	20-150%
	13C2-PFTeDA	78%	57%	20-150%
	13C3-PFBS	121%	105%	20-150%
	13C3-PFHxS	120%	95%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380840-NELSON LAKE-DEEPEST		
Lab Sample ID:	FC8270-8	**Date Sampled:**	07/28/23
Matrix:	AQ - Surface Water	**Date Received:**	07/29/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	115%	107%	20-150%
	13C8-FOSA	101%	94%	20-150%
	d3-MeFOSA	118%	90%	20-150%
	d5-EtFOSA	79%	90%	20-150%
	d3-MeFOSAA	99%	89%	20-150%
	d5-EtFOSAA	106%	87%	20-150%
	d7-MeFOSE	77%	79%	20-150%
	d9-EtFOSE	73%	73%	20-150%
	13C2-4:2FTS	143%	105%	20-180%
	13C2-6:2FTS	113%	142%	20-180%
	13C2-8:2FTS	86%	112%	20-180%
	13C3-HFPO-DA	109%	89%	20-150%

(a) Confirmation run.
(b) Associated ID Standard outside control limits.
(c) Associated Low Level BS outside of control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # SKIFF # FC8270

Client / Reporting Information		Project Information		Analytical Information	Matrix Codes
Company Name: ND Department of Environ. Quality		Project Name: NDDEQ PFAS			DW - Drinking Water
Address: 4201 Normandy St.		Street 4201 Normandy St.			GW - Ground Water
City: Bismarck State: ND Zip: 58503		City Bismarck State ND			WW - Water
Project Contact: SSUGGS Email: SSUGGS@nd.gov		Project #			SW - Surface Water
Phone #: 701-328-6409		Fax #			SO - Soil
Sampler(s) Name(s) (Printed) Sampler 1: Emily Braun Sampler 2:		Client Purchase Order #			SL- Sludge
					OI - Oil
					LIQ - Other Liquid
					AIR - Air
					SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	CONTAINER INFORMATION TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LCIDIG33LIST 40	LAB USE ONLY
1B 1	Patterson Lake Blank	7/25/23	7:45	EB	WATER	3										X	
1 2	Patterson Lake	7/25/23	7:50	EB	SW	3										X	
1D 3	Patterson Lake Duplicate	7/25/23	7:55	EB	SW	3										X	
2 4	380860 Oahnd Dam	7/25/23	11:05	EB	SW	3										X	SP
3 5	Bowman-Haley Dam	7/24/23	9:45	EB	SW	3										X	
4 6	380630 MIRROR LAKE	7/27/23	12:10	EB	SW	3										X	
57	380950 -Tschida-deepest	7/28/23	17:00	EB	SW	3										X	
68	380840 -Nelson Lake-deepest	7/28/23	10:00	EB	SW	3										X	
SP																	

INITIAL ASSESSMENT SP

LABEL VERIFICATION SP

Turnaround Time (Business days)		Data Deliverable Information	Comments / Remarks
10 Day (Business)	Approved By: / Date:	☐ COMMERCIAL "A" (RESULTS ONLY)	
7 Day		☐ COMMERCIAL "B" (RESULTS PLUS QC)	
5 Day		☐ REDT1 (EPA LEVEL 3)	
3 Day *RUSH*		☐ FULLT1 (EPA LEVEL 4)	
2 Day *RUSH*		☐ EDD'S	
1 Day *RUSH*			
Other			

Rush T/A Data Available VIA Email or Lablink

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 SSUGGS	7/28	2 FEDEX	3 FX		4 07/29/23 0930
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 2.8 TLH

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

FC8270: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC8270 **Client:** NDDEQ **Project:** NDDEQ PFAS

Date / Time Received: 7/29/2023 9:30:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7817 6425 3160

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (2.8);

Cooler Temps (Corrected) °C: Cooler 1: (2.6);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____

Number of 5035 Field Kits: _____

Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230320 pH 10-12 _____

Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP Date: 7/29/2023 9:30:00 AM Reviewer: _____ Date: _____

FC8270: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC8270
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-MB	4Q49455.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8270-1, FC8270-2, FC8270-3, FC8270-4, FC8270-5, FC8270-6, FC8270-7, FC8270-8

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	0.00090	0.0020	0.00050	ug/l	J
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC8270
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-MB	4Q49455.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8270-1, FC8270-2, FC8270-3, FC8270-4, FC8270-5, FC8270-6, FC8270-7, FC8270-8

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	118%	20-150%
	13C5-PFPeA	112%	20-150%
	13C5-PFHxA	125%	20-150%
	13C4-PFHpA	112%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	97%	20-150%
	13C6-PFDA	108%	20-150%
	13C7-PFUnDA	118%	20-150%
	13C2-PFDoDA	93%	20-150%
	13C2-PFTeDA	97%	20-150%
	13C3-PFBS	112%	20-150%
	13C3-PFHxS	107%	20-150%
	13C8-PFOS	96%	20-150%
	13C8-FOSA	65%	20-150%
	d3-MeFOSA	79%	20-150%
	d5-EtFOSA	71%	20-150%
	d3-MeFOSAA	108%	20-150%
	d5-EtFOSAA	110%	20-150%
	d7-MeFOSE	66%	20-150%
	d9-EtFOSE	69%	20-150%
	13C2-4:2FTS	127%	20-180%
	13C2-6:2FTS	140%	20-180%
	13C2-8:2FTS	124%	20-180%
	13C3-HFPO-DA	98%	20-150%

Instrument Blank

Job Number: FC8270
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-IBLK	4Q49434.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8270-1, FC8270-2, FC8270-3, FC8270-4, FC8270-5, FC8270-6, FC8270-7, FC8270-8

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	0.0032	0.0080	0.0010	ug/l	J
4151-50-2	EtFOSA	0.0047	0.0080	0.0010	ug/l	J
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	0.0069	0.040	0.0044	ug/l	J
1691-99-2	EtFOSE	0.0094	0.040	0.0074	ug/l	J
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC8270
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-IBLK	4Q49434.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8270-1, FC8270-2, FC8270-3, FC8270-4, FC8270-5, FC8270-6, FC8270-7, FC8270-8

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	104%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	106%	20-150%
	13C6-PFDA	101%	20-150%
	13C7-PFUnDA	106%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	115%	20-150%
	13C3-PFBS	98%	20-150%
	13C3-PFHxS	89%	20-150%
	13C8-PFOS	94%	20-150%
	13C8-FOSA	112%	20-150%
	d3-MeFOSAA	114%	20-150%
	d5-EtFOSAA	113%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	116%	20-180%
	13C2-8:2FTS	111%	20-180%

Continuing Calibration Blank

Job Number: FC8270
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49448.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8270-1, FC8270-2, FC8270-3

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8270
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49448.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8270-1, FC8270-2, FC8270-3

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	107%	20-150%
	13C5-PFPeA	100%	20-150%
	13C5-PFHxA	108%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	89%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	116%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	115%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	103%	20-150%
	13C8-PFOS	92%	20-150%
	13C8-FOSA	93%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	106%	20-150%
	13C2-4:2FTS	113%	20-180%
	13C2-6:2FTS	126%	20-180%
	13C2-8:2FTS	110%	20-180%

Continuing Calibration Blank

Job Number: FC8270
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49460.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8270-4, FC8270-5, FC8270-6, FC8270-7, FC8270-8

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8270
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49460.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8270-4, FC8270-5, FC8270-6, FC8270-7, FC8270-8

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	107%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	112%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	94%	20-150%
	13C9-PFNA	88%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	113%	20-150%
	13C2-PFDoDA	103%	20-150%
	13C2-PFTeDA	115%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	97%	20-150%
	13C8-PFOS	88%	20-150%
	13C8-FOSA	87%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	102%	20-150%
	13C2-4:2FTS	108%	20-180%
	13C2-6:2FTS	116%	20-180%
	13C2-8:2FTS	117%	20-180%

Blank Spike Summary

Job Number: FC8270
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-LLBS	4Q49454.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8270-1, FC8270-2, FC8270-3, FC8270-4, FC8270-5, FC8270-6, FC8270-7, FC8270-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0186	116	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0101	126	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0056	140	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0045	113	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0052	130	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0054	135	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0048	120	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0047	118	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0047	118	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0052	130	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0042	105	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0052	147	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0052	138	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0054	148	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0058	152*	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0048	129	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0060	156*	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0052	135	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0040	103	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0198	132	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0189	124	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0202	132	40-150
754-91-6	PFOSA	0.004	0.0050	125	40-150
31506-32-8	MeFOSA	0.008	0.0085	106	40-150
4151-50-2	EtFOSA	0.008	0.0110	138	40-150
2355-31-9	MeFOSAA	0.004	0.0045	113	40-150
2991-50-6	EtFOSAA	0.004	0.0044	110	40-150
24448-09-7	MeFOSE	0.02	0.0251	126	40-150
1691-99-2	EtFOSE	0.02	0.0279	140	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0090	113	40-150
919005-14-4	ADONA	0.00756	0.0100	132	40-150
377-73-1	PFMPA	0.008	0.0092	115	40-150
863090-89-5	PFMBA	0.008	0.0096	120	40-150
151772-58-6	NFDHA	0.008	0.0085	106	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0107	143	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0088	116	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8270
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-LLBS	4Q49454.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8270-1, FC8270-2, FC8270-3, FC8270-4, FC8270-5, FC8270-6, FC8270-7, FC8270-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0071	100	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0176	88	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.108	108	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.110	110	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	114%	20-150%
	13C5-PFPeA	107%	20-150%
	13C5-PFHxA	119%	20-150%
	13C4-PFHpA	111%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	107%	20-150%
	13C7-PFUnDA	117%	20-150%
	13C2-PFDoDA	91%	20-150%
	13C2-PFTeDA	90%	20-150%
	13C3-PFBS	109%	20-150%
	13C3-PFHxS	105%	20-150%
	13C8-PFOS	93%	20-150%
	13C8-FOSA	70%	20-150%
	d3-MeFOSA	77%	20-150%
	d5-EtFOSA	64%	20-150%
	d3-MeFOSAA	102%	20-150%
	d5-EtFOSAA	107%	20-150%
	d7-MeFOSE	65%	20-150%
	d9-EtFOSE	69%	20-150%
	13C2-4:2FTS	121%	20-180%
	13C2-6:2FTS	133%	20-180%
	13C2-8:2FTS	119%	20-180%
	13C3-HFPO-DA	93%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8270
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-BS	4Q49453.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8270-1, FC8270-2, FC8270-3, FC8270-4, FC8270-5, FC8270-6, FC8270-7, FC8270-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.126	126	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0671	134	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0304	122	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0311	124	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0353	141	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0363	145	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0355	142	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0297	119	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0328	131	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0330	132	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0303	121	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0306	138	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0326	139	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0337	147	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0328	138	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0302	130	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0349	145	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0315	131	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0275	113	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.126	134	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.114	120	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.125	130	40-150
754-91-6	PFOSA	0.025	0.0356	142	40-150
31506-32-8	MeFOSA	0.05	0.0582	116	40-150
4151-50-2	EtFOSA	0.05	0.0690	138	40-150
2355-31-9	MeFOSAA	0.025	0.0322	129	40-150
2991-50-6	EtFOSAA	0.025	0.0318	127	40-150
24448-09-7	MeFOSE	0.125	0.155	124	40-150
1691-99-2	EtFOSE	0.125	0.177	142	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0605	121	40-150
919005-14-4	ADONA	0.0473	0.0711	150	40-150
377-73-1	PFMPA	0.05	0.0344	69	40-150
863090-89-5	PFMBA	0.05	0.0635	127	40-150
151772-58-6	NFDHA	0.05	0.0477	95	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0698	149	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0623	132	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8270
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-BS	4Q49453.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8270-1, FC8270-2, FC8270-3, FC8270-4, FC8270-5, FC8270-6, FC8270-7, FC8270-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0471	106	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.177	142	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.738	118	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.759	121	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	38%	20-150%
	13C5-PFPeA	109%	20-150%
	13C5-PFHxA	125%	20-150%
	13C4-PFHpA	112%	20-150%
	13C8-PFOA	108%	20-150%
	13C9-PFNA	88%	20-150%
	13C6-PFDA	110%	20-150%
	13C7-PFUnDA	121%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	96%	20-150%
	13C3-PFBS	113%	20-150%
	13C3-PFHxS	108%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	78%	20-150%
	d3-MeFOSA	91%	20-150%
	d5-EtFOSA	73%	20-150%
	d3-MeFOSAA	100%	20-150%
	d5-EtFOSAA	107%	20-150%
	d7-MeFOSE	70%	20-150%
	d9-EtFOSE	72%	20-150%
	13C2-4:2FTS	114%	20-180%
	13C2-6:2FTS	134%	20-180%
	13C2-8:2FTS	122%	20-180%
	13C3-HFPO-DA	94%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC8270
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-MS	4Q49467.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724
FC8472-1	4Q49466.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8270-1, FC8270-2, FC8270-3, FC8270-4, FC8270-5, FC8270-6, FC8270-7, FC8270-8

CAS No.	Compound	FC8472-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	ND		0.104	0.129	124	40-150
2706-90-3	Perfluoropentanoic acid	ND		0.0521	0.0717	138	40-150
307-24-4	Perfluorohexanoic acid	ND		0.026	0.0302	116	40-150
375-85-9	Perfluoroheptanoic acid	ND		0.026	0.0324	124	40-150
335-67-1	Perfluorooctanoic acid	ND		0.026	0.0357	137	40-150
375-95-1	Perfluorononanoic acid	ND		0.026	0.0383	147	40-150
335-76-2	Perfluorodecanoic acid	ND		0.026	0.0342	131	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.026	0.0304	117	40-150
307-55-1	Perfluorododecanoic acid	ND		0.026	0.0353	136	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.026	0.0373	143	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.026	0.0296	114	40-150
375-73-5	Perfluorobutanesulfonic acid	ND		0.0231	0.0329	142	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0245	0.0333	136	40-150
355-46-4	Perfluorohexanesulfonic acid	ND		0.0238	0.0330	139	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0248	0.0349	141	40-150
1763-23-1	Perfluorooctanesulfonic acid	ND		0.0242	0.0293	121	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.0251	0.0334	133	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.0251	0.0296	118	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0253	0.0266	105	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0977	0.134	137	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.099	0.115	116	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.1	0.130	130	40-150
754-91-6	PFOSA	ND		0.026	0.0360	138	40-150
31506-32-8	MeFOSA	ND		0.0521	0.0600	115	40-150
4151-50-2	EtFOSA	ND		0.0521	0.0676	130	40-150
2355-31-9	MeFOSAA	ND		0.026	0.0310	119	40-150
2991-50-6	EtFOSAA	ND		0.026	0.0353	136	40-150
24448-09-7	MeFOSE	ND		0.13	0.161	124	40-150
1691-99-2	EtFOSE	ND		0.13	0.181	139	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.0521	0.0625	120	40-150
919005-14-4	ADONA	ND		0.0492	0.0718	146	40-150
377-73-1	PFMPA	ND		0.0521	0.0651	125	40-150
863090-89-5	PFMBA	ND		0.0521	0.0661	127	40-150
151772-58-6	NFDHA	ND		0.0521	0.0532	102	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0487	0.0681	140	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0492	0.0560	114	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC8270
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-MS	4Q49467.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724
FC8472-1	4Q49466.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8270-1, FC8270-2, FC8270-3, FC8270-4, FC8270-5, FC8270-6, FC8270-7, FC8270-8

CAS No.	Compound	FC8472-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	ND		0.0464	0.0506	109	40-150
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.13	0.123	94	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.651	0.786	121	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.651	0.789	121	40-150

CAS No.	ID Standard Recoveries	MS	FC8472-1	Limits
	13C4-PFBA	110%	114%	20-150%
	13C5-PFPeA	100%	104%	20-150%
	13C5-PFHxA	114%	121%	20-150%
	13C4-PFHpA	103%	108%	20-150%
	13C8-PFOA	104%	103%	20-150%
	13C9-PFNA	87%	86%	20-150%
	13C6-PFDA	104%	107%	20-150%
	13C7-PFUnDA	107%	106%	20-150%
	13C2-PFDoDA	80%	84%	20-150%
	13C2-PFTeDA	86%	86%	20-150%
	13C3-PFBS	102%	106%	20-150%
	13C3-PFHxS	98%	104%	20-150%
	13C8-PFOS	92%	98%	20-150%
	13C8-FOSA	67%	67%	20-150%
	d3-MeFOSA	68%	66%	20-150%
	d5-EtFOSA	58%	60%	20-150%
	d3-MeFOSAA	98%	96%	20-150%
	d5-EtFOSAA	92%	88%	20-150%
	d7-MeFOSE	57%	60%	20-150%
	d9-EtFOSE	56%	61%	20-150%
	13C2-4:2FTS	104%	114%	20-180%
	13C2-6:2FTS	132%	118%	20-180%
	13C2-8:2FTS	109%	109%	20-180%
	13C3-HFPO-DA	90%	94%	20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC8270
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-DUP	4Q49469.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724
FC8472-2	4Q49468.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8270-1, FC8270-2, FC8270-3, FC8270-4, FC8270-5, FC8270-6, FC8270-7, FC8270-8

CAS No.	Compound	FC8472-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	ND		ND		nc	30
2706-90-3	Perfluoropentanoic acid	ND		ND		nc	30
307-24-4	Perfluorohexanoic acid	0.0032		0.0032		0	30
375-85-9	Perfluoroheptanoic acid	ND		ND		nc	30
335-67-1	Perfluorooctanoic acid	0.0029		0.0030		3	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	0.0012	J	0.0012	J	0	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC8270
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-DUP	4Q49469.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724
FC8472-2	4Q49468.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8270-1, FC8270-2, FC8270-3, FC8270-4, FC8270-5, FC8270-6, FC8270-7, FC8270-8

CAS No.	Compound	FC8472-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC8472-2	Limits
	13C4-PFBA	111%	115%	20-150%
	13C5-PFPeA	104%	106%	20-150%
	13C5-PFHxA	116%	122%	20-150%
	13C4-PFHpA	105%	110%	20-150%
	13C8-PFOA	102%	108%	20-150%
	13C9-PFNA	88%	87%	20-150%
	13C6-PFDA	106%	109%	20-150%
	13C7-PFUnDA	116%	114%	20-150%
	13C2-PFDoDA	91%	90%	20-150%
	13C2-PFTeDA	80%	78%	20-150%
	13C3-PFBS	103%	101%	20-150%
	13C3-PFHxS	100%	105%	20-150%
	13C8-PFOS	98%	86%	20-150%
	13C8-FOSA	68%	66%	20-150%
	d3-MeFOSA	77%	69%	20-150%
	d5-EtFOSA	57%	52%	20-150%
	d3-MeFOSAA	98%	92%	20-150%
	d5-EtFOSAA	91%	84%	20-150%
	d7-MeFOSE	60%	57%	20-150%
	d9-EtFOSE	57%	55%	20-150%
	13C2-4:2FTS	116%	118%	20-180%
	13C2-6:2FTS	121%	130%	20-180%
	13C2-8:2FTS	111%	102%	20-180%
	13C3-HFPO-DA	92%	97%	20-150%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC8036

Sampling Dates: 07/17/23 - 07/19/23



Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
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ATTN: Shannon Suggs

Total number of pages in report: 54

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

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Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC8036

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
FC8036-1	07/17/23	15:30	LH	07/21/23	AQ	Water	SHEVENNE TOOLING
FC8036-2	07/18/23	10:05	LH	07/21/23	AQ	Water	MALACH USA
FC8036-3	07/18/23	15:43	LH	07/21/23	AQ	Water	TRI W-G
FC8036-4	07/19/23	11:30	LH	07/21/23	AQ	Water	JOHN DEERE

Summary of Hits

Job Number: FC8036
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 07/17/23 thru 07/19/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC8036-1	**SHEVENNE TOOLING**					
Perfluorohexanoic acid		1.3 J	1.9	0.49	ng/l	EPA DRAFT 1633
Perfluorononanoic acid		0.86 J	1.9	0.59	ng/l	EPA DRAFT 1633
FC8036-2	**MALACH USA**					
No hits reported in this sample.						
FC8036-3	**TRI W-G**					
Perfluorohexanoic acid		2.3	2.2	0.54	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.8 J	2.2	0.54	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.8 J	2.2	0.54	ng/l	EPA DRAFT 1633
Perfluorononanoic acid		1.6 J	2.2	0.66	ng/l	EPA DRAFT 1633
Perfluorodecanoic acid		1.1 J	2.2	0.54	ng/l	EPA DRAFT 1633
Perfluoroundecanoic acid		0.84 J	2.2	0.65	ng/l	EPA DRAFT 1633
Perfluorododecanoic acid		0.90 J	2.2	0.65	ng/l	EPA DRAFT 1633
Perfluorotridecanoic acid		1.1 J	2.2	0.91	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		1.6 J	2.2	1.1	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		2.1 J	2.2	1.1	ng/l	EPA DRAFT 1633
FC8036-4	**JOHN DEERE**					
Perfluorohexanoic acid		18.0	2.1	0.52	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		4.6	2.1	0.52	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		2.0 J	2.1	0.52	ng/l	EPA DRAFT 1633
Perfluorodecanoic acid		0.65 J	2.1	0.52	ng/l	EPA DRAFT 1633
6:2 Fluorotelomer sulfonate		5.4 J	8.3	4.2	ng/l	EPA DRAFT 1633

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	SHEVENNE TOOLING		
Lab Sample ID:	FC8036-1	**Date Sampled:**	07/17/23
Matrix:	AQ - Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q23008.D	1	08/16/23 04:42	MV	08/09/23 09:40	OP98329	S6Q333
Run #2	4Q49200.D	1	08/20/23 21:04	MV	08/18/23 11:05	OP98507	S4Q721
Run #3 [a]	6Q23009.D	10	08/16/23 04:56	MV	08/09/23 09:40	OP98329	S6Q333
Run #4 [a]	4Q49201.D	10	08/20/23 21:19	MV	08/18/23 11:05	OP98507	S4Q721

	Initial Volume	Final Volume
Run #1	515 ml	5.0 ml
Run #2	65.0 ml	5.0 ml
Run #3	515 ml	5.0 ml
Run #4	65.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND [c]	62	31	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.9	0.97	ng/l	
307-24-4	Perfluorohexanoic acid	1.3	1.9	0.49	ng/l	J
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.49	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.49	ng/l	
375-95-1	Perfluorononanoic acid	0.86	1.9	0.59	ng/l	J
335-76-2	Perfluorodecanoic acid	ND	1.9	0.49	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.82	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.49	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.97	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.97	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.97	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.97	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.97	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.97	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate [d]	ND [e]	620	310	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND [f]	78	40	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SHEVENNE TOOLING		
Lab Sample ID:	FC8036-1	**Date Sampled:**	07/17/23
Matrix:	AQ - Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.97	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.97	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.97	ng/l	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND [f]	19	9.7	ng/l	
2991-50-6	EtFOSAA	ND [f]	19	13	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.7	ng/l	
1691-99-2	EtFOSE	ND	19	9.7	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.8	1.9	ng/l	
919005-14-4	ADONA	ND	7.8	1.9	ng/l	
377-73-1	PFMPA	ND	3.9	0.97	ng/l	
863090-89-5	PFMBA	ND	3.9	1.1	ng/l	
151772-58-6	NFDHA	ND	3.9	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.8	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.8	1.9	ng/l	
113507-82-7	PFEESA	ND	3.9	0.97	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.7	4.9	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	49	9.7	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	49	9.7	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C4-PFBA	7% [g]	61%	7% [g]	20-150%
	13C5-PFPeA	23%	84%	20%	20-150%
	13C5-PFHxA	77%	91%	70%	20-150%
	13C4-PFHpA	104%	88%	103%	20-150%
	13C8-PFOA	114%	87%	95%	20-150%
	13C9-PFNA	108%	80%	91%	20-150%
	13C6-PFDA	112%	77%	96%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SHEVENNE TOOLING		
Lab Sample ID:	FC8036-1	**Date Sampled:**	07/17/23
Matrix:	AQ - Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C7-PFUnDA	99%	77%	96%	20-150%
	13C2-PFDoDA	92%	65%	78%	20-150%
	13C2-PFTeDA	52%	49%	53%	20-150%
	13C3-PFBS	124%	93%	89%	20-150%
	13C3-PFHxS	108%	84%	107%	20-150%
	13C8-PFOS	100%	73%	104%	20-150%
	13C8-FOSA	84%	73%	77%	20-150%
	d3-MeFOSA	68%	62%	67%	20-150%
	d5-EtFOSA	68%	56%	69%	20-150%
	d3-MeFOSAA	172% g	128%	118%	20-150%
	d5-EtFOSAA	171% g	115%	98%	20-150%
	d7-MeFOSE	70%	71%	70%	20-150%
	d9-EtFOSE	70%	66%	75%	20-150%
	13C2-4:2FTS	95%	389% g	36%	20-180%
	13C2-6:2FTS	385% g	400% g	337% g	20-180%
	13C2-8:2FTS	289% g	218% g	109%	20-180%
	13C3-HFPO-DA	44%	62%	53%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Associated NIS Standard outside control limits.
(c) Result is from Run# 2
(d) Associated ID Standard outside control limits. Confirmed by re-extraction and reanalysis.
(e) Result is from Run# 4
(f) Result is from Run# 3
(g) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MALACH USA		
Lab Sample ID:	FC8036-2	**Date Sampled:**	07/18/23
Matrix:	AQ - Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q23011.D	1	08/16/23 05:24	MV	08/09/23 09:40	OP98329	S6Q333
Run #2	4Q49202.D	1	08/20/23 21:34	MV	08/18/23 11:05	OP98507	S4Q721
Run #3 [a]	6Q23012.D	10	08/16/23 05:38	MV	08/09/23 09:40	OP98329	S6Q333
Run #4 [b]	4Q49203.D	10	08/20/23 21:48	MV	08/18/23 11:05	OP98507	S4Q721

	Initial Volume	Final Volume
Run #1	470 ml	5.0 ml
Run #2	55.0 ml	5.0 ml
Run #3	470 ml	5.0 ml
Run #4	55.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND [c]	73	36	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.3	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.1	0.53	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.1	0.53	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.1	0.53	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.65	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.53	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.64	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.64	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.89	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.53	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.5	4.3	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate [d]	ND [e]	85	43	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate [d]	ND [e]	85	44	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MALACH USA		
Lab Sample ID:	FC8036-2	**Date Sampled:**	07/18/23
Matrix:	AQ - Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.1	ng/l	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND [c]	180	91	ng/l	
1691-99-2	EtFOSE	ND [c]	180	91	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.5	2.1	ng/l	
919005-14-4	ADONA	ND	8.5	2.1	ng/l	
377-73-1	PFMPA	ND	4.3	1.1	ng/l	
863090-89-5	PFMBA	ND	4.3	1.2	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.5	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.5	2.1	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.3	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	53	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	53	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C4-PFBA	12% [f]	101%	12% [f]	20-150%
	13C5-PFPeA	40%	95%	35%	20-150%
	13C5-PFHxA	92%	103%	82%	20-150%
	13C4-PFHpA	117%	104%	104%	20-150%
	13C8-PFOA	115%	99%	100%	20-150%
	13C9-PFNA	110%	95%	100%	20-150%
	13C6-PFDA	104%	95%	96%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MALACH USA		
Lab Sample ID:	FC8036-2	**Date Sampled:**	07/18/23
Matrix:	AQ - Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C7-PFUnDA	105%	88%	105%	20-150%
	13C2-PFDoDA	90%	79%	98%	20-150%
	13C2-PFTeDA	77%	79%	77%	20-150%
	13C3-PFBS	131%	98%	103%	20-150%
	13C3-PFHxS	116%	96%	108%	20-150%
	13C8-PFOS	140%	89%	131%	20-150%
	13C8-FOSA	76%	94%	65%	20-150%
	d3-MeFOSA	30%	75%	42%	20-150%
	d5-EtFOSA	30%	58%	52%	20-150%
	d3-MeFOSAA	128%	167% [f]	165% [f]	20-150%
	d5-EtFOSAA	142%	190% [f]	183% [f]	20-150%
	d7-MeFOSE	3% [f]	64%	48%	20-150%
	d9-EtFOSE	13% [f]	55%	33%	20-150%
	13C2-4:2FTS	51%	386% [f]	27%	20-180%
	13C2-6:2FTS	364% [f]	390% [f]	228% [f]	20-180%
	13C2-8:2FTS	396% [f]	332% [f]	277% [f]	20-180%
	13C3-HFPO-DA	70%	75%	75%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Confirmation run.
(c) Result is from Run# 2
(d) Associated ID Standard outside control limits.
(e) Result is from Run# 3
(f) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRI W-G		
Lab Sample ID:	FC8036-3	**Date Sampled:**	07/18/23
Matrix:	AQ - Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q23013.D	1	08/16/23 05:52	MV	08/09/23 09:40	OP98329	S6Q333
Run #2	4Q49624.D	1	08/28/23 22:29	AL	08/22/23 10:30	OP98554	S4Q726
Run #3 [a]	6Q23014.D	10	08/16/23 06:06	MV	08/09/23 09:40	OP98329	S6Q333
Run #4 [a]	4Q49625.D	10	08/28/23 22:44	AL	08/22/23 10:30	OP98554	S4Q726

	Initial Volume	Final Volume
Run #1	460 ml	5.0 ml
Run #2	60.0 ml	5.0 ml
Run #3	460 ml	5.0 ml
Run #4	60.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND [b]	67	33	ng/l	
2706-90-3	Perfluoropentanoic acid	ND [b]	33	8.3	ng/l	
307-24-4	Perfluorohexanoic acid	2.3	2.2	0.54	ng/l	
375-85-9	Perfluoroheptanoic acid	1.8	2.2	0.54	ng/l	J
335-67-1	Perfluorooctanoic acid	1.8	2.2	0.54	ng/l	J
375-95-1	Perfluorononanoic acid	1.6	2.2	0.66	ng/l	J
335-76-2	Perfluorodecanoic acid	1.1	2.2	0.54	ng/l	J
2058-94-8	Perfluoroundecanoic acid	0.84	2.2	0.65	ng/l	J
307-55-1	Perfluorododecanoic acid	0.90	2.2	0.65	ng/l	J
72629-94-8	Perfluorotridecanoic acid	1.1	2.2	0.91	ng/l	J
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.54	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	1.6	2.2	1.1	ng/l	J
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	2.1	2.2	1.1	ng/l	J
68259-12-1	Perfluorononanesulfonic acid	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.7	4.3	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate [c]	ND [b]	67	33	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate [d]	ND [b]	67	34	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRI W-G		
Lab Sample ID:	FC8036-3	**Date Sampled:**	07/18/23
Matrix:	AQ - Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND [b]	17	8.3	ng/l	
2991-50-6	EtFOSAA [d]	ND [b]	17	11	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.7	2.2	ng/l	
919005-14-4	ADONA	ND	8.7	2.2	ng/l	
377-73-1	PFMPA	ND [b]	33	8.3	ng/l	
863090-89-5	PFMBA	ND [b]	33	9.5	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.7	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.7	2.2	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [d]	ND [b]	83	42	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	54	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	54	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C4-PFBA	7% [e]	66%	7% [e]	20-150%
	13C5-PFPeA	17% [e]	80%	17% [e]	20-150%
	13C5-PFHxA	66%	86%	58%	20-150%
	13C4-PFHpA	82%	89%	96%	20-150%
	13C8-PFOA	109%	84%	103%	20-150%
	13C9-PFNA	98%	89%	93%	20-150%
	13C6-PFDA	108%	79%	108%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRI W-G		
Lab Sample ID:	FC8036-3	**Date Sampled:**	07/18/23
Matrix:	AQ - Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C7-PFUnDA	111%	81%	114%	20-150%
	13C2-PFDoDA	100%	72%	123%	20-150%
	13C2-PFTeDA	77%	71%	80%	20-150%
	13C3-PFBS	93%	85%	79%	20-150%
	13C3-PFHxS	103%	83%	97%	20-150%
	13C8-PFOS	105%	84%	81%	20-150%
	13C8-FOSA	104%	76%	102%	20-150%
	d3-MeFOSA	63%	70%	62%	20-150%
	d5-EtFOSA	42%	62%	47%	20-150%
	d3-MeFOSAA	172% e	97%	159% e	20-150%
	d5-EtFOSAA	187% e	105%	178% e	20-150%
	d7-MeFOSE	64%	76%	76%	20-150%
	d9-EtFOSE	65%	76%	72%	20-150%
	13C2-4:2FTS	32%	204% e	25%	20-180%
	13C2-6:2FTS	316% e	276% e	288% e	20-180%
	13C2-8:2FTS	268% e	75%	193% e	20-180%
	13C3-HFPO-DA	48%	72%	55%	20-150%

(a) Confirmation run.
(b) Result is from Run# 2
(c) Associated ID Standard outside control limits.
(d) Associated BS outside control limits high, sample was ND.
(e) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	JOHN DEERE		
Lab Sample ID:	FC8036-4	**Date Sampled:**	07/19/23
Matrix:	AQ - Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q23017.D	1	08/16/23 06:48	MV	08/09/23 09:40	OP98329	S6Q333
Run #2	4Q49208.D	1	08/20/23 23:02	MV	08/18/23 11:05	OP98507	S4Q721
Run #3 [a]	6Q23018.D	10	08/16/23 07:02	MV	08/09/23 09:40	OP98329	S6Q333

	Initial Volume	Final Volume
Run #1	480 ml	5.0 ml
Run #2	55.0 ml	5.0 ml
Run #3	480 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND [b]	73	36	ng/l	
2706-90-3	Perfluoropentanoic acid	ND [b]	36	9.1	ng/l	
307-24-4	Perfluorohexanoic acid	18.0	2.1	0.52	ng/l	
375-85-9	Perfluoroheptanoic acid	4.6	2.1	0.52	ng/l	
335-67-1	Perfluorooctanoic acid	2.0	2.1	0.52	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.1	0.64	ng/l	
335-76-2	Perfluorodecanoic acid	0.65	2.1	0.52	ng/l	J
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.63	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.63	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.88	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.52	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.3	4.2	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	5.4	8.3	4.2	ng/l	J
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.3	4.3	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	JOHN DEERE		
Lab Sample ID:	FC8036-4	**Date Sampled:**	07/19/23
Matrix:	AQ - Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.0	ng/l	
2991-50-6	EtFOSAA [c]	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.3	2.1	ng/l	
919005-14-4	ADONA	ND	8.3	2.1	ng/l	
377-73-1	PFMPA	ND [b]	36	9.1	ng/l	
863090-89-5	PFMBA	ND [b]	36	10	ng/l	
151772-58-6	NFDHA	ND	4.2	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.3	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.3	2.1	ng/l	
113507-82-7	PFEESA	ND	4.2	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND [b]	91	45	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C4-PFBA	4% [d]	93%	4% [d]	20-150%
	13C5-PFPeA	19% [d]	91%	19% [d]	20-150%
	13C5-PFHxA	84%	98%	78%	20-150%
	13C4-PFHpA	103%	95%	96%	20-150%
	13C8-PFOA	97%	90%	92%	20-150%
	13C9-PFNA	91%	79%	88%	20-150%
	13C6-PFDA	104%	73%	103%	20-150%
	13C7-PFUnDA	106%	72%	98%	20-150%
	13C2-PFDoDA	91%	63%	88%	20-150%
	13C2-PFTeDA	48%	63%	41%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	JOHN DEERE		
Lab Sample ID:	FC8036-4	**Date Sampled:**	07/19/23
Matrix:	AQ - Water	**Date Received:**	07/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C3-PFBS	91%	85%	86%	20-150%
	13C3-PFHxS	99%	90%	90%	20-150%
	13C8-PFOS	108%	67%	102%	20-150%
	13C8-FOSA	110%	75%	93%	20-150%
	d3-MeFOSA	95%	54%	102%	20-150%
	d5-EtFOSA	90%	53%	92%	20-150%
	d3-MeFOSAA	146%	84%	99%	20-150%
	d5-EtFOSAA	157% [d]	79%	107%	20-150%
	d7-MeFOSE	97%	72%	90%	20-150%
	d9-EtFOSE	85%	64%	87%	20-150%
	13C2-4:2FTS	98%	120%	67%	20-180%
	13C2-6:2FTS	175%	97%	100%	20-180%
	13C2-8:2FTS	144%	76%	102%	20-180%
	13C3-HFPO-DA	73%	88%	80%	20-150%

(a) Confirmation run.
(b) Result is from Run# 2
(c) Associated ID Standard outside control limits.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FC8036

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE_____OF_____

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: NDDEQ PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58503
Project Contact: Shannon Suggs Email: SSuggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed)
Sampler 1: Sampler 2:

Project Information

Project Name: NDDEQ PFAS
Street 4201 Normandy St
City Bismarck State ND
Project #
Fax #
Client Purchase Order #

Analytical Information

LCID1633 LIST40

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION: OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH
1	SHEVENNE TOOLING	7/17	15:30	LH	WW	3									
2	MALACH USA	7/18	10:05	LH	WW	3									
3	TRI W-G	7/18	15:43	LH	WW	3									
4	JOHN DEERE	7/19	11:30	LH	WW	3									

FAL ASSESSMENT

FAL VERIFICATION

LAB USE ONLY

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	LAWRENCE HANSEN/DEQ	7/20/23 9:50	2 SSuggs	3 SSuggs	7/20/23	4 Fed Ex
5	Fed Ex	Date Time:	6 07/21/23 1015	7	Date Time:	8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 0.4/0.4 TR #1

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

FC8036: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC8036 **Client:** NDDEQ PFAS **Project:** NDDEQ PFAS

Date / Time Received: 7/21/2023 10:15:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7814 0649 8723

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (0.4);

Cooler Temps (Corrected) °C: Cooler 1: (0.2);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230320 pH 10-12 _____ Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP Date: 7/21/2023 10:15:00 A Reviewer: _____ Date: _____

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-MB	6Q22857.D	1	08/14/23	MV	08/09/23	OP98329	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-3, FC8036-4

CAS No.	Compound	Result	RL	MDL	Units	Q
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	0.0011	0.0020	0.00050	ug/l	J
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	

Method Blank Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-MB	6Q22857.D	1	08/14/23	MV	08/09/23	OP98329	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-3, FC8036-4

CAS No.	Compound	Result	RL	MDL	Units	Q
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	94%	20-150%
	13C6-PFDA	103%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	89%	20-150%
	13C2-PFTeDA	72%	20-150%
	13C3-PFBS	106%	20-150%
	13C3-PFHxS	97%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	59%	20-150%
	d3-MeFOSA	55%	20-150%
	d5-EtFOSA	56%	20-150%
	d3-MeFOSAA	93%	20-150%
	d5-EtFOSAA	78%	20-150%
	d7-MeFOSE	55%	20-150%
	d9-EtFOSE	64%	20-150%
	13C2-4:2FTS	98%	20-180%
	13C2-6:2FTS	118%	20-180%
	13C2-8:2FTS	91%	20-180%
	13C3-HFPO-DA	102%	20-150%

Method Blank Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98507-MB	4Q49199.D	1	08/20/23	MV	08/18/23	OP98507	S4Q721

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	97%	20-150%
	13C5-PFPeA	94%	20-150%
	13C5-PFHxA	97%	20-150%
	13C4-PFHpA	97%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	87%	20-150%
	13C6-PFDA	93%	20-150%
	13C7-PFUnDA	92%	20-150%
	13C2-PFDoDA	75%	20-150%
	13C2-PFTeDA	57%	20-150%
	13C3-PFBS	105%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	91%	20-150%
	13C8-FOSA	73%	20-150%
	d3-MeFOSA	58%	20-150%
	d5-EtFOSA	53%	20-150%
	d3-MeFOSAA	98%	20-150%
	d5-EtFOSAA	81%	20-150%
	d7-MeFOSE	61%	20-150%
	d9-EtFOSE	59%	20-150%
	13C2-4:2FTS	129%	20-180%
	13C2-6:2FTS	124%	20-180%
	13C2-8:2FTS	109%	20-180%
	13C3-HFPO-DA	91%	20-150%

Method Blank Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98554-MB	4Q49623.D	1	08/28/23	AL	08/22/23	OP98554	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-3

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	55%	20-150%
	13C5-PFPeA	55%	20-150%
	13C5-PFHxA	55%	20-150%
	13C4-PFHpA	55%	20-150%
	13C8-PFOA	53%	20-150%
	13C9-PFNA	54%	20-150%
	13C6-PFDA	52%	20-150%
	13C7-PFUnDA	51%	20-150%
	13C2-PFDoDA	51%	20-150%
	13C2-PFTeDA	44%	20-150%
	13C3-PFBS	59%	20-150%
	13C3-PFHxS	57%	20-150%
	13C8-PFOS	59%	20-150%
	13C8-FOSA	49%	20-150%
	d3-MeFOSA	45%	20-150%
	d5-EtFOSA	40%	20-150%
	d3-MeFOSAA	55%	20-150%
	d5-EtFOSAA	52%	20-150%
	d7-MeFOSE	43%	20-150%
	d9-EtFOSE	42%	20-150%
	13C2-4:2FTS	72%	20-180%
	13C2-6:2FTS	73%	20-180%
	13C2-8:2FTS	68%	20-180%

Method Blank Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98554-MB	4Q49623.D	1	08/28/23	AL	08/22/23	OP98554	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-3

CAS No.	ID Standard Recoveries		Limits
	13C3-HFPO-DA	56%	20-150%

Instrument Blank

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-IBLK	6Q22930.D	1	08/15/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-3, FC8036-4

CAS No.	Compound	Result	RL	MDL	Units	Q
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	

Instrument Blank

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-IBLK	6Q22930.D	1	08/15/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-3, FC8036-4

CAS No.	Compound	Result	RL	MDL	Units	Q
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	100%	20-150%
	13C6-PFDA	98%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	98%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	96%	20-150%
	13C3-PFHxS	95%	20-150%
	13C8-PFOS	101%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSA	97%	20-150%
	d5-EtFOSA	98%	20-150%
	d3-MeFOSAA	107%	20-150%
	d5-EtFOSAA	96%	20-150%
	d7-MeFOSE	105%	20-150%
	d9-EtFOSE	104%	20-150%
	13C2-4:2FTS	110%	20-180%
	13C2-6:2FTS	100%	20-180%
	13C2-8:2FTS	96%	20-180%
	13C3-HFPO-DA	106%	20-150%

Instrument Blank

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-IBLK	6Q23026.D	1	08/16/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-3, FC8036-4

CAS No.	Compound	Result	RL	MDL	Units	Q
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	

Instrument Blank

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-IBLK	6Q23026.D	1	08/16/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-3, FC8036-4

CAS No.	Compound	Result	RL	MDL	Units	Q
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	99%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	94%	20-150%
	13C6-PFDA	98%	20-150%
	13C7-PFUnDA	107%	20-150%
	13C2-PFDoDA	95%	20-150%
	13C2-PFTeDA	97%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	92%	20-150%
	13C8-PFOS	107%	20-150%
	13C8-FOSA	101%	20-150%
	d3-MeFOSA	107%	20-150%
	d5-EtFOSA	109%	20-150%
	d3-MeFOSAA	113%	20-150%
	d5-EtFOSAA	103%	20-150%
	d7-MeFOSE	117%	20-150%
	d9-EtFOSE	122%	20-150%
	13C2-4:2FTS	105%	20-180%
	13C2-6:2FTS	110%	20-180%
	13C2-8:2FTS	103%	20-180%
	13C3-HFPO-DA	107%	20-150%

Instrument Blank

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q721-IBLK	4Q49185.D	1	08/20/23	MV	n/a	n/a	S4Q721

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
24448-09-7	MeFOSE	0.0058	0.040	0.0044	ug/l	J
1691-99-2	EtFOSE	0.0106	0.040	0.0074	ug/l	J
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	99%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	97%	20-150%
	13C6-PFDA	97%	20-150%
	13C7-PFUnDA	102%	20-150%
	13C2-PFDoDA	91%	20-150%
	13C2-PFTeDA	93%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	103%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	94%	20-150%
	d3-MeFOSAA	97%	20-150%
	d5-EtFOSAA	99%	20-150%
	13C2-4:2FTS	114%	20-180%
	13C2-6:2FTS	110%	20-180%
	13C2-8:2FTS	114%	20-180%

Instrument Blank

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q726-IBLK	4Q49615.D	1	08/28/23	AL	n/a	n/a	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-3

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	107%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	96%	20-150%
	13C7-PFUnDA	102%	20-150%
	13C2-PFDoDA	101%	20-150%
	13C2-PFTeDA	101%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSAA	105%	20-150%
	d5-EtFOSAA	101%	20-150%
	13C2-4:2FTS	123%	20-180%
	13C2-6:2FTS	116%	20-180%
	13C2-8:2FTS	122%	20-180%

Continuing Calibration Blank

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-ICCB	6Q23004.D	1	08/16/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-3

CAS No.	Compound	Result	RL	MDL	Units	Q
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	

Continuing Calibration Blank

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-ICCB	6Q23004.D	1	08/16/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-3

CAS No.	Compound	Result	RL	MDL	Units	Q
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	96%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	99%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	98%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	102%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSA	102%	20-150%
	d5-EtFOSA	104%	20-150%
	d3-MeFOSAA	102%	20-150%
	d5-EtFOSAA	97%	20-150%
	d7-MeFOSE	111%	20-150%
	d9-EtFOSE	114%	20-150%
	13C2-4:2FTS	109%	20-180%
	13C2-6:2FTS	114%	20-180%
	13C2-8:2FTS	110%	20-180%
	13C3-HFPO-DA	111%	20-150%

Continuing Calibration Blank

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-ICCB	6Q23016.D	1	08/16/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-4

CAS No.	Compound	Result	RL	MDL	Units	Q
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

Continuing Calibration Blank

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-ICCB	6Q23016.D	1	08/16/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-4

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	91%	20-150%
	13C6-PFDA	103%	20-150%
	13C7-PFUnDA	113%	20-150%
	13C2-PFDoDA	113%	20-150%
	13C2-PFTeDA	131%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	121%	20-150%
	d3-MeFOSA	98%	20-150%
	d5-EtFOSA	97%	20-150%
	d3-MeFOSAA	117%	20-150%
	d5-EtFOSAA	124%	20-150%
	d7-MeFOSE	144%	20-150%
	d9-EtFOSE	134%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	118%	20-180%
	13C2-8:2FTS	124%	20-180%
	13C3-HFPO-DA	108%	20-150%

Continuing Calibration Blank

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q721-ICCB	4Q49196.D	1	08/20/23	MV	n/a	n/a	S4Q721

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	97%	20-150%
	13C7-PFUnDA	103%	20-150%
	13C2-PFDoDA	92%	20-150%
	13C2-PFTeDA	94%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	97%	20-150%
	13C8-FOSA	94%	20-150%
	d3-MeFOSAA	98%	20-150%
	d5-EtFOSAA	104%	20-150%
	13C2-4:2FTS	132%	20-180%
	13C2-6:2FTS	109%	20-180%
	13C2-8:2FTS	119%	20-180%

Continuing Calibration Blank

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q721-ICCB	4Q49207.D	1	08/20/23	MV	n/a	n/a	S4Q721

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	101%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	95%	20-150%
	13C6-PFDA	97%	20-150%
	13C7-PFUnDA	105%	20-150%
	13C2-PFDoDA	101%	20-150%
	13C2-PFTeDA	120%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	92%	20-150%
	13C8-FOSA	101%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	107%	20-150%
	13C2-4:2FTS	129%	20-180%
	13C2-6:2FTS	121%	20-180%
	13C2-8:2FTS	122%	20-180%

Instrument Blank

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q332-IBLK	6Q22852.D	1	08/14/23	MV	n/a	n/a	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98329-BS, OP98329-LLBS

CAS No.	Compound	Result	RL	MDL	Units	Q
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	

Instrument Blank

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q332-IBLK	6Q22852.D	1	08/14/23	MV	n/a	n/a	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98329-BS, OP98329-LLBS

CAS No.	Compound	Result	RL	MDL	Units	Q
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	103%	20-150%
	13C9-PFNA	106%	20-150%
	13C6-PFDA	113%	20-150%
	13C7-PFUnDA	106%	20-150%
	13C2-PFDoDA	107%	20-150%
	13C2-PFTeDA	101%	20-150%
	13C3-PFBS	95%	20-150%
	13C3-PFHxS	98%	20-150%
	13C8-PFOS	97%	20-150%
	13C8-FOSA	89%	20-150%
	d3-MeFOSA	93%	20-150%
	d5-EtFOSA	92%	20-150%
	d3-MeFOSAA	91%	20-150%
	d5-EtFOSAA	85%	20-150%
	d7-MeFOSE	98%	20-150%
	d9-EtFOSE	99%	20-150%
	13C2-4:2FTS	99%	20-180%
	13C2-6:2FTS	101%	20-180%
	13C2-8:2FTS	85%	20-180%
	13C3-HFPO-DA	106%	20-150%

Blank Spike Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-LLBS	6Q22856.D	1	08/14/23	MV	08/09/23	OP98329	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-3, FC8036-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2706-90-3	Perfluoropentanoic acid	0.008	0.0091	114	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0058	145	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0043	108	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0045	113	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0042	105	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0041	103	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0046	115	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0043	108	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0039	98	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0045	113	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0041	116	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0045	120	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0043	118	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0044	115	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0046	124	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0040	104	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0040	104	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0033	85	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0177	118	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0155	102	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0165	107	40-150
754-91-6	PFOSA	0.004	0.0045	113	40-150
31506-32-8	MeFOSA	0.008	0.0087	109	40-150
4151-50-2	EtFOSA	0.008	0.0089	111	40-150
2355-31-9	MeFOSAA	0.004	0.0045	113	40-150
2991-50-6	EtFOSAA	0.004	0.0051	128	40-150
24448-09-7	MeFOSE	0.02	0.0217	109	40-150
1691-99-2	EtFOSE	0.02	0.0214	107	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0090	113	40-150
919005-14-4	ADONA	0.00756	0.0083	110	40-150
377-73-1	PFMPA	0.008	0.0091	114	40-150
863090-89-5	PFMBA	0.008	0.0091	114	40-150
151772-58-6	NFDHA	0.008	0.0092	115	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0083	111	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0073	97	40-150
113507-82-7	PFEESA	0.00712	0.0082	115	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-LLBS	6Q22856.D	1	08/14/23	MV	08/09/23	OP98329	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-3, FC8036-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0177	89	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.104	104	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.0984	98	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	106%	20-150%
	13C5-PFPeA	109%	20-150%
	13C5-PFHxA	108%	20-150%
	13C4-PFHpA	110%	20-150%
	13C8-PFOA	109%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	112%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	86%	20-150%
	13C2-PFTeDA	74%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	105%	20-150%
	13C8-PFOS	111%	20-150%
	13C8-FOSA	70%	20-150%
	d3-MeFOSA	65%	20-150%
	d5-EtFOSA	67%	20-150%
	d3-MeFOSAA	89%	20-150%
	d5-EtFOSAA	71%	20-150%
	d7-MeFOSE	67%	20-150%
	d9-EtFOSE	77%	20-150%
	13C2-4:2FTS	107%	20-180%
	13C2-6:2FTS	117%	20-180%
	13C2-8:2FTS	90%	20-180%
	13C3-HFPO-DA	109%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98507-LLBS	4Q49198.D	1	08/20/23	MV	08/18/23	OP98507	S4Q721

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0182	114	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0091	114	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0167	110	40-150
24448-09-7	MeFOSE	0.02	0.0219	110	40-150
1691-99-2	EtFOSE	0.02	0.0217	109	40-150
377-73-1	PFMPA	0.008	0.0090	113	40-150
863090-89-5	PFMBA	0.008	0.0092	115	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0211	106	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	107%	20-150%
	13C5-PFPeA	106%	20-150%
	13C5-PFHxA	108%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	91%	20-150%
	13C7-PFUnDA	97%	20-150%
	13C2-PFDoDA	85%	20-150%
	13C2-PFTeDA	83%	20-150%
	13C3-PFBS	109%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	94%	20-150%
	d3-MeFOSA	89%	20-150%
	d5-EtFOSA	84%	20-150%
	d3-MeFOSAA	99%	20-150%
	d5-EtFOSAA	98%	20-150%
	d7-MeFOSE	92%	20-150%
	d9-EtFOSE	88%	20-150%
	13C2-4:2FTS	147%	20-180%
	13C2-6:2FTS	135%	20-180%
	13C2-8:2FTS	114%	20-180%
	13C3-HFPO-DA	99%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98554-LLBS	4Q49622.D	1	08/28/23	AL	08/22/23	OP98554	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0192	120	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0097	121	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0196	129	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0205	133	40-150
2355-31-9	MeFOSAA	0.004	0.0051	128	40-150
2991-50-6	EtFOSAA	0.004	0.0053	133	40-150
377-73-1	PFMPA	0.008	0.0091	114	40-150
863090-89-5	PFMBA	0.008	0.0089	111	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0225	113	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	97%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	90%	20-150%
	13C7-PFUnDA	84%	20-150%
	13C2-PFDoDA	81%	20-150%
	13C2-PFTeDA	74%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	95%	20-150%
	13C8-PFOS	91%	20-150%
	13C8-FOSA	93%	20-150%
	d3-MeFOSA	79%	20-150%
	d5-EtFOSA	86%	20-150%
	d3-MeFOSAA	95%	20-150%
	d5-EtFOSAA	92%	20-150%
	d7-MeFOSE	80%	20-150%
	d9-EtFOSE	81%	20-150%
	13C2-4:2FTS	121%	20-180%
	13C2-6:2FTS	116%	20-180%
	13C2-8:2FTS	105%	20-180%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98554-LLBS	4Q49622.D	1	08/28/23	AL	08/22/23	OP98554	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-3

CAS No.	ID Standard Recoveries	BSP	Limits
	13C3-HFPO-DA	107%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-BS	6Q22855.D	1	08/14/23	MV	08/09/23	OP98329	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-3, FC8036-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
2706-90-3	Perfluoropentanoic acid	0.05	0.0599	120	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0317	127	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0288	115	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0288	115	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0293	117	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0282	113	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0324	130	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0282	113	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0286	114	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0273	109	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0248	112	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0282	120	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0269	118	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0257	108	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0253	109	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0234	97	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0253	105	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0264	109	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.110	117	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.112	118	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.107	111	40-150
754-91-6	PFOSA	0.025	0.0293	117	40-150
31506-32-8	MeFOSA	0.05	0.0543	109	40-150
4151-50-2	EtFOSA	0.05	0.0558	112	40-150
2355-31-9	MeFOSAA	0.025	0.0295	118	40-150
2991-50-6	EtFOSAA	0.025	0.0316	126	40-150
24448-09-7	MeFOSE	0.125	0.146	117	40-150
1691-99-2	EtFOSE	0.125	0.148	118	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0570	114	40-150
919005-14-4	ADONA	0.0473	0.0533	113	40-150
377-73-1	PFMPA	0.05	0.0602	120	40-150
863090-89-5	PFMBA	0.05	0.0606	121	40-150
151772-58-6	NFDHA	0.05	0.0606	121	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0530	113	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0540	114	40-150
113507-82-7	PFEESA	0.0445	0.0577	130	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-BS	6Q22855.D	1	08/14/23	MV	08/09/23	OP98329	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-3, FC8036-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.109	87	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.662	106	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.657	105	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	108%	20-150%
	13C5-PFPeA	112%	20-150%
	13C5-PFHxA	110%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	103%	20-150%
	13C6-PFDA	109%	20-150%
	13C7-PFUnDA	102%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	101%	20-150%
	13C3-PFBS	105%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	121%	20-150%
	13C8-FOSA	76%	20-150%
	d3-MeFOSA	81%	20-150%
	d5-EtFOSA	84%	20-150%
	d3-MeFOSAA	98%	20-150%
	d5-EtFOSAA	76%	20-150%
	d7-MeFOSE	82%	20-150%
	d9-EtFOSE	91%	20-150%
	13C2-4:2FTS	104%	20-180%
	13C2-6:2FTS	105%	20-180%
	13C2-8:2FTS	77%	20-180%
	13C3-HFPO-DA	115%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98507-BS	4Q49197.D	1	08/20/23	MV	08/18/23	OP98507	S4Q721

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.129	129	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0639	128	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.125	132	40-150
24448-09-7	MeFOSE	0.125	0.161	129	40-150
1691-99-2	EtFOSE	0.125	0.161	129	40-150
377-73-1	PFMPA	0.05	0.0636	127	40-150
863090-89-5	PFMBA	0.05	0.0636	127	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.156	125	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	91%	20-150%
	13C5-PFPeA	90%	20-150%
	13C5-PFHxA	94%	20-150%
	13C4-PFHpA	94%	20-150%
	13C8-PFOA	92%	20-150%
	13C9-PFNA	87%	20-150%
	13C6-PFDA	93%	20-150%
	13C7-PFUnDA	86%	20-150%
	13C2-PFDoDA	77%	20-150%
	13C2-PFTeDA	64%	20-150%
	13C3-PFBS	95%	20-150%
	13C3-PFHxS	92%	20-150%
	13C8-PFOS	92%	20-150%
	13C8-FOSA	70%	20-150%
	d3-MeFOSA	60%	20-150%
	d5-EtFOSA	56%	20-150%
	d3-MeFOSAA	87%	20-150%
	d5-EtFOSAA	82%	20-150%
	d7-MeFOSE	66%	20-150%
	d9-EtFOSE	63%	20-150%
	13C2-4:2FTS	107%	20-180%
	13C2-6:2FTS	112%	20-180%
	13C2-8:2FTS	109%	20-180%
	13C3-HFPO-DA	86%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98554-BS [a]	4Q49621.D	1	08/28/23	AL	08/22/23	OP98554	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.132	132	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0669	134	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.118	124	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.147	153*	40-150
2355-31-9	MeFOSAA	0.025	0.0343	137	40-150
2991-50-6	EtFOSAA	0.025	0.0379	152*	40-150
377-73-1	PFMPA	0.05	0.0379	76	40-150
863090-89-5	PFMBA	0.05	0.0612	122	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.268	214*	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	36%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	105%	20-150%
	13C6-PFDA	98%	20-150%
	13C7-PFUnDA	99%	20-150%
	13C2-PFDoDA	90%	20-150%
	13C2-PFTeDA	85%	20-150%
	13C3-PFBS	103%	20-150%
	13C3-PFHxS	98%	20-150%
	13C8-PFOS	93%	20-150%
	13C8-FOSA	93%	20-150%
	d3-MeFOSA	81%	20-150%
	d5-EtFOSA	77%	20-150%
	d3-MeFOSAA	98%	20-150%
	d5-EtFOSAA	91%	20-150%
	d7-MeFOSE	75%	20-150%
	d9-EtFOSE	71%	20-150%
	13C2-4:2FTS	117%	20-180%
	13C2-6:2FTS	124%	20-180%
	13C2-8:2FTS	109%	20-180%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98554-BS [a]	4Q49621.D	1	08/28/23	AL	08/22/23	OP98554	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-3

CAS No.	ID Standard Recoveries	BSP	Limits
	13C3-HFPO-DA	106%	20-150%

(a) Insufficient sample for MS/MSD.

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-MS	6Q23010.D	1	08/16/23	MV	08/09/23	OP98329	S6Q333
FC8036-1	6Q23008.D	1	08/16/23	MV	08/09/23	OP98329	S6Q333
FC8036-1 [a]	6Q23009.D	10	08/16/23	MV	08/09/23	OP98329	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-3, FC8036-4

CAS No.	Compound	FC8036-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
2706-90-3	Perfluoropentanoic acid	ND		0.05	0.0531	106	40-150
307-24-4	Perfluorohexanoic acid	0.0013	J	0.025	0.0329	126	40-150
375-85-9	Perfluoroheptanoic acid	ND		0.025	0.0287	115	40-150
335-67-1	Perfluorooctanoic acid	ND		0.025	0.0294	118	40-150
375-95-1	Perfluorononanoic acid	0.00086	J	0.025	0.0291	113	40-150
335-76-2	Perfluorodecanoic acid	ND		0.025	0.0264	106	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.025	0.0336	134	40-150
307-55-1	Perfluorododecanoic acid	ND		0.025	0.0279	112	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.025	0.0235	94	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.025	0.0287	115	40-150
375-73-5	Perfluorobutanesulfonic acid	ND		0.0222	0.0269	121	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0235	0.0337	143	40-150
355-46-4	Perfluorohexanesulfonic acid	ND		0.0229	0.0241	105	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0238	0.0290	122	40-150
1763-23-1	Perfluorooctanesulfonic acid	ND		0.0232	0.0284	122	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.0241	0.0266	111	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.0241	0.0251	104	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0243	0.0145	60	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0938	0.134	143	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.095	0.116	122	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND [b]		0.096	0.116	121	40-150
754-91-6	PFOSA	ND		0.025	0.0302	121	40-150
31506-32-8	MeFOSA	ND		0.05	0.0605	121	40-150
4151-50-2	EtFOSA	ND		0.05	0.0590	118	40-150
2355-31-9	MeFOSAA	ND [b]		0.025	0.0298	119	40-150
2991-50-6	EtFOSAA	ND [b]		0.025	0.0300	120	40-150
24448-09-7	MeFOSE	ND		0.125	0.157	126	40-150
1691-99-2	EtFOSE	ND		0.125	0.152	122	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.05	0.0588	118	40-150
919005-14-4	ADONA	ND		0.0473	0.0852	180*	40-150
377-73-1	PFMPA	ND		0.05	0.0264	53	40-150
863090-89-5	PFMBA	ND		0.05	0.0774	155*	40-150
151772-58-6	NFDHA	ND		0.05	0.0436	87	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0468	0.126	270*	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0473	0.109	231*	40-150
113507-82-7	PFEESA	ND		0.0445	0.0631	142	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-MS	6Q23010.D	1	08/16/23	MV	08/09/23	OP98329	S6Q333
FC8036-1	6Q23008.D	1	08/16/23	MV	08/09/23	OP98329	S6Q333
FC8036-1 [a]	6Q23009.D	10	08/16/23	MV	08/09/23	OP98329	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-3, FC8036-4

CAS No.	Compound	FC8036-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.125	0.0725	58	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.625	1.16	186*	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.625	1.48	237*	40-150

CAS No.	ID Standard Recoveries	MS	FC8036-1	FC8036-1	Limits
	13C4-PFBA	6%* [c]	7%* [c]	7%* [c]	20-150%
	13C5-PFPeA	22%	23%	20%	20-150%
	13C5-PFHxA	78%	77%	70%	20-150%
	13C4-PFHpA	103%	104%	103%	20-150%
	13C8-PFOA	105%	114%	95%	20-150%
	13C9-PFNA	102%	108%	91%	20-150%
	13C6-PFDA	109%	112%	96%	20-150%
	13C7-PFUnDA	96%	99%	96%	20-150%
	13C2-PFDoDA	91%	92%	78%	20-150%
	13C2-PFTeDA	58%	52%	53%	20-150%
	13C3-PFBS	128%	124%	89%	20-150%
	13C3-PFHxS	110%	108%	107%	20-150%
	13C8-PFOS	108%	100%	104%	20-150%
	13C8-FOSA	105%	84%	77%	20-150%
	d3-MeFOSA	76%	68%	67%	20-150%
	d5-EtFOSA	75%	68%	69%	20-150%
	d3-MeFOSAA	173%* [c]	172%* [c]	118%	20-150%
	d5-EtFOSAA	165%* [c]	171%* [c]	98%	20-150%
	d7-MeFOSE	95%	70%	70%	20-150%
	d9-EtFOSE	87%	70%	75%	20-150%
	13C2-4:2FTS	83%	95%	36%	20-180%
	13C2-6:2FTS	391%* [c]	385%* [c]	337%* [c]	20-180%
	13C2-8:2FTS	265%* [c]	289%* [c]	109%	20-180%
	13C3-HFPO-DA	49%	44%	53%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Result is from Run #2.
(c) Outside control limits.

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-DUP	6Q23019.D	1	08/16/23	MV	08/09/23	OP98329	S6Q333
FC8036-4	6Q23017.D	1	08/16/23	MV	08/09/23	OP98329	S6Q333
FC8036-4 [a]	6Q23018.D	10	08/16/23	MV	08/09/23	OP98329	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-3, FC8036-4

CAS No.	Compound	FC8036-4 ug/l	Q	DUP ug/l	Q	RPD	Limits
2706-90-3	Perfluoropentanoic acid	ND		ND		nc	30
307-24-4	Perfluorohexanoic acid	0.0180		0.0152		17	30
375-85-9	Perfluoroheptanoic acid	0.0046		0.0041		11	30
335-67-1	Perfluorooctanoic acid	0.0020	J	0.0019	J	5	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	0.00065	J	ND		200*	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	0.0054	J	0.0047	J	14	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30
113507-82-7	PFEESA	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC8036
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-DUP	6Q23019.D	1	08/16/23	MV	08/09/23	OP98329	S6Q333
FC8036-4	6Q23017.D	1	08/16/23	MV	08/09/23	OP98329	S6Q333
FC8036-4 [a]	6Q23018.D	10	08/16/23	MV	08/09/23	OP98329	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8036-1, FC8036-2, FC8036-3, FC8036-4

CAS No.	Compound	FC8036-4 ug/l	Q	DUP ug/l	Q	RPD	Limits
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC8036-4	FC8036-4	Limits
	13C4-PFBA	5%* [b]	4%* [b]	4%* [b]	20-150%
	13C5-PFPeA	24%	19%* [b]	19%* [b]	20-150%
	13C5-PFHxA	92%	84%	78%	20-150%
	13C4-PFHpA	105%	103%	96%	20-150%
	13C8-PFOA	102%	97%	92%	20-150%
	13C9-PFNA	102%	91%	88%	20-150%
	13C6-PFDA	104%	104%	103%	20-150%
	13C7-PFUnDA	102%	106%	98%	20-150%
	13C2-PFDoDA	89%	91%	88%	20-150%
	13C2-PFTeDA	43%	48%	41%	20-150%
	13C3-PFBS	101%	91%	86%	20-150%
	13C3-PFHxS	108%	99%	90%	20-150%
	13C8-PFOS	112%	108%	102%	20-150%
	13C8-FOSA	106%	110%	93%	20-150%
	d3-MeFOSA	91%	95%	102%	20-150%
	d5-EtFOSA	93%	90%	92%	20-150%
	d3-MeFOSAA	153%* [b]	146%	99%	20-150%
	d5-EtFOSAA	162%* [b]	157%* [b]	107%	20-150%
	d7-MeFOSE	75%	97%	90%	20-150%
	d9-EtFOSE	77%	85%	87%	20-150%
	13C2-4:2FTS	109%	98%	67%	20-180%
	13C2-6:2FTS	181%* [b]	175%	100%	20-180%
	13C2-8:2FTS	147%	144%	102%	20-180%
	13C3-HFPO-DA	83%	73%	80%	20-150%

(a) Confirmation run.
(b) Outside control limits.

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC7978

Sampling Dates: 07/17/23 - 07/18/23



Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
ssuggs@nd.gov

ATTN: Shannon Suggs

Total number of pages in report: 57

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC7978

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FC7978-1	07/17/23	06:45	MS	07/19/23	AQ	Surface Water	380067
FC7978-2	07/17/23	09:30	MS	07/19/23	AQ	Surface Water	380077
FC7978-3	07/17/23	10:00	MS	07/19/23	AQ	Surface Water	380105
FC7978-4	07/17/23	12:30	MS	07/19/23	AQ	Surface Water	384131
FC7978-5	07/17/23	14:00	MS	07/19/23	AQ	Surface Water	380087
FC7978-6	07/18/23	08:30	MS	07/19/23	AQ	Surface Water	380059
FC7978-7	07/18/23	10:15	MS	07/19/23	AQ	Surface Water	380022
FC7978-8	07/18/23	11:30	MS	07/19/23	AQ	Surface Water	380160
FC7978-9	07/18/23	13:00	MS	07/19/23	AQ	Surface Water	380151

Summary of Hits

Job Number: FC7978
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 07/17/23 thru 07/18/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC7978-1	**380067**					
No hits reported in this sample.						
FC7978-2	**380077**					
Perfluorohexanoic acid		1.0 JB	2.0	0.51	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.1 J	2.0	0.51	ng/l	EPA DRAFT 1633
FC7978-3	**380105**					
No hits reported in this sample.						
FC7978-4	**384131**					
No hits reported in this sample.						
FC7978-5	**380087**					
No hits reported in this sample.						
FC7978-6	**380059**					
Perfluoropentanoic acid		1.8 J	4.2	1.0	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		0.73 JB	2.1	0.52	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.1 J	2.1	0.52	ng/l	EPA DRAFT 1633
FC7978-7	**380022**					
Perfluoropentanoic acid		1.9 J	4.3	1.1	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.6 J	2.2	0.54	ng/l	EPA DRAFT 1633
FC7978-8	**380160**					
Perfluoropentanoic acid		5.8	4.0	1.0	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		3.4 B	2.0	0.51	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.3 J	2.0	0.51	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.7 J	2.0	0.51	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		1.1 J	2.0	1.0	ng/l	EPA DRAFT 1633
FC7978-9	**380151**					
Perfluoropentanoic acid		1.8 J	4.1	1.0	ng/l	EPA DRAFT 1633

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	380067		
Lab Sample ID:	FC7978-1	**Date Sampled:**	07/17/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22862.D	1	08/14/23 13:49	MV	08/09/23 09:40	OP98329	S6Q332
Run #2 [a]	6Q23002.D	5	08/16/23 03:18	MV	08/09/23 09:40	OP98329	S6Q333

	Initial Volume	Final Volume
Run #1	500 ml	5.0 ml
Run #2	500 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND [c]	40	20	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.61	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.60	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.60	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.84	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.0	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.0	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.0	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380067		
Lab Sample ID:	FC7978-1	**Date Sampled:**	07/17/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.0	2.0	ng/l	
919005-14-4	ADONA	ND	8.0	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	1.0	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.0	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.0	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	50	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	19% [d]	19% [d]	20-150%
	13C5-PFPeA	89%	85%	20-150%
	13C5-PFHxA	107%	101%	20-150%
	13C4-PFHpA	105%	105%	20-150%
	13C8-PFOA	99%	98%	20-150%
	13C9-PFNA	96%	109%	20-150%
	13C6-PFDA	109%	107%	20-150%
	13C7-PFUnDA	99%	90%	20-150%
	13C2-PFDoDA	86%	84%	20-150%
	13C2-PFTeDA	58%	58%	20-150%
	13C3-PFBS	106%	92%	20-150%
	13C3-PFHxS	100%	89%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380067		
Lab Sample ID:	FC7978-1	**Date Sampled:**	07/17/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	108%	109%	20-150%
	13C8-FOSA	94%	92%	20-150%
	d3-MeFOSA	89%	88%	20-150%
	d5-EtFOSA	93%	89%	20-150%
	d3-MeFOSAA	97%	101%	20-150%
	d5-EtFOSAA	85%	97%	20-150%
	d7-MeFOSE	83%	80%	20-150%
	d9-EtFOSE	87%	84%	20-150%
	13C2-4:2FTS	91%	89%	20-180%
	13C2-6:2FTS	94%	118%	20-180%
	13C2-8:2FTS	73%	81%	20-180%
	13C3-HFPO-DA	100%	104%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Associated ID Standard outside control limits.
(c) Result is from Run# 2
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380077		
Lab Sample ID:	FC7978-2	**Date Sampled:**	07/17/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22863.D	1	08/14/23 14:04	MV	08/09/23 09:40	OP98329	S6Q332
Run #2 [a]	6Q22966.D	5	08/15/23 18:54	MV	08/09/23 09:40	OP98329	S6Q333

	Initial Volume	Final Volume
Run #1	495 ml	5.0 ml
Run #2	495 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND [c]	40	20	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	1.0	2.0	0.51	ng/l	JB
375-85-9	Perfluoroheptanoic acid	1.1	2.0	0.51	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.0	0.51	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.85	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.1	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.1	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.1	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380077		
Lab Sample ID:	FC7978-2	**Date Sampled:**	07/17/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.1	2.0	ng/l	
919005-14-4	ADONA	ND	8.1	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	1.0	ng/l	
863090-89-5	PFMBA	ND	4.0	1.2	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.1	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.1	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	17% [d]	17% [d]	20-150%
	13C5-PFPeA	95%	85%	20-150%
	13C5-PFHxA	110%	104%	20-150%
	13C4-PFHpA	112%	107%	20-150%
	13C8-PFOA	109%	101%	20-150%
	13C9-PFNA	99%	97%	20-150%
	13C6-PFDA	114%	106%	20-150%
	13C7-PFUnDA	105%	95%	20-150%
	13C2-PFDoDA	88%	78%	20-150%
	13C2-PFTeDA	53%	50%	20-150%
	13C3-PFBS	103%	105%	20-150%
	13C3-PFHxS	101%	96%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380077		
Lab Sample ID:	FC7978-2	**Date Sampled:**	07/17/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	113%	93%	20-150%
	13C8-FOSA	101%	91%	20-150%
	d3-MeFOSA	99%	94%	20-150%
	d5-EtFOSA	94%	83%	20-150%
	d3-MeFOSAA	99%	97%	20-150%
	d5-EtFOSAA	90%	80%	20-150%
	d7-MeFOSE	76%	68%	20-150%
	d9-EtFOSE	75%	69%	20-150%
	13C2-4:2FTS	99%	95%	20-180%
	13C2-6:2FTS	96%	112%	20-180%
	13C2-8:2FTS	76%	108%	20-180%
	13C3-HFPO-DA	113%	100%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Associated ID Standard outside control limits.
(c) Result is from Run# 2
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380105		
Lab Sample ID:	FC7978-3	**Date Sampled:**	07/17/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22864.D	1	08/14/23 14:18	MV	08/09/23 09:40	OP98329	S6Q332
Run #2							

	Initial Volume	Final Volume
Run #1	465 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.6	4.3	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.3	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.2	0.54	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.2	0.54	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.2	0.54	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	0.66	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.54	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.65	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.65	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.90	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.54	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.6	4.3	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.6	4.3	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.6	4.4	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380105		
Lab Sample ID:	FC7978-3	**Date Sampled:**	07/17/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.6	2.2	ng/l	
919005-14-4	ADONA	ND	8.6	2.2	ng/l	
377-73-1	PFMPA	ND	4.3	1.1	ng/l	
863090-89-5	PFMBA	ND	4.3	1.2	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.6	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.6	2.2	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.4	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	54	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	54	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	22%		20-150%
	13C5-PFPeA	90%		20-150%
	13C5-PFHxA	107%		20-150%
	13C4-PFHpA	105%		20-150%
	13C8-PFOA	107%		20-150%
	13C9-PFNA	109%		20-150%
	13C6-PFDA	111%		20-150%
	13C7-PFUnDA	94%		20-150%
	13C2-PFDoDA	71%		20-150%
	13C2-PFTeDA	48%		20-150%
	13C3-PFBS	109%		20-150%
	13C3-PFHxS	108%		20-150%

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380105		
Lab Sample ID:	FC7978-3	**Date Sampled:**	07/17/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	108%		20-150%
	13C8-FOSA	92%		20-150%
	d3-MeFOSA	87%		20-150%
	d5-EtFOSA	81%		20-150%
	d3-MeFOSAA	84%		20-150%
	d5-EtFOSAA	75%		20-150%
	d7-MeFOSE	69%		20-150%
	d9-EtFOSE	69%		20-150%
	13C2-4:2FTS	98%		20-180%
	13C2-6:2FTS	99%		20-180%
	13C2-8:2FTS	77%		20-180%
	13C3-HFPO-DA	101%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	384131		
Lab Sample ID:	FC7978-4	**Date Sampled:**	07/17/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22888.D	1	08/14/23 20:08	MV	08/09/23 09:40	OP98329	S6Q332
Run #2 [a]	6Q23005.D	5	08/16/23 04:00	MV	08/09/23 09:40	OP98329	S6Q333

	Initial Volume	Final Volume
Run #1	480 ml	5.0 ml
Run #2	480 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND [c]	42	21	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.2	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.1	0.52	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.1	0.52	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.1	0.52	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.64	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.52	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.63	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.63	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.88	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.52	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.3	4.2	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.3	4.2	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.3	4.3	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	384131		
Lab Sample ID:	FC7978-4	**Date Sampled:**	07/17/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.3	2.1	ng/l	
919005-14-4	ADONA	ND	8.3	2.1	ng/l	
377-73-1	PFMPA	ND	4.2	1.0	ng/l	
863090-89-5	PFMBA	ND	4.2	1.2	ng/l	
151772-58-6	NFDHA	ND	4.2	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.3	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.3	2.1	ng/l	
113507-82-7	PFEESA	ND	4.2	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.2	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18% [d]	18% [d]	20-150%
	13C5-PFPeA	85%	87%	20-150%
	13C5-PFHxA	103%	99%	20-150%
	13C4-PFHpA	99%	99%	20-150%
	13C8-PFOA	104%	94%	20-150%
	13C9-PFNA	96%	93%	20-150%
	13C6-PFDA	101%	95%	20-150%
	13C7-PFUnDA	90%	99%	20-150%
	13C2-PFDoDA	80%	80%	20-150%
	13C2-PFTeDA	63%	60%	20-150%
	13C3-PFBS	98%	103%	20-150%
	13C3-PFHxS	95%	90%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	384131		
Lab Sample ID:	FC7978-4	**Date Sampled:**	07/17/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	103%	106%	20-150%
	13C8-FOSA	95%	90%	20-150%
	d3-MeFOSA	95%	97%	20-150%
	d5-EtFOSA	91%	92%	20-150%
	d3-MeFOSAA	97%	95%	20-150%
	d5-EtFOSAA	85%	91%	20-150%
	d7-MeFOSE	88%	78%	20-150%
	d9-EtFOSE	94%	90%	20-150%
	13C2-4:2FTS	95%	105%	20-180%
	13C2-6:2FTS	88%	97%	20-180%
	13C2-8:2FTS	66%	107%	20-180%
	13C3-HFPO-DA	95%	108%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Associated ID Standard outside control limits.
(c) Result is from Run# 2
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380087		
Lab Sample ID:	FC7978-5	**Date Sampled:**	07/17/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22889.D	1	08/14/23 20:23	MV	08/09/23 09:40	OP98329	S6Q332
Run #2 [a]	6Q23006.D	5	08/16/23 04:14	MV	08/09/23 09:40	OP98329	S6Q333

	Initial Volume	Final Volume
Run #1	500 ml	5.0 ml
Run #2	500 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND [c]	40	20	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.61	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.60	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.60	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.84	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.0	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.0	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.0	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380087		
Lab Sample ID:	FC7978-5	**Date Sampled:**	07/17/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.0	2.0	ng/l	
919005-14-4	ADONA	ND	8.0	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	1.0	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.0	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.0	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	50	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	18% [d]	19% [d]	20-150%
	13C5-PFPeA	91%	86%	20-150%
	13C5-PFHxA	107%	97%	20-150%
	13C4-PFHpA	102%	101%	20-150%
	13C8-PFOA	108%	100%	20-150%
	13C9-PFNA	97%	94%	20-150%
	13C6-PFDA	102%	91%	20-150%
	13C7-PFUnDA	97%	92%	20-150%
	13C2-PFDoDA	87%	72%	20-150%
	13C2-PFTeDA	56%	51%	20-150%
	13C3-PFBS	96%	86%	20-150%
	13C3-PFHxS	89%	83%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380087		
Lab Sample ID:	FC7978-5	**Date Sampled:**	07/17/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%	101%	20-150%
	13C8-FOSA	85%	83%	20-150%
	d3-MeFOSA	89%	86%	20-150%
	d5-EtFOSA	89%	88%	20-150%
	d3-MeFOSAA	98%	87%	20-150%
	d5-EtFOSAA	83%	85%	20-150%
	d7-MeFOSE	85%	76%	20-150%
	d9-EtFOSE	87%	84%	20-150%
	13C2-4:2FTS	87%	89%	20-180%
	13C2-6:2FTS	88%	104%	20-180%
	13C2-8:2FTS	75%	77%	20-180%
	13C3-HFPO-DA	99%	95%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Associated ID Standard outside control limits.
(c) Result is from Run# 2
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380059		
Lab Sample ID:	FC7978-6	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22890.D	1	08/14/23 20:37	MV	08/09/23 09:40	OP98329	S6Q332
Run #2							

	Initial Volume	Final Volume
Run #1	480 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.3	4.2	ng/l	
2706-90-3	Perfluoropentanoic acid	1.8	4.2	1.0	ng/l	J
307-24-4	Perfluorohexanoic acid	0.73	2.1	0.52	ng/l	JB
375-85-9	Perfluoroheptanoic acid	1.1	2.1	0.52	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.1	0.52	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.64	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.52	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.63	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.63	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.88	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.52	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.3	4.2	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.3	4.2	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.3	4.3	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380059		
Lab Sample ID:	FC7978-6	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.3	2.1	ng/l	
919005-14-4	ADONA	ND	8.3	2.1	ng/l	
377-73-1	PFMPA	ND	4.2	1.0	ng/l	
863090-89-5	PFMBA	ND	4.2	1.2	ng/l	
151772-58-6	NFDHA	ND	4.2	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.3	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.3	2.1	ng/l	
113507-82-7	PFEESA	ND	4.2	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.2	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	26%		20-150%
	13C5-PFPeA	96%		20-150%
	13C5-PFHxA	105%		20-150%
	13C4-PFHpA	111%		20-150%
	13C8-PFOA	107%		20-150%
	13C9-PFNA	110%		20-150%
	13C6-PFDA	118%		20-150%
	13C7-PFUnDA	110%		20-150%
	13C2-PFDoDA	99%		20-150%
	13C2-PFTeDA	76%		20-150%
	13C3-PFBS	107%		20-150%
	13C3-PFHxS	110%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380059		
Lab Sample ID:	FC7978-6	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	110%		20-150%
	13C8-FOSA	97%		20-150%
	d3-MeFOSA	100%		20-150%
	d5-EtFOSA	105%		20-150%
	d3-MeFOSAA	96%		20-150%
	d5-EtFOSAA	91%		20-150%
	d7-MeFOSE	99%		20-150%
	d9-EtFOSE	107%		20-150%
	13C2-4:2FTS	88%		20-180%
	13C2-6:2FTS	93%		20-180%
	13C2-8:2FTS	79%		20-180%
	13C3-HFPO-DA	105%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380022		
Lab Sample ID:	FC7978-7	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22891.D	1	08/14/23 20:51	MV	08/09/23 09:40	OP98329	S6Q332
Run #2							

	Initial Volume	Final Volume
Run #1	465 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.6	4.3	ng/l	
2706-90-3	Perfluoropentanoic acid	1.9	4.3	1.1	ng/l	J
307-24-4	Perfluorohexanoic acid	ND	2.2	0.54	ng/l	
375-85-9	Perfluoroheptanoic acid	1.6	2.2	0.54	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.2	0.54	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	0.66	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.54	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.65	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.65	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.90	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.54	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.6	4.3	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.6	4.3	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.6	4.4	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380022		
Lab Sample ID:	FC7978-7	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.6	2.2	ng/l	
919005-14-4	ADONA	ND	8.6	2.2	ng/l	
377-73-1	PFMPA	ND	4.3	1.1	ng/l	
863090-89-5	PFMBA	ND	4.3	1.2	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.6	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.6	2.2	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.4	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	54	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	54	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	25%		20-150%
	13C5-PFPeA	99%		20-150%
	13C5-PFHxA	112%		20-150%
	13C4-PFHpA	112%		20-150%
	13C8-PFOA	107%		20-150%
	13C9-PFNA	106%		20-150%
	13C6-PFDA	109%		20-150%
	13C7-PFUnDA	99%		20-150%
	13C2-PFDoDA	98%		20-150%
	13C2-PFTeDA	79%		20-150%
	13C3-PFBS	99%		20-150%
	13C3-PFHxS	97%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380022		
Lab Sample ID:	FC7978-7	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	109%		20-150%
	13C8-FOSA	102%		20-150%
	d3-MeFOSA	100%		20-150%
	d5-EtFOSA	103%		20-150%
	d3-MeFOSAA	106%		20-150%
	d5-EtFOSAA	91%		20-150%
	d7-MeFOSE	100%		20-150%
	d9-EtFOSE	104%		20-150%
	13C2-4:2FTS	97%		20-180%
	13C2-6:2FTS	96%		20-180%
	13C2-8:2FTS	79%		20-180%
	13C3-HFPO-DA	102%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380160		
Lab Sample ID:	FC7978-8	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22892.D	1	08/14/23 21:06	MV	08/09/23 09:40	OP98329	S6Q332
Run #2							

	Initial Volume	Final Volume
Run #1	495 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.1	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	5.8	4.0	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	3.4	2.0	0.51	ng/l	B
375-85-9	Perfluoroheptanoic acid	1.3	2.0	0.51	ng/l	J
335-67-1	Perfluorooctanoic acid	1.7	2.0	0.51	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.85	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	1.1	2.0	1.0	ng/l	J
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.1	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.1	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.1	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380160		
Lab Sample ID:	FC7978-8	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.1	2.0	ng/l	
919005-14-4	ADONA	ND	8.1	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	1.0	ng/l	
863090-89-5	PFMBA	ND	4.0	1.2	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.1	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.1	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	24%		20-150%
	13C5-PFPeA	99%		20-150%
	13C5-PFHxA	113%		20-150%
	13C4-PFHpA	111%		20-150%
	13C8-PFOA	105%		20-150%
	13C9-PFNA	95%		20-150%
	13C6-PFDA	109%		20-150%
	13C7-PFUnDA	102%		20-150%
	13C2-PFDoDA	93%		20-150%
	13C2-PFTeDA	58%		20-150%
	13C3-PFBS	103%		20-150%
	13C3-PFHxS	102%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380160		
Lab Sample ID:	FC7978-8	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	107%		20-150%
	13C8-FOSA	100%		20-150%
	d3-MeFOSA	101%		20-150%
	d5-EtFOSA	102%		20-150%
	d3-MeFOSAA	98%		20-150%
	d5-EtFOSAA	91%		20-150%
	d7-MeFOSE	86%		20-150%
	d9-EtFOSE	93%		20-150%
	13C2-4:2FTS	103%		20-180%
	13C2-6:2FTS	103%		20-180%
	13C2-8:2FTS	86%		20-180%
	13C3-HFPO-DA	108%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380151		
Lab Sample ID:	FC7978-9	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q22893.D	1	08/14/23 21:20	MV	08/09/23 09:40	OP98329	S6Q332
Run #2 [a]	6Q23007.D	5	08/16/23 04:28	MV	08/09/23 09:40	OP98329	S6Q333

	Initial Volume	Final Volume
Run #1	490 ml	5.0 ml
Run #2	490 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND [c]	41	20	ng/l	
2706-90-3	Perfluoropentanoic acid	1.8	4.1	1.0	ng/l	J
307-24-4	Perfluorohexanoic acid	ND	2.0	0.51	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.51	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.51	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.86	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380151		
Lab Sample ID:	FC7978-9	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.0	ng/l	
919005-14-4	ADONA	ND	8.2	2.0	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.0	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	19% [d]	18% [d]	20-150%
	13C5-PFPeA	93%	91%	20-150%
	13C5-PFHxA	108%	101%	20-150%
	13C4-PFHpA	107%	105%	20-150%
	13C8-PFOA	103%	97%	20-150%
	13C9-PFNA	97%	104%	20-150%
	13C6-PFDA	107%	105%	20-150%
	13C7-PFUnDA	103%	97%	20-150%
	13C2-PFDoDA	89%	82%	20-150%
	13C2-PFTeDA	65%	61%	20-150%
	13C3-PFBS	107%	96%	20-150%
	13C3-PFHxS	102%	98%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380151		
Lab Sample ID:	FC7978-9	**Date Sampled:**	07/18/23
Matrix:	AQ - Surface Water	**Date Received:**	07/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	111%	118%	20-150%
	13C8-FOSA	91%	91%	20-150%
	d3-MeFOSA	95%	83%	20-150%
	d5-EtFOSA	93%	96%	20-150%
	d3-MeFOSAA	104%	98%	20-150%
	d5-EtFOSAA	80%	86%	20-150%
	d7-MeFOSE	90%	81%	20-150%
	d9-EtFOSE	97%	96%	20-150%
	13C2-4:2FTS	93%	103%	20-180%
	13C2-6:2FTS	95%	120%	20-180%
	13C2-8:2FTS	81%	95%	20-180%
	13C3-HFPO-DA	108%	102%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Associated ID Standard outside control limits.
(c) Result is from Run# 2
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # SKIFF # FC7978

Client / Reporting Information

Company Name: NDDEQ PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58503
Project Contact: Shannon Suggs Email: SSuggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed)
Sampler 1: Sampler 2:

Project Information

Project Name: NDDEQ PFAS
Street 4201 Normandy St
City Bismarck State ND
Project #
Fax #
Client Purchase Order #

Analytical Information

LCID 16233 LIST 40

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	CONTAINER INFORMATION MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LAB USE ONLY
1	380067	7-17	6:45	MS	SW	3										
2	380077	7-17	9:30	MS	SW	3										
3	380105	7-17	10:00	MS	SW	3										
4	384131	7-17	12:30	MS	SW	3										
5	380087	7-17	14:00	MS	SW	3										
6	380059	7-18	8:30	MS	SW	3										
7	380022	7-18	10:15	MS	SW	3										
8	380160	7-18	11:30	MS	SW	3										
9	380151	7-18	13:00	MS	SW	3										

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

INITIAL ASSESSMENT SP
LABEL VERIFICATION SP

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	SSuggs	7/19	2 Fed Ex	3 Fed Ex		4 07/19/23 1045
5	Relinquished By/Affiliation	Date Time:	6 Received By/Affiliation	7 Relinquished By/Affiliation	Date Time:	8 Received By/Affiliation

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 2.6 IR #1

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

FC7978: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC7978 **Client:** NDDEQ PFAS **Project:** NDDEQ PFAS

Date / Time Received: 7/19/2023 10:45:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7813 2248 5094

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (2.6);

Cooler Temps (Corrected) °C: Cooler 1: (2.4);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____

Number of 5035 Field Kits: _____

Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230320 pH 10-12 _____

Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP Date: 7/19/2023 10:45:00 A Reviewer: _____ Date: _____

FC7978: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-MB	6Q22857.D	1	08/14/23	MV	08/09/23	OP98329	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-1, FC7978-2, FC7978-3, FC7978-4, FC7978-5, FC7978-6, FC7978-7, FC7978-8, FC7978-9

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	0.0011	0.0020	0.00050	ug/l	J
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-MB	6Q22857.D	1	08/14/23	MV	08/09/23	OP98329	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-1, FC7978-2, FC7978-3, FC7978-4, FC7978-5, FC7978-6, FC7978-7, FC7978-8, FC7978-9

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	94%	20-150%
	13C6-PFDA	103%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	89%	20-150%
	13C2-PFTeDA	72%	20-150%
	13C3-PFBS	106%	20-150%
	13C3-PFHxS	97%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	59%	20-150%
	d3-MeFOSA	55%	20-150%
	d5-EtFOSA	56%	20-150%
	d3-MeFOSAA	93%	20-150%
	d5-EtFOSAA	78%	20-150%
	d7-MeFOSE	55%	20-150%
	d9-EtFOSE	64%	20-150%
	13C2-4:2FTS	98%	20-180%
	13C2-6:2FTS	118%	20-180%
	13C2-8:2FTS	91%	20-180%
	13C3-HFPO-DA	102%	20-150%

Instrument Blank

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q332-IBLK	6Q22852.D	1	08/14/23	MV	n/a	n/a	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-1, FC7978-2, FC7978-3, FC7978-4, FC7978-5, FC7978-6, FC7978-7, FC7978-8, FC7978-9

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q332-IBLK	6Q22852.D	1	08/14/23	MV	n/a	n/a	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-1, FC7978-2, FC7978-3, FC7978-4, FC7978-5, FC7978-6, FC7978-7, FC7978-8, FC7978-9

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	103%	20-150%
	13C9-PFNA	106%	20-150%
	13C6-PFDA	113%	20-150%
	13C7-PFUnDA	106%	20-150%
	13C2-PFDoDA	107%	20-150%
	13C2-PFTeDA	101%	20-150%
	13C3-PFBS	95%	20-150%
	13C3-PFHxS	98%	20-150%
	13C8-PFOS	97%	20-150%
	13C8-FOSA	89%	20-150%
	d3-MeFOSA	93%	20-150%
	d5-EtFOSA	92%	20-150%
	d3-MeFOSAA	91%	20-150%
	d5-EtFOSAA	85%	20-150%
	d7-MeFOSE	98%	20-150%
	d9-EtFOSE	99%	20-150%
	13C2-4:2FTS	99%	20-180%
	13C2-6:2FTS	101%	20-180%
	13C2-8:2FTS	85%	20-180%
	13C3-HFPO-DA	106%	20-150%

Instrument Blank

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-IBLK	6Q22930.D	1	08/15/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-1, FC7978-2, FC7978-4, FC7978-5, FC7978-9

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	100%	20-150%
	13C6-PFDA	98%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	98%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	96%	20-150%
	13C3-PFHxS	95%	20-150%
	13C8-PFOS	101%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSA	97%	20-150%
	d5-EtFOSA	98%	20-150%
	d3-MeFOSAA	107%	20-150%
	d5-EtFOSAA	96%	20-150%
	d7-MeFOSE	105%	20-150%
	d9-EtFOSE	104%	20-150%
	13C2-4:2FTS	110%	20-180%
	13C2-6:2FTS	100%	20-180%
	13C2-8:2FTS	96%	20-180%
	13C3-HFPO-DA	106%	20-150%

Instrument Blank

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-IBLK	6Q23026.D	1	08/16/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-1, FC7978-2, FC7978-4, FC7978-5, FC7978-9

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	99%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	94%	20-150%
	13C6-PFDA	98%	20-150%
	13C7-PFUnDA	107%	20-150%
	13C2-PFDoDA	95%	20-150%
	13C2-PFTeDA	97%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	92%	20-150%
	13C8-PFOS	107%	20-150%
	13C8-FOSA	101%	20-150%
	d3-MeFOSA	107%	20-150%
	d5-EtFOSA	109%	20-150%
	d3-MeFOSAA	113%	20-150%
	d5-EtFOSAA	103%	20-150%
	d7-MeFOSE	117%	20-150%
	d9-EtFOSE	122%	20-150%
	13C2-4:2FTS	105%	20-180%
	13C2-6:2FTS	110%	20-180%
	13C2-8:2FTS	103%	20-180%
	13C3-HFPO-DA	107%	20-150%

Continuing Calibration Blank

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q332-ICCB	6Q22887.D	1	08/14/23	MV	n/a	n/a	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-4, FC7978-5, FC7978-6, FC7978-7, FC7978-8, FC7978-9

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q332-ICCB	6Q22887.D	1	08/14/23	MV	n/a	n/a	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-4, FC7978-5, FC7978-6, FC7978-7, FC7978-8, FC7978-9

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	99%	20-150%
	13C4-PFHpA	97%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	102%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	106%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	93%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSA	95%	20-150%
	d5-EtFOSA	100%	20-150%
	d3-MeFOSAA	96%	20-150%
	d5-EtFOSAA	76%	20-150%
	d7-MeFOSE	113%	20-150%
	d9-EtFOSE	120%	20-150%
	13C2-4:2FTS	103%	20-180%
	13C2-6:2FTS	108%	20-180%
	13C2-8:2FTS	85%	20-180%
	13C3-HFPO-DA	104%	20-150%

Continuing Calibration Blank

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-ICCB	6Q22956.D	1	08/15/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-2

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	100%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	100%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	92%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	94%	20-150%
	13C2-PFTeDA	95%	20-150%
	13C3-PFBS	95%	20-150%
	13C3-PFHxS	94%	20-150%
	13C8-PFOS	106%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSA	98%	20-150%
	d5-EtFOSA	99%	20-150%
	d3-MeFOSAA	111%	20-150%
	d5-EtFOSAA	95%	20-150%
	d7-MeFOSE	105%	20-150%
	d9-EtFOSE	105%	20-150%
	13C2-4:2FTS	106%	20-180%
	13C2-6:2FTS	111%	20-180%
	13C2-8:2FTS	100%	20-180%
	13C3-HFPO-DA	109%	20-150%

Continuing Calibration Blank

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-ICCB	6Q22992.D	1	08/16/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	104%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	95%	20-150%
	13C6-PFDA	110%	20-150%
	13C7-PFUnDA	110%	20-150%
	13C2-PFDoDA	107%	20-150%
	13C2-PFTeDA	115%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSA	97%	20-150%
	d5-EtFOSA	98%	20-150%
	d3-MeFOSAA	100%	20-150%
	d5-EtFOSAA	99%	20-150%
	d7-MeFOSE	113%	20-150%
	d9-EtFOSE	108%	20-150%
	13C2-4:2FTS	108%	20-180%
	13C2-6:2FTS	117%	20-180%
	13C2-8:2FTS	105%	20-180%
	13C3-HFPO-DA	106%	20-150%

Continuing Calibration Blank

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-ICCB	6Q23004.D	1	08/16/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-4, FC7978-5, FC7978-9

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	96%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	99%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	98%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	102%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSA	102%	20-150%
	d5-EtFOSA	104%	20-150%
	d3-MeFOSAA	102%	20-150%
	d5-EtFOSAA	97%	20-150%
	d7-MeFOSE	111%	20-150%
	d9-EtFOSE	114%	20-150%
	13C2-4:2FTS	109%	20-180%
	13C2-6:2FTS	114%	20-180%
	13C2-8:2FTS	110%	20-180%
	13C3-HFPO-DA	111%	20-150%

Continuing Calibration Blank

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-ICCB	6Q23016.D	1	08/16/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98329-DUP, S6Q333-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q333-ICCB	6Q23016.D	1	08/16/23	MV	n/a	n/a	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98329-DUP, S6Q333-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	91%	20-150%
	13C6-PFDA	103%	20-150%
	13C7-PFUnDA	113%	20-150%
	13C2-PFDoDA	113%	20-150%
	13C2-PFTeDA	131%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	121%	20-150%
	d3-MeFOSA	98%	20-150%
	d5-EtFOSA	97%	20-150%
	d3-MeFOSAA	117%	20-150%
	d5-EtFOSAA	124%	20-150%
	d7-MeFOSE	144%	20-150%
	d9-EtFOSE	134%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	118%	20-180%
	13C2-8:2FTS	124%	20-180%
	13C3-HFPO-DA	108%	20-150%

Blank Spike Summary

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-LLBS	6Q22856.D	1	08/14/23	MV	08/09/23	OP98329	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-1, FC7978-2, FC7978-3, FC7978-4, FC7978-5, FC7978-6, FC7978-7, FC7978-8, FC7978-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0176	110	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0091	114	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0058	145	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0043	108	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0045	113	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0042	105	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0041	103	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0046	115	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0043	108	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0039	98	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0045	113	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0041	116	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0045	120	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0043	118	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0044	115	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0046	124	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0040	104	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0040	104	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0033	85	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0177	118	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0155	102	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0165	107	40-150
754-91-6	PFOSA	0.004	0.0045	113	40-150
31506-32-8	MeFOSA	0.008	0.0087	109	40-150
4151-50-2	EtFOSA	0.008	0.0089	111	40-150
2355-31-9	MeFOSAA	0.004	0.0045	113	40-150
2991-50-6	EtFOSAA	0.004	0.0051	128	40-150
24448-09-7	MeFOSE	0.02	0.0217	109	40-150
1691-99-2	EtFOSE	0.02	0.0214	107	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0090	113	40-150
919005-14-4	ADONA	0.00756	0.0083	110	40-150
377-73-1	PFMPA	0.008	0.0091	114	40-150
863090-89-5	PFMBA	0.008	0.0091	114	40-150
151772-58-6	NFDHA	0.008	0.0092	115	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0083	111	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0073	97	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-LLBS	6Q22856.D	1	08/14/23	MV	08/09/23	OP98329	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-1, FC7978-2, FC7978-3, FC7978-4, FC7978-5, FC7978-6, FC7978-7, FC7978-8, FC7978-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0082	115	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0177	89	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.104	104	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.0984	98	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	106%	20-150%
	13C5-PFPeA	109%	20-150%
	13C5-PFHxA	108%	20-150%
	13C4-PFHpA	110%	20-150%
	13C8-PFOA	109%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	112%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	86%	20-150%
	13C2-PFTeDA	74%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	105%	20-150%
	13C8-PFOS	111%	20-150%
	13C8-FOSA	70%	20-150%
	d3-MeFOSA	65%	20-150%
	d5-EtFOSA	67%	20-150%
	d3-MeFOSAA	89%	20-150%
	d5-EtFOSAA	71%	20-150%
	d7-MeFOSE	67%	20-150%
	d9-EtFOSE	77%	20-150%
	13C2-4:2FTS	107%	20-180%
	13C2-6:2FTS	117%	20-180%
	13C2-8:2FTS	90%	20-180%
	13C3-HFPO-DA	109%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-BS	6Q22855.D	1	08/14/23	MV	08/09/23	OP98329	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-1, FC7978-2, FC7978-3, FC7978-4, FC7978-5, FC7978-6, FC7978-7, FC7978-8, FC7978-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.115	115	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0599	120	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0317	127	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0288	115	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0288	115	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0293	117	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0282	113	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0324	130	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0282	113	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0286	114	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0273	109	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0248	112	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0282	120	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0269	118	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0257	108	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0253	109	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0234	97	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0253	105	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0264	109	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.110	117	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.112	118	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.107	111	40-150
754-91-6	PFOSA	0.025	0.0293	117	40-150
31506-32-8	MeFOSA	0.05	0.0543	109	40-150
4151-50-2	EtFOSA	0.05	0.0558	112	40-150
2355-31-9	MeFOSAA	0.025	0.0295	118	40-150
2991-50-6	EtFOSAA	0.025	0.0316	126	40-150
24448-09-7	MeFOSE	0.125	0.146	117	40-150
1691-99-2	EtFOSE	0.125	0.148	118	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0570	114	40-150
919005-14-4	ADONA	0.0473	0.0533	113	40-150
377-73-1	PFMPA	0.05	0.0602	120	40-150
863090-89-5	PFMBA	0.05	0.0606	121	40-150
151772-58-6	NFDHA	0.05	0.0606	121	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0530	113	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0540	114	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-BS	6Q22855.D	1	08/14/23	MV	08/09/23	OP98329	S6Q332

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-1, FC7978-2, FC7978-3, FC7978-4, FC7978-5, FC7978-6, FC7978-7, FC7978-8, FC7978-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0577	130	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.109	87	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.662	106	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.657	105	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	108%	20-150%
	13C5-PFPeA	112%	20-150%
	13C5-PFHxA	110%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	103%	20-150%
	13C6-PFDA	109%	20-150%
	13C7-PFUnDA	102%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	101%	20-150%
	13C3-PFBS	105%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	121%	20-150%
	13C8-FOSA	76%	20-150%
	d3-MeFOSA	81%	20-150%
	d5-EtFOSA	84%	20-150%
	d3-MeFOSAA	98%	20-150%
	d5-EtFOSAA	76%	20-150%
	d7-MeFOSE	82%	20-150%
	d9-EtFOSE	91%	20-150%
	13C2-4:2FTS	104%	20-180%
	13C2-6:2FTS	105%	20-180%
	13C2-8:2FTS	77%	20-180%
	13C3-HFPO-DA	115%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-MS	6Q23010.D	1	08/16/23	MV	08/09/23	OP98329	S6Q333
FC8036-1	6Q23008.D	1	08/16/23	MV	08/09/23	OP98329	S6Q333
FC8036-1 [a]	6Q23009.D	10	08/16/23	MV	08/09/23	OP98329	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-1, FC7978-2, FC7978-3, FC7978-4, FC7978-5, FC7978-6, FC7978-7, FC7978-8, FC7978-9

CAS No.	Compound	FC8036-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	ND		0.1	0.126	126	40-150
2706-90-3	Perfluoropentanoic acid	ND		0.05	0.0531	106	40-150
307-24-4	Perfluorohexanoic acid	0.0013	J	0.025	0.0329	126	40-150
375-85-9	Perfluoroheptanoic acid	ND		0.025	0.0287	115	40-150
335-67-1	Perfluorooctanoic acid	ND		0.025	0.0294	118	40-150
375-95-1	Perfluorononanoic acid	0.00086	J	0.025	0.0291	113	40-150
335-76-2	Perfluorodecanoic acid	ND		0.025	0.0264	106	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.025	0.0336	134	40-150
307-55-1	Perfluorododecanoic acid	ND		0.025	0.0279	112	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.025	0.0235	94	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.025	0.0287	115	40-150
375-73-5	Perfluorobutanesulfonic acid	ND		0.0222	0.0269	121	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0235	0.0337	143	40-150
355-46-4	Perfluorohexanesulfonic acid	ND		0.0229	0.0241	105	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0238	0.0290	122	40-150
1763-23-1	Perfluorooctanesulfonic acid	ND		0.0232	0.0284	122	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.0241	0.0266	111	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.0241	0.0251	104	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0243	0.0145	60	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0938	0.134	143	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.095	0.116	122	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND [b]		0.096	0.116	121	40-150
754-91-6	PFOSA	ND		0.025	0.0302	121	40-150
31506-32-8	MeFOSA	ND		0.05	0.0605	121	40-150
4151-50-2	EtFOSA	ND		0.05	0.0590	118	40-150
2355-31-9	MeFOSAA	ND [b]		0.025	0.0298	119	40-150
2991-50-6	EtFOSAA	ND [b]		0.025	0.0300	120	40-150
24448-09-7	MeFOSE	ND		0.125	0.157	126	40-150
1691-99-2	EtFOSE	ND		0.125	0.152	122	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.05	0.0588	118	40-150
919005-14-4	ADONA	ND		0.0473	0.0852	180*	40-150
377-73-1	PFMPA	ND		0.05	0.0264	53	40-150
863090-89-5	PFMBA	ND		0.05	0.0774	155*	40-150
151772-58-6	NFDHA	ND		0.05	0.0436	87	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0468	0.126	270*	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0473	0.109	231*	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-MS	6Q23010.D	1	08/16/23	MV	08/09/23	OP98329	S6Q333
FC8036-1	6Q23008.D	1	08/16/23	MV	08/09/23	OP98329	S6Q333
FC8036-1 [a]	6Q23009.D	10	08/16/23	MV	08/09/23	OP98329	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-1, FC7978-2, FC7978-3, FC7978-4, FC7978-5, FC7978-6, FC7978-7, FC7978-8, FC7978-9

CAS No.	Compound	FC8036-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	ND		0.0445	0.0631	142	40-150
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.125	0.0725	58	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.625	1.16	186*	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.625	1.48	237*	40-150

CAS No.	ID Standard Recoveries	MS	FC8036-1	FC8036-1	Limits
	13C4-PFBA	6%* [c]	7%* [c]	7%* [c]	20-150%
	13C5-PFPeA	22%	23%	20%	20-150%
	13C5-PFHxA	78%	77%	70%	20-150%
	13C4-PFHpA	103%	104%	103%	20-150%
	13C8-PFOA	105%	114%	95%	20-150%
	13C9-PFNA	102%	108%	91%	20-150%
	13C6-PFDA	109%	112%	96%	20-150%
	13C7-PFUnDA	96%	99%	96%	20-150%
	13C2-PFDoDA	91%	92%	78%	20-150%
	13C2-PFTeDA	58%	52%	53%	20-150%
	13C3-PFBS	128%	124%	89%	20-150%
	13C3-PFHxS	110%	108%	107%	20-150%
	13C8-PFOS	108%	100%	104%	20-150%
	13C8-FOSA	105%	84%	77%	20-150%
	d3-MeFOSA	76%	68%	67%	20-150%
	d5-EtFOSA	75%	68%	69%	20-150%
	d3-MeFOSAA	173%* [c]	172%* [c]	118%	20-150%
	d5-EtFOSAA	165%* [c]	171%* [c]	98%	20-150%
	d7-MeFOSE	95%	70%	70%	20-150%
	d9-EtFOSE	87%	70%	75%	20-150%
	13C2-4:2FTS	83%	95%	36%	20-180%
	13C2-6:2FTS	391%* [c]	385%* [c]	337%* [c]	20-180%
	13C2-8:2FTS	265%* [c]	289%* [c]	109%	20-180%
	13C3-HFPO-DA	49%	44%	53%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Result is from Run #2.
(c) Outside control limits.

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-DUP	6Q23019.D	1	08/16/23	MV	08/09/23	OP98329	S6Q333
FC8036-4	6Q23017.D	1	08/16/23	MV	08/09/23	OP98329	S6Q333
FC8036-4 [a]	6Q23018.D	10	08/16/23	MV	08/09/23	OP98329	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-1, FC7978-2, FC7978-3, FC7978-4, FC7978-5, FC7978-6, FC7978-7, FC7978-8, FC7978-9

CAS No.	Compound	FC8036-4 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	ND		ND		nc	30
2706-90-3	Perfluoropentanoic acid	ND		ND		nc	30
307-24-4	Perfluorohexanoic acid	0.0180		0.0152		17	30
375-85-9	Perfluoroheptanoic acid	0.0046		0.0041		11	30
335-67-1	Perfluorooctanoic acid	0.0020	J	0.0019	J	5	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	0.00065	J	ND		200*	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	0.0054	J	0.0047	J	14	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC7978
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98329-DUP	6Q23019.D	1	08/16/23	MV	08/09/23	OP98329	S6Q333
FC8036-4	6Q23017.D	1	08/16/23	MV	08/09/23	OP98329	S6Q333
FC8036-4 [a]	6Q23018.D	10	08/16/23	MV	08/09/23	OP98329	S6Q333

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC7978-1, FC7978-2, FC7978-3, FC7978-4, FC7978-5, FC7978-6, FC7978-7, FC7978-8, FC7978-9

CAS No.	Compound	FC8036-4 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC8036-4	FC8036-4	Limits
	13C4-PFBA	5%* [b]	4%* [b]	4%* [b]	20-150%
	13C5-PFPeA	24%	19%* [b]	19%* [b]	20-150%
	13C5-PFHxA	92%	84%	78%	20-150%
	13C4-PFHpA	105%	103%	96%	20-150%
	13C8-PFOA	102%	97%	92%	20-150%
	13C9-PFNA	102%	91%	88%	20-150%
	13C6-PFDA	104%	104%	103%	20-150%
	13C7-PFUnDA	102%	106%	98%	20-150%
	13C2-PFDoDA	89%	91%	88%	20-150%
	13C2-PFTeDA	43%	48%	41%	20-150%
	13C3-PFBS	101%	91%	86%	20-150%
	13C3-PFHxS	108%	99%	90%	20-150%
	13C8-PFOS	112%	108%	102%	20-150%
	13C8-FOSA	106%	110%	93%	20-150%
	d3-MeFOSA	91%	95%	102%	20-150%
	d5-EtFOSA	93%	90%	92%	20-150%
	d3-MeFOSAA	153%* [b]	146%	99%	20-150%
	d5-EtFOSAA	162%* [b]	157%* [b]	107%	20-150%
	d7-MeFOSE	75%	97%	90%	20-150%
	d9-EtFOSE	77%	85%	87%	20-150%
	13C2-4:2FTS	109%	98%	67%	20-180%
	13C2-6:2FTS	181%* [b]	175%	100%	20-180%
	13C2-8:2FTS	147%	144%	102%	20-180%
	13C3-HFPO-DA	83%	73%	80%	20-150%

(a) Confirmation run.
(b) Outside control limits.

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report



Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC8529

Sampling Date: 08/03/23

Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
ssuggs@nd.gov

ATTN: Shannon Suggs

Total number of pages in report: **48**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC8529

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
FC8529-1	08/03/23	10:30	EB	08/09/23	AQ	Surface Water	380235 EAST DEVILS LAKE
FC8529-2	08/03/23	14:00	EB	08/09/23	AQ	Surface Water	380236 WEST BAY DEVILS LAKE
FC8529-3	08/03/23	15:15	EB	08/09/23	AQ	Surface Water	385029 PELICAN LAKE

Summary of Hits

Job Number: FC8529
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 08/03/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC8529-1	**380235 EAST DEVILS LAKE**					
Perfluoropentanoic acid		2.4 J	3.9	0.97	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid [a]		2.6	1.9	0.49	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		2.0	1.9	0.49	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.5 J	1.9	0.49	ng/l	EPA DRAFT 1633
Perfluorononanoic acid		1.0 J	1.9	0.59	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		0.98 J	1.9	0.97	ng/l	EPA DRAFT 1633
FC8529-2	**380236 WEST BAY DEVILS LAKE**					
Perfluorobutanoic acid [b]		42.2	7.8	3.9	ng/l	EPA DRAFT 1633
Perfluoropentanoic acid		2.0 J	3.9	0.97	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid [c]		2.8	1.9	0.49	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		2.7	1.9	0.49	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.6 J	1.9	0.49	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		1.0 J	1.9	0.97	ng/l	EPA DRAFT 1633
FC8529-3	**385029 PELICAN LAKE**					
Perfluorobutanoic acid [b]		59.0	8.0	4.0	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid [c]		2.0	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		2.6	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.3 J	2.0	0.50	ng/l	EPA DRAFT 1633

(a) Associated Low Level BS outside of control limits.
(b) Associated ID Standard outside control limits.
(c) Associated Low Level BS outside of control limits high.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	380235 EAST DEVILS LAKE		
Lab Sample ID:	FC8529-1	**Date Sampled:**	08/03/23
Matrix:	AQ - Surface Water	**Date Received:**	08/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49770.D	1	08/30/23 15:59	AL	08/24/23 10:05	OP98611	S4Q728
Run #2 [a]	4Q49771.D	5	08/30/23 16:14	AL	08/24/23 10:05	OP98611	S4Q728

	Initial Volume	Final Volume
Run #1	515 ml	5.0 ml
Run #2	515 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND [c]	39	19	ng/l	
2706-90-3	Perfluoropentanoic acid	2.4	3.9	0.97	ng/l	J
307-24-4	Perfluorohexanoic acid [d]	2.6	1.9	0.49	ng/l	
375-85-9	Perfluoroheptanoic acid	2.0	1.9	0.49	ng/l	
335-67-1	Perfluorooctanoic acid	1.5	1.9	0.49	ng/l	J
375-95-1	Perfluorononanoic acid	1.0	1.9	0.59	ng/l	J
335-76-2	Perfluorodecanoic acid [e]	ND	1.9	0.49	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.82	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.49	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.97	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	0.98	1.9	0.97	ng/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.97	ng/l	
1763-23-1	Perfluorooctanesulfonic acid [f]	ND	1.9	0.97	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.97	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.97	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate [f]	ND	7.8	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.97	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.97	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.97	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380235 EAST DEVILS LAKE		
Lab Sample ID:	FC8529-1	**Date Sampled:**	08/03/23
Matrix:	AQ - Surface Water	**Date Received:**	08/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA [e]	ND	1.9	0.97	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.7	ng/l	
1691-99-2	EtFOSE	ND	19	9.7	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.8	1.9	ng/l	
919005-14-4	ADONA	ND	7.8	1.9	ng/l	
377-73-1	PFMPA	ND	3.9	0.97	ng/l	
863090-89-5	PFMBA	ND	3.9	1.1	ng/l	
151772-58-6	NFDHA	ND	3.9	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.8	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.8	1.9	ng/l	
113507-82-7	PFEESA	ND	3.9	0.97	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [e]	ND	9.7	4.9	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	49	9.7	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	49	9.7	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	8% [g]	8% [g]	20-150%
	13C5-PFPeA	66%	69%	20-150%
	13C5-PFHxA	104%	107%	20-150%
	13C4-PFHpA	107%	108%	20-150%
	13C8-PFOA	108%	104%	20-150%
	13C9-PFNA	106%	117%	20-150%
	13C6-PFDA	98%	86%	20-150%
	13C7-PFUnDA	89%	84%	20-150%
	13C2-PFDoDA	68%	63%	20-150%
	13C2-PFTeDA	38%	36%	20-150%
	13C3-PFBS	104%	103%	20-150%
	13C3-PFHxS	99%	100%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380235 EAST DEVILS LAKE		
Lab Sample ID:	FC8529-1	**Date Sampled:**	08/03/23
Matrix:	AQ - Surface Water	**Date Received:**	08/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%	100%	20-150%
	13C8-FOSA	103%	89%	20-150%
	d3-MeFOSA	98%	95%	20-150%
	d5-EtFOSA	97%	106%	20-150%
	d3-MeFOSAA	94%	88%	20-150%
	d5-EtFOSAA	74%	89%	20-150%
	d7-MeFOSE	78%	73%	20-150%
	d9-EtFOSE	72%	70%	20-150%
	13C2-4:2FTS	91%	110%	20-180%
	13C2-6:2FTS	82%	106%	20-180%
	13C2-8:2FTS	79%	96%	20-180%
	13C3-HFPO-DA	99%	100%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Associated ID Standard outside control limits.
(c) Result is from Run# 2
(d) Associated Low Level BS outside of control limits.
(e) Associated BS outside control limits high, sample was ND.
(f) Associated Low Level BS outside of control limits high, sample was ND.
(g) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380236 WEST BAY DEVILS LAKE		
Lab Sample ID:	FC8529-2	**Date Sampled:**	08/03/23
Matrix:	AQ - Surface Water	**Date Received:**	08/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49772.D	1	08/30/23 16:28	AL	08/24/23 10:05	OP98611	S4Q728
Run #2 [a]	4Q49773.D	5	08/30/23 16:43	AL	08/24/23 10:05	OP98611	S4Q728

	Initial Volume	Final Volume
Run #1	515 ml	5.0 ml
Run #2	515 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	42.2	7.8	3.9	ng/l	
2706-90-3	Perfluoropentanoic acid	2.0	3.9	0.97	ng/l	J
307-24-4	Perfluorohexanoic acid [c]	2.8	1.9	0.49	ng/l	
375-85-9	Perfluoroheptanoic acid	2.7	1.9	0.49	ng/l	
335-67-1	Perfluorooctanoic acid	1.6	1.9	0.49	ng/l	J
375-95-1	Perfluorononanoic acid	ND	1.9	0.59	ng/l	
335-76-2	Perfluorodecanoic acid [d]	ND	1.9	0.49	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.82	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.49	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.97	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	1.0	1.9	0.97	ng/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.97	ng/l	
1763-23-1	Perfluorooctanesulfonic acid [e]	ND	1.9	0.97	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.97	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.97	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate [e]	ND	7.8	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.97	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.97	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.97	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380236 WEST BAY DEVILS LAKE		
Lab Sample ID:	FC8529-2	**Date Sampled:**	08/03/23
Matrix:	AQ - Surface Water	**Date Received:**	08/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA [d]	ND	1.9	0.97	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.7	ng/l	
1691-99-2	EtFOSE	ND	19	9.7	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.8	1.9	ng/l	
919005-14-4	ADONA	ND	7.8	1.9	ng/l	
377-73-1	PFMPA	ND	3.9	0.97	ng/l	
863090-89-5	PFMBA	ND	3.9	1.1	ng/l	
151772-58-6	NFDHA	ND	3.9	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.8	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.8	1.9	ng/l	
113507-82-7	PFEESA	ND	3.9	0.97	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [d]	ND	9.7	4.9	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	49	9.7	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	49	9.7	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9% [f]	9% [f]	20-150%
	13C5-PFPeA	75%	75%	20-150%
	13C5-PFHxA	103%	101%	20-150%
	13C4-PFHpA	108%	105%	20-150%
	13C8-PFOA	102%	106%	20-150%
	13C9-PFNA	101%	94%	20-150%
	13C6-PFDA	103%	98%	20-150%
	13C7-PFUnDA	100%	85%	20-150%
	13C2-PFDoDA	83%	72%	20-150%
	13C2-PFTeDA	60%	47%	20-150%
	13C3-PFBS	102%	109%	20-150%
	13C3-PFHxS	102%	103%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	380236 WEST BAY DEVILS LAKE		
Lab Sample ID:	FC8529-2	**Date Sampled:**	08/03/23
Matrix:	AQ - Surface Water	**Date Received:**	08/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%	94%	20-150%
	13C8-FOSA	96%	97%	20-150%
	d3-MeFOSA	94%	94%	20-150%
	d5-EtFOSA	94%	77%	20-150%
	d3-MeFOSAA	86%	94%	20-150%
	d5-EtFOSAA	82%	88%	20-150%
	d7-MeFOSE	74%	74%	20-150%
	d9-EtFOSE	75%	71%	20-150%
	13C2-4:2FTS	97%	102%	20-180%
	13C2-6:2FTS	86%	139%	20-180%
	13C2-8:2FTS	72%	107%	20-180%
	13C3-HFPO-DA	103%	100%	20-150%

(a) Confirmation run.
(b) Associated ID Standard outside control limits.
(c) Associated Low Level BS outside of control limits high.
(d) Associated BS outside control limits high, sample was ND.
(e) Associated Low Level BS outside of control limits high, sample was ND.
(f) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	385029 PELICAN LAKE		
Lab Sample ID:	FC8529-3	**Date Sampled:**	08/03/23
Matrix:	AQ - Surface Water	**Date Received:**	08/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49774.D	1	08/30/23 16:58	AL	08/24/23 10:05	OP98611	S4Q728
Run #2 [a]	4Q49775.D	5	08/30/23 17:13	AL	08/24/23 10:05	OP98611	S4Q728

	Initial Volume	Final Volume
Run #1	500 ml	5.0 ml
Run #2	500 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	59.0	8.0	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	1.0	ng/l	
307-24-4	Perfluorohexanoic acid [c]	2.0	2.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	2.6	2.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	1.3	2.0	0.50	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.0	0.61	ng/l	
335-76-2	Perfluorodecanoic acid [d]	ND	2.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.60	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.60	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.84	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid [e]	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.0	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.0	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate [e]	ND	8.0	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	385029 PELICAN LAKE		
Lab Sample ID:	FC8529-3	**Date Sampled:**	08/03/23
Matrix:	AQ - Surface Water	**Date Received:**	08/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA [d]	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.0	2.0	ng/l	
919005-14-4	ADONA	ND	8.0	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	1.0	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.0	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.0	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [d]	ND	10	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	50	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10% [f]	10% [f]	20-150%
	13C5-PFPeA	79%	74%	20-150%
	13C5-PFHxA	110%	101%	20-150%
	13C4-PFHpA	115%	106%	20-150%
	13C8-PFOA	112%	103%	20-150%
	13C9-PFNA	108%	107%	20-150%
	13C6-PFDA	97%	111%	20-150%
	13C7-PFUnDA	94%	106%	20-150%
	13C2-PFDoDA	76%	84%	20-150%
	13C2-PFTeDA	47%	45%	20-150%
	13C3-PFBS	119%	91%	20-150%
	13C3-PFHxS	121%	97%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	385029 PELICAN LAKE		
Lab Sample ID:	FC8529-3	**Date Sampled:**	08/03/23
Matrix:	AQ - Surface Water	**Date Received:**	08/09/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	102%	96%	20-150%
	13C8-FOSA	102%	90%	20-150%
	d3-MeFOSA	96%	89%	20-150%
	d5-EtFOSA	89%	76%	20-150%
	d3-MeFOSAA	87%	89%	20-150%
	d5-EtFOSAA	80%	89%	20-150%
	d7-MeFOSE	73%	67%	20-150%
	d9-EtFOSE	71%	63%	20-150%
	13C2-4:2FTS	120%	98%	20-180%
	13C2-6:2FTS	96%	101%	20-180%
	13C2-8:2FTS	93%	78%	20-180%
	13C3-HFPO-DA	104%	98%	20-150%

(a) Confirmation run.
(b) Associated ID Standard outside control limits.
(c) Associated Low Level BS outside of control limits high.
(d) Associated BS outside control limits high, sample was ND.
(e) Associated Low Level BS outside of control limits high, sample was ND.
(f) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando

Chain of Custody

FC 8529

SGS - ORLANDO JOB # :

PAGE 1 OF 1

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: NDDEQ PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58503
Project Contact: SSuggs Email: $uggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed)
Sampler 1: Sampler 2:

Project Information

Project Name: NDDEQ PFAS
Street 4201 Normandy St
City Bismarck State ND
Project #
Fax #
Client Purchase Order #

Analytical Information

LCID 16332 LIST 40

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LAB USE ONLY
1	380235 East Devils Lake	8/3/23	16:30	EB	SW	3										
2	380236 West Bay Devils Lake	8/3/23	14:00	EB	SW	3										
3	385029 Pelican Lake	8/3/23	15:15	EB	SW	3										

INITIAL AS

LABEL VE

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	S Suggs	8/8/23	2 Fed Ex	3		4 8/9/23 945
5	Relinquished by/Affiliation	Date Time:	6 Received By/Affiliation	7 Relinquished By/Affiliation	Date Time:	8 Received By/Affiliation

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 4.0 FC #1

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

FC8529: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC8529 **Client:** NDDEQ PFAS **Project:** NDDEQ PFAS

Date / Time Received: 8/9/2023 9:45:00 AM **Delivery Method:** FEDEX **Airbill #'s:** 782221926203

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (4.0);

Cooler Temps (Corrected) °C: Cooler 1: (3.8);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230320 pH 10-12 _____ Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: ZANEB Date: 8/9/2023 9:45:00 AM Reviewer: _____ Date: _____

FC8529: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98611-MB	4Q49656.D	1	08/29/23	AL	08/24/23	OP98611	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	0.0022	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98611-MB	4Q49656.D	1	08/29/23	AL	08/24/23	OP98611	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	113%	20-150%
	13C5-PFPeA	116%	20-150%
	13C5-PFHxA	111%	20-150%
	13C4-PFHpA	120%	20-150%
	13C8-PFOA	111%	20-150%
	13C9-PFNA	131%	20-150%
	13C6-PFDA	116%	20-150%
	13C7-PFUnDA	105%	20-150%
	13C2-PFDoDA	89%	20-150%
	13C2-PFTeDA	115%	20-150%
	13C3-PFBS	124%	20-150%
	13C3-PFHxS	129%	20-150%
	13C8-PFOS	120%	20-150%
	13C8-FOSA	93%	20-150%
	d3-MeFOSA	83%	20-150%
	d5-EtFOSA	94%	20-150%
	d3-MeFOSAA	136%	20-150%
	d5-EtFOSAA	121%	20-150%
	d7-MeFOSE	75%	20-150%
	d9-EtFOSE	80%	20-150%
	13C2-4:2FTS	161%	20-180%
	13C2-6:2FTS	167%	20-180%
	13C2-8:2FTS	158%	20-180%
	13C3-HFPO-DA	130%	20-150%

Method Blank Summary

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98611-MB	4Q49711.D	1	08/29/23	AL	08/24/23	OP98611	S4Q727

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	0.0023	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98611-MB	4Q49711.D	1	08/29/23	AL	08/24/23	OP98611	S4Q727

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	116%	20-150%
	13C5-PFPeA	117%	20-150%
	13C5-PFHxA	115%	20-150%
	13C4-PFHpA	117%	20-150%
	13C8-PFOA	115%	20-150%
	13C9-PFNA	107%	20-150%
	13C6-PFDA	114%	20-150%
	13C7-PFUnDA	111%	20-150%
	13C2-PFDoDA	95%	20-150%
	13C2-PFTeDA	89%	20-150%
	13C3-PFBS	114%	20-150%
	13C3-PFHxS	116%	20-150%
	13C8-PFOS	110%	20-150%
	13C8-FOSA	85%	20-150%
	d3-MeFOSA	78%	20-150%
	d5-EtFOSA	82%	20-150%
	d3-MeFOSAA	98%	20-150%
	d5-EtFOSAA	104%	20-150%
	d7-MeFOSE	68%	20-150%
	d9-EtFOSE	74%	20-150%
	13C2-4:2FTS	113%	20-180%
	13C2-6:2FTS	126%	20-180%
	13C2-8:2FTS	127%	20-180%
	13C3-HFPO-DA	107%	20-150%

Instrument Blank

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q728-IBLK	4Q49764.D	1	08/30/23	AL	n/a	n/a	S4Q728

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.00052	0.0040	0.00050	ug/l	J
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	0.0042	0.0080	0.0010	ug/l	J
4151-50-2	EtFOSA	0.0051	0.0080	0.0010	ug/l	J
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	0.0092	0.040	0.0044	ug/l	J
1691-99-2	EtFOSE	0.0141	0.040	0.0074	ug/l	J
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q728-IBLK	4Q49764.D	1	08/30/23	AL	n/a	n/a	S4Q728

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	93%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	107%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	105%	20-150%
	13C8-PFOS	93%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSAA	101%	20-150%
	d5-EtFOSAA	92%	20-150%
	13C2-4:2FTS	120%	20-180%
	13C2-6:2FTS	112%	20-180%
	13C2-8:2FTS	119%	20-180%

Instrument Blank

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q726-IBLK	4Q49615.D	1	08/28/23	AL	n/a	n/a	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98611-BS, OP98611-LLBS

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	0.0033	0.0080	0.0010	ug/l	J
4151-50-2	EtFOSA	0.0052	0.0080	0.0010	ug/l	J
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	0.0057	0.040	0.0044	ug/l	J
1691-99-2	EtFOSE	0.0111	0.040	0.0074	ug/l	J
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q726-IBLK	4Q49615.D	1	08/28/23	AL	n/a	n/a	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98611-BS, OP98611-LLBS

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	107%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	96%	20-150%
	13C7-PFUnDA	102%	20-150%
	13C2-PFDoDA	101%	20-150%
	13C2-PFTeDA	101%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSAA	105%	20-150%
	d5-EtFOSAA	101%	20-150%
	13C2-4:2FTS	123%	20-180%
	13C2-6:2FTS	116%	20-180%
	13C2-8:2FTS	122%	20-180%

Instrument Blank

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q727-IBLK	4Q49682.D	1	08/29/23	AL	n/a	n/a	S4Q727

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98611-BS, OP98611-LLBS, OP98611-DUP, OP98611-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	0.0030	0.0080	0.0010	ug/l	J
4151-50-2	EtFOSA	0.0056	0.0080	0.0010	ug/l	J
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	0.0093	0.040	0.0044	ug/l	J
1691-99-2	EtFOSE	0.0100	0.040	0.0074	ug/l	J
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q727-IBLK	4Q49682.D	1	08/29/23	AL	n/a	n/a	S4Q727

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98611-BS, OP98611-LLBS, OP98611-DUP, OP98611-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	104%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	102%	20-150%
	13C6-PFDA	87%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	91%	20-150%
	13C2-PFTeDA	89%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	108%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSAA	96%	20-150%
	d5-EtFOSAA	96%	20-150%
	13C2-4:2FTS	112%	20-180%
	13C2-6:2FTS	106%	20-180%
	13C2-8:2FTS	107%	20-180%

Continuing Calibration Blank

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q726-ICCB	4Q49653.D	1	08/29/23	AL	n/a	n/a	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98611-BS, OP98611-LLBS, OP98611-MB

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q726-ICCB	4Q49653.D	1	08/29/23	AL	n/a	n/a	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98611-BS, OP98611-LLBS, OP98611-MB

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	98%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	107%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	111%	20-150%
	13C6-PFDA	102%	20-150%
	13C7-PFUnDA	102%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	134%	20-150%
	13C3-PFBS	116%	20-150%
	13C3-PFHxS	108%	20-150%
	13C8-PFOS	106%	20-150%
	13C8-FOSA	103%	20-150%
	d3-MeFOSAA	128%	20-150%
	d5-EtFOSAA	114%	20-150%
	13C2-4:2FTS	146%	20-180%
	13C2-6:2FTS	154%	20-180%
	13C2-8:2FTS	138%	20-180%

Continuing Calibration Blank

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q726-ICCB	4Q49660.D	1	08/29/23	AL	n/a	n/a	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98611-BS, OP98611-LLBS, OP98611-MB

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q726-ICCB	4Q49660.D	1	08/29/23	AL	n/a	n/a	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98611-BS, OP98611-LLBS, OP98611-MB

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	97%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	97%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	116%	20-150%
	13C6-PFDA	101%	20-150%
	13C7-PFUnDA	96%	20-150%
	13C2-PFDoDA	99%	20-150%
	13C2-PFTeDA	130%	20-150%
	13C3-PFBS	107%	20-150%
	13C3-PFHxS	104%	20-150%
	13C8-PFOS	104%	20-150%
	13C8-FOSA	108%	20-150%
	d3-MeFOSAA	132%	20-150%
	d5-EtFOSAA	114%	20-150%
	13C2-4:2FTS	119%	20-180%
	13C2-6:2FTS	107%	20-180%
	13C2-8:2FTS	107%	20-180%

Continuing Calibration Blank

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q727-ICCB	4Q49708.D	1	08/29/23	AL	n/a	n/a	S4Q727

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98611-BS, OP98611-LLBS, OP98611-MB, OP98611-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q727-ICCB	4Q49708.D	1	08/29/23	AL	n/a	n/a	S4Q727

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98611-BS, OP98611-LLBS, OP98611-MB, OP98611-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	101%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	100%	20-150%
	13C6-PFDA	94%	20-150%
	13C7-PFUnDA	113%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	92%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	94%	20-150%
	13C8-PFOS	103%	20-150%
	13C8-FOSA	97%	20-150%
	d3-MeFOSAA	102%	20-150%
	d5-EtFOSAA	96%	20-150%
	13C2-4:2FTS	103%	20-180%
	13C2-6:2FTS	97%	20-180%
	13C2-8:2FTS	109%	20-180%

Continuing Calibration Blank

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q727-ICCB	4Q49719.D	1	08/30/23	AL	n/a	n/a	S4Q727

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98611-DUP

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q727-ICCB	4Q49719.D	1	08/30/23	AL	n/a	n/a	S4Q727

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98611-DUP

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	101%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	97%	20-150%
	13C7-PFUnDA	106%	20-150%
	13C2-PFDoDA	100%	20-150%
	13C2-PFTeDA	92%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	97%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	98%	20-150%
	d3-MeFOSAA	98%	20-150%
	d5-EtFOSAA	99%	20-150%
	13C2-4:2FTS	98%	20-180%
	13C2-6:2FTS	109%	20-180%
	13C2-8:2FTS	105%	20-180%

Blank Spike Summary

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98611-LLBS	4Q49655.D	1	08/29/23	AL	08/24/23	OP98611	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0206	129	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0106	133	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0063	158*	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0046	115	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0045	113	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0048	120	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0056	140	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0060	150	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0050	125	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0046	115	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0042	105	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0046	130	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0051	135	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0041	112	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0047	123	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0052	140	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0045	117	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0047	122	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0038	98	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0197	131	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0193	127	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0219	143	40-150
754-91-6	PFOSA	0.004	0.0055	138	40-150
31506-32-8	MeFOSA	0.008	0.0083	104	40-150
4151-50-2	EtFOSA	0.008	0.0095	119	40-150
2355-31-9	MeFOSAA	0.004	0.0052	130	40-150
2991-50-6	EtFOSAA	0.004	0.0074	185*	40-150
24448-09-7	MeFOSE	0.02	0.0239	120	40-150
1691-99-2	EtFOSE	0.02	0.0210	105	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0093	116	40-150
919005-14-4	ADONA	0.00756	0.0089	118	40-150
377-73-1	PFMPA	0.008	0.0096	120	40-150
863090-89-5	PFMBA	0.008	0.0090	113	40-150
151772-58-6	NFDHA	0.008	0.0112	140	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0091	122	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0075	99	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98611-LLBS	4Q49655.D	1	08/29/23	AL	08/24/23	OP98611	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0091	128	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0239	120	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.122	122	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.126	126	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	104%	20-150%
	13C5-PFPeA	111%	20-150%
	13C5-PFHxA	107%	20-150%
	13C4-PFHpA	117%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	125%	20-150%
	13C6-PFDA	95%	20-150%
	13C7-PFUnDA	85%	20-150%
	13C2-PFDoDA	82%	20-150%
	13C2-PFTeDA	100%	20-150%
	13C3-PFBS	115%	20-150%
	13C3-PFHxS	113%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	81%	20-150%
	d3-MeFOSA	77%	20-150%
	d5-EtFOSA	80%	20-150%
	d3-MeFOSAA	115%	20-150%
	d5-EtFOSAA	108%	20-150%
	d7-MeFOSE	77%	20-150%
	d9-EtFOSE	80%	20-150%
	13C2-4:2FTS	156%	20-180%
	13C2-6:2FTS	149%	20-180%
	13C2-8:2FTS	141%	20-180%
	13C3-HFPO-DA	119%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98611-LLBS	4Q49710.D	1	08/29/23	AL	08/24/23	OP98611	S4Q727

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0208	130	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0103	129	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0062	155*	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0049	123	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0048	120	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0050	125	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0063	158*	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0054	135	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0058	145	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0053	133	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0051	128	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0053	149	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0049	130	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0049	134	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0041	108	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0057	154*	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0052	135	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0041	106	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0043	111	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0201	134	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0184	121	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0244	159*	40-150
754-91-6	PFOSA	0.004	0.0053	133	40-150
31506-32-8	MeFOSA	0.008	0.0097	121	40-150
4151-50-2	EtFOSA	0.008	0.0100	125	40-150
2355-31-9	MeFOSAA	0.004	0.0068	170*	40-150
2991-50-6	EtFOSAA	0.004	0.0054	135	40-150
24448-09-7	MeFOSE	0.02	0.0235	118	40-150
1691-99-2	EtFOSE	0.02	0.0216	108	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0093	116	40-150
919005-14-4	ADONA	0.00756	0.0095	126	40-150
377-73-1	PFMPA	0.008	0.0096	120	40-150
863090-89-5	PFMBA	0.008	0.0098	123	40-150
151772-58-6	NFDHA	0.008	0.0102	128	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0100	134	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0092	122	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98611-LLBS	4Q49710.D	1	08/29/23	AL	08/24/23	OP98611	S4Q727

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0085	119	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0230	115	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.120	120	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.127	127	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	107%	20-150%
	13C5-PFPeA	111%	20-150%
	13C5-PFHxA	111%	20-150%
	13C4-PFHpA	114%	20-150%
	13C8-PFOA	109%	20-150%
	13C9-PFNA	102%	20-150%
	13C6-PFDA	106%	20-150%
	13C7-PFUnDA	109%	20-150%
	13C2-PFDoDA	96%	20-150%
	13C2-PFTeDA	80%	20-150%
	13C3-PFBS	103%	20-150%
	13C3-PFHxS	110%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	84%	20-150%
	d3-MeFOSA	79%	20-150%
	d5-EtFOSA	82%	20-150%
	d3-MeFOSAA	96%	20-150%
	d5-EtFOSAA	95%	20-150%
	d7-MeFOSE	78%	20-150%
	d9-EtFOSE	83%	20-150%
	13C2-4:2FTS	106%	20-180%
	13C2-6:2FTS	119%	20-180%
	13C2-8:2FTS	108%	20-180%
	13C3-HFPO-DA	103%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98611-BS	4Q49654.D	1	08/29/23	AL	08/24/23	OP98611	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.134	134	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0659	132	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0334	134	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0343	137	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0313	125	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0300	120	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0326	130	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0374	150	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0323	129	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0326	130	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0261	104	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0302	136	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0316	134	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0293	128	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0243	102	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0276	119	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0277	115	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0277	115	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0234	96	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.134	143	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.130	137	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.156	163*	40-150
754-91-6	PFOSA	0.025	0.0366	146	40-150
31506-32-8	MeFOSA	0.05	0.0631	126	40-150
4151-50-2	EtFOSA	0.05	0.0597	119	40-150
2355-31-9	MeFOSAA	0.025	0.0366	146	40-150
2991-50-6	EtFOSAA	0.025	0.0379	152*	40-150
24448-09-7	MeFOSE	0.125	0.149	119	40-150
1691-99-2	EtFOSE	0.125	0.136	109	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0633	127	40-150
919005-14-4	ADONA	0.0473	0.0584	124	40-150
377-73-1	PFMPA	0.05	0.0386	77	40-150
863090-89-5	PFMBA	0.05	0.0600	120	40-150
151772-58-6	NFDHA	0.05	0.0669	134	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0563	120	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0534	113	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98611-BS	4Q49654.D	1	08/29/23	AL	08/24/23	OP98611	S4Q726

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0589	132	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.296	237*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.826	132	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.807	129	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	37%	20-150%
	13C5-PFPeA	112%	20-150%
	13C5-PFHxA	111%	20-150%
	13C4-PFHpA	117%	20-150%
	13C8-PFOA	115%	20-150%
	13C9-PFNA	122%	20-150%
	13C6-PFDA	112%	20-150%
	13C7-PFUnDA	96%	20-150%
	13C2-PFDoDA	99%	20-150%
	13C2-PFTeDA	116%	20-150%
	13C3-PFBS	126%	20-150%
	13C3-PFHxS	124%	20-150%
	13C8-PFOS	130%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSA	87%	20-150%
	d5-EtFOSA	90%	20-150%
	d3-MeFOSAA	124%	20-150%
	d5-EtFOSAA	122%	20-150%
	d7-MeFOSE	76%	20-150%
	d9-EtFOSE	85%	20-150%
	13C2-4:2FTS	153%	20-180%
	13C2-6:2FTS	158%	20-180%
	13C2-8:2FTS	140%	20-180%
	13C3-HFPO-DA	121%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98611-BS	4Q49709.D	1	08/29/23	AL	08/24/23	OP98611	S4Q727

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.136	136	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0678	136	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0344	138	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0334	134	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0346	138	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0336	134	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0386	154*	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0310	124	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0355	142	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0355	142	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0301	120	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0304	137	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0306	130	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0294	129	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0322	135	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0299	129	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0321	133	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0321	133	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0300	124	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.125	133	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.123	129	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.140	146	40-150
754-91-6	PFOSA	0.025	0.0347	139	40-150
31506-32-8	MeFOSA	0.05	0.0556	111	40-150
4151-50-2	EtFOSA	0.05	0.0639	128	40-150
2355-31-9	MeFOSAA	0.025	0.0382	153*	40-150
2991-50-6	EtFOSAA	0.025	0.0346	138	40-150
24448-09-7	MeFOSE	0.125	0.154	123	40-150
1691-99-2	EtFOSE	0.125	0.146	117	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0667	133	40-150
919005-14-4	ADONA	0.0473	0.0647	137	40-150
377-73-1	PFMPA	0.05	0.0379	76	40-150
863090-89-5	PFMBA	0.05	0.0618	124	40-150
151772-58-6	NFDHA	0.05	0.0635	127	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0681	146	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0621	131	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98611-BS	4Q49709.D	1	08/29/23	AL	08/24/23	OP98611	S4Q727

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0543	122	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.273	218*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.809	129	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.808	129	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	38%	20-150%
	13C5-PFPeA	116%	20-150%
	13C5-PFHxA	118%	20-150%
	13C4-PFHpA	116%	20-150%
	13C8-PFOA	114%	20-150%
	13C9-PFNA	112%	20-150%
	13C6-PFDA	106%	20-150%
	13C7-PFUnDA	126%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	96%	20-150%
	13C3-PFBS	107%	20-150%
	13C3-PFHxS	113%	20-150%
	13C8-PFOS	120%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSA	104%	20-150%
	d5-EtFOSA	95%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	113%	20-150%
	d7-MeFOSE	83%	20-150%
	d9-EtFOSE	91%	20-150%
	13C2-4:2FTS	109%	20-180%
	13C2-6:2FTS	112%	20-180%
	13C2-8:2FTS	100%	20-180%
	13C3-HFPO-DA	107%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98611-MS	4Q49717.D	1	08/29/23	AL	08/24/23	OP98611	S4Q727
FC8668-1	4Q49776.D	1	08/30/23	AL	08/24/23	OP98611	S4Q728

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	FC8668-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	0.0101		0.098	0.146	139	40-150
2706-90-3	Perfluoropentanoic acid	0.0064		0.049	0.0707	131	40-150
307-24-4	Perfluorohexanoic acid	0.0044	B	0.0245	0.0378	136	40-150
375-85-9	Perfluoroheptanoic acid	0.0031		0.0245	0.0362	135	40-150
335-67-1	Perfluorooctanoic acid	0.0089		0.0245	0.0452	148	40-150
375-95-1	Perfluorononanoic acid	0.00085	J	0.0245	0.0353	141	40-150
335-76-2	Perfluorodecanoic acid	ND		0.0245	0.0381	155*	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.0245	0.0338	138	40-150
307-55-1	Perfluorododecanoic acid	ND		0.0245	0.0319	130	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.0245	0.0309	126	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.0245	0.0339	138	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0050		0.0217	0.0343	135	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0231	0.0313	136	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0016	J	0.0224	0.0310	131	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0234	0.0320	137	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0020		0.0227	0.0312	128	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.0236	0.0337	143	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.0237	0.0283	120	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0238	0.0188	79	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0919	0.120	131	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.0931	0.123	132	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.0941	0.149	158*	40-150
754-91-6	PFOSA	ND		0.0245	0.0345	141	40-150
31506-32-8	MeFOSA	ND		0.049	0.0665	136	40-150
4151-50-2	EtFOSA	ND		0.049	0.0648	132	40-150
2355-31-9	MeFOSAA	ND		0.0245	0.0338	138	40-150
2991-50-6	EtFOSAA	ND		0.0245	0.0363	148	40-150
24448-09-7	MeFOSE	ND		0.123	0.147	120	40-150
1691-99-2	EtFOSE	ND		0.123	0.150	122	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.049	0.0645	132	40-150
919005-14-4	ADONA	ND		0.0463	0.0643	139	40-150
377-73-1	PFMPA	ND		0.049	0.0554	113	40-150
863090-89-5	PFMBA	ND		0.049	0.0602	123	40-150
151772-58-6	NFDHA	ND		0.049	0.0648	132	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0458	0.0662	144	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0463	0.0525	113	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98611-MS	4Q49717.D	1	08/29/23	AL	08/24/23	OP98611	S4Q727
FC8668-1	4Q49776.D	1	08/30/23	AL	08/24/23	OP98611	S4Q728

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	FC8668-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	ND		0.0436	0.0568	130	40-150
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.123	0.259	211*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.613	0.882	144	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.613	0.848	138	40-150

CAS No.	ID Standard Recoveries	MS	FC8668-1	Limits
	13C4-PFBA	99%	107%	20-150%
	13C5-PFPeA	102%	111%	20-150%
	13C5-PFHxA	101%	111%	20-150%
	13C4-PFHpA	103%	116%	20-150%
	13C8-PFOA	96%	113%	20-150%
	13C9-PFNA	100%	106%	20-150%
	13C6-PFDA	91%	114%	20-150%
	13C7-PFUnDA	93%	109%	20-150%
	13C2-PFDoDA	82%	90%	20-150%
	13C2-PFTeDA	54%	66%	20-150%
	13C3-PFBS	110%	111%	20-150%
	13C3-PFHxS	112%	111%	20-150%
	13C8-PFOS	105%	107%	20-150%
	13C8-FOSA	96%	98%	20-150%
	d3-MeFOSA	80%	79%	20-150%
	d5-EtFOSA	76%	77%	20-150%
	d3-MeFOSAA	88%	85%	20-150%
	d5-EtFOSAA	73%	78%	20-150%
	d7-MeFOSE	78%	79%	20-150%
	d9-EtFOSE	75%	74%	20-150%
	13C2-4:2FTS	106%	107%	20-180%
	13C2-6:2FTS	81%	82%	20-180%
	13C2-8:2FTS	62%	77%	20-180%
	13C3-HFPO-DA	95%	103%	20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98611-DUP	4Q49721.D	1	08/30/23	AL	08/24/23	OP98611	S4Q727
FC8668-2	4Q49779.D	1	08/30/23	AL	08/24/23	OP98611	S4Q728

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	FC8668-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	0.0068	J	0.0061	J	11	30
2706-90-3	Perfluoropentanoic acid	0.0016	J	0.0014	J	13	30
307-24-4	Perfluorohexanoic acid	0.0013	JB	0.0012	J	8	30
375-85-9	Perfluoroheptanoic acid	0.0010	J	0.0011	J	10	30
335-67-1	Perfluorooctanoic acid	0.0029		0.0031		7	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	ND		ND		nc	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	0.0020		0.0023		14	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	0.0011	J	0.0012	J	9	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	0.0013	J	0.0011	J	17	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC8529
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98611-DUP	4Q49721.D	1	08/30/23	AL	08/24/23	OP98611	S4Q727
FC8668-2	4Q49779.D	1	08/30/23	AL	08/24/23	OP98611	S4Q728

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8529-1, FC8529-2, FC8529-3

CAS No.	Compound	FC8668-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC8668-2	Limits
	13C4-PFBA	109%	111%	20-150%
	13C5-PFPeA	112%	117%	20-150%
	13C5-PFHxA	111%	114%	20-150%
	13C4-PFHpA	113%	115%	20-150%
	13C8-PFOA	106%	111%	20-150%
	13C9-PFNA	106%	105%	20-150%
	13C6-PFDA	95%	92%	20-150%
	13C7-PFUnDA	91%	91%	20-150%
	13C2-PFDoDA	78%	74%	20-150%
	13C2-PFTeDA	62%	62%	20-150%
	13C3-PFBS	114%	117%	20-150%
	13C3-PFHxS	111%	107%	20-150%
	13C8-PFOS	95%	104%	20-150%
	13C8-FOSA	87%	92%	20-150%
	d3-MeFOSA	78%	72%	20-150%
	d5-EtFOSA	72%	60%	20-150%
	d3-MeFOSAA	82%	79%	20-150%
	d5-EtFOSAA	71%	65%	20-150%
	d7-MeFOSE	78%	71%	20-150%
	d9-EtFOSE	74%	69%	20-150%
	13C2-4:2FTS	96%	94%	20-180%
	13C2-6:2FTS	87%	90%	20-180%
	13C2-8:2FTS	91%	81%	20-180%
	13C3-HFPO-DA	103%	111%	20-150%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

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Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC8459

Sampling Dates: 08/01/23 - 08/02/23



Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
ssuggs@nd.gov

ATTN: Shannon Suggs

Total number of pages in report: **58**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

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Sample Summary

North Dakota DEQ

Job No: FC8459

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
FC8459-1	08/01/23	10:35	LH	08/05/23	AQ	Water	NORTHERN PLAINS FINISHING
FC8459-2	08/01/23	14:45	LH	08/05/23	AQ	Water	ABU TRAILERS
FC8459-3	08/02/23	15:30	LH	08/05/23	AQ	Water	BOBCAT CYLINDERS
FC8459-4	08/02/23	10:31	LH	08/05/23	AQ	Water	BOBCAT 6WINNER

Summary of Hits

Job Number: FC8459
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 08/01/23 thru 08/02/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC8459-1	**NORTHERN PLAINS FINISHING**					
No hits reported in this sample.						
FC8459-2	**ABU TRAILERS**					
No hits reported in this sample.						
FC8459-3	**BOBCAT CYLINDERS**					
Perfluorohexanoic acid [a]		7.6 JB	17	4.2	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		4.0	2.1	1.1	ng/l	EPA DRAFT 1633
FC8459-4	**BOBCAT 6WINNER**					
Perfluorobutanesulfonic acid		7.5	2.1	1.1	ng/l	EPA DRAFT 1633
6:2 Fluorotelomer sulfonate		6.4 J	8.4	4.2	ng/l	EPA DRAFT 1633
EtFOSAA		1.6 J	2.1	1.4	ng/l	EPA DRAFT 1633

(a) Associated Low Level BS outside of control limits high.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	NORTHERN PLAINS FINISHING		
Lab Sample ID:	FC8459-1	**Date Sampled:**	08/01/23
Matrix:	AQ - Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49473.D	1	08/24/23 23:15	AL	08/19/23 09:55	OP98527	S4Q724
Run #2							

	Initial Volume	Final Volume
Run #1	465 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.6	4.3	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.3	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.2	0.54	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.2	0.54	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.2	0.54	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	0.66	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.54	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.65	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.65	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.90	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.54	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid [a]	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid [a]	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.6	4.3	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.6	4.3	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.6	4.4	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NORTHERN PLAINS FINISHING		
Lab Sample ID:	FC8459-1	**Date Sampled:**	08/01/23
Matrix:	AQ - Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.6	2.2	ng/l	
919005-14-4	ADONA	ND	8.6	2.2	ng/l	
377-73-1	PFMPA	ND	4.3	1.1	ng/l	
863090-89-5	PFMBA	ND	4.3	1.2	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.6	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.6	2.2	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.4	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	54	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	54	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	57%		20-150%
	13C5-PFPeA	109%		20-150%
	13C5-PFHxA	127%		20-150%
	13C4-PFHpA	119%		20-150%
	13C8-PFOA	108%		20-150%
	13C9-PFNA	100%		20-150%
	13C6-PFDA	112%		20-150%
	13C7-PFUnDA	117%		20-150%
	13C2-PFDoDA	94%		20-150%
	13C2-PFTeDA	88%		20-150%
	13C3-PFBS	97%		20-150%
	13C3-PFHxS	109%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NORTHERN PLAINS FINISHING		
Lab Sample ID:	FC8459-1	**Date Sampled:**	08/01/23
Matrix:	AQ - Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		20-150%
	13C8-FOSA	89%		20-150%
	d3-MeFOSA	68%		20-150%
	d5-EtFOSA	50%		20-150%
	d3-MeFOSAA	118%		20-150%
	d5-EtFOSAA	120%		20-150%
	d7-MeFOSE	57%		20-150%
	d9-EtFOSE	54%		20-150%
	13C2-4:2FTS	114%		20-180%
	13C2-6:2FTS	124%		20-180%
	13C2-8:2FTS	91%		20-180%
	13C3-HFPO-DA	101%		20-150%

(a) Associated Low Level BS outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ABU TRAILERS		
Lab Sample ID:	FC8459-2	**Date Sampled:**	08/01/23
Matrix:	AQ - Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49795.D	1	08/30/23 22:08	AL	08/29/23 09:20	OP98695	S4Q728
Run #2 [a]	4Q49882.D	10	08/31/23 22:12	AL	08/29/23 09:20	OP98695	S4Q729
Run #3 [b]	4Q49474.D	1	08/24/23 23:30	AL	08/19/23 09:55	OP98527	S4Q724

	Initial Volume	Final Volume
Run #1	60.0 ml	5.0 ml
Run #2	60.0 ml	5.0 ml
Run #3	455 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [c]	ND	67	33	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	33	8.3	ng/l	
307-24-4	Perfluorohexanoic acid [d]	ND	17	4.2	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	17	4.2	ng/l	
335-67-1	Perfluorooctanoic acid [d]	ND	17	4.2	ng/l	
375-95-1	Perfluorononanoic acid	ND	17	5.1	ng/l	
335-76-2	Perfluorodecanoic acid [e]	ND	17	4.2	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	17	5.0	ng/l	
307-55-1	Perfluorododecanoic acid	ND	17	5.0	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	17	7.0	ng/l	
376-06-7	Perfluorotetradecanoic acid [e]	ND [f]	170	42	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	17	8.3	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	17	9.3	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	17	8.3	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	17	8.3	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	17	8.3	ng/l	
68259-12-1	Perfluorononanesulfonic acid [e]	ND	17	8.3	ng/l	
335-77-3	Perfluorodecanesulfonic acid [d]	ND	17	8.3	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	17	9.5	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND [f]	670	330	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate [g]	ND [f]	670	330	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	67	34	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	17	8.3	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ABU TRAILERS		
Lab Sample ID:	FC8459-2	**Date Sampled:**	08/01/23
Matrix:	AQ - Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
31506-32-8	MeFOSA	ND	17	8.3	ng/l	
4151-50-2	EtFOSA	ND	17	8.3	ng/l	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	17	8.3	ng/l	
2991-50-6	EtFOSAA	ND	17	11	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	170	83	ng/l	
1691-99-2	EtFOSE	ND	170	83	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	67	17	ng/l	
919005-14-4	ADONA	ND	67	17	ng/l	
377-73-1	PFMPA	ND	33	8.3	ng/l	
863090-89-5	PFMBA	ND	33	9.5	ng/l	
151772-58-6	NFDHA	ND	33	10	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major) [e]	ND	67	17	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	67	17	ng/l	
113507-82-7	PFEESA	ND	33	8.3	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [e]	ND	83	42	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	420	83	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	420	83	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C4-PFBA	123%	82%	4% [h]	20-150%
	13C5-PFPeA	105%	109%	9% [h]	20-150%
	13C5-PFHxA	107%	105%	38%	20-150%
	13C4-PFHpA	109%	114%	64%	20-150%
	13C8-PFOA	107%	95%	86%	20-150%
	13C9-PFNA	102%	81%	85%	20-150%
	13C6-PFDA	94%	94%	109%	20-150%
	13C7-PFUnDA	96%	108%	147%	20-150%
	13C2-PFDoDA	127%	87%	239% [h]	20-150%
	13C2-PFTeDA	158% [h]	64%	595% [h]	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ABU TRAILERS		
Lab Sample ID:	FC8459-2	**Date Sampled:**	08/01/23
Matrix:	AQ - Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C3-PFBS	106%	83%	65%	20-150%
	13C3-PFHxS	108%	97%	89%	20-150%
	13C8-PFOS	94%	99%	95%	20-150%
	13C8-FOSA	88%	61%	169% h	20-150%
	d3-MeFOSA	94%	76%	161% h	20-150%
	d5-EtFOSA	101%	63%	137%	20-150%
	d3-MeFOSAA	49%	101%	17% h	20-150%
	d5-EtFOSAA	41%	89%	10% h	20-150%
	d7-MeFOSE	96%	62%	153% h	20-150%
	d9-EtFOSE	95%	68%	132%	20-150%
	13C2-4:2FTS	348% h	104%	13% h	20-180%
	13C2-6:2FTS	338% h	286% h	352% h	20-180%
	13C2-8:2FTS	137%	54%	57%	20-180%
	13C3-HFPO-DA	75%	94%	26%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Confirmation run.
(c) Associated ID Standard outside control limits.
(d) Associated Low Level BS outside of control limits high, sample was ND.
(e) Associated BS outside control limits high, sample was ND.
(f) Result is from Run# 2
(g) Associated ID Standard outside control limits. Confirmed by re-extraction and reanalysis.
(h) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BOBCAT CYLINDERS		
Lab Sample ID:	FC8459-3	**Date Sampled:**	08/02/23
Matrix:	AQ - Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49796.D	1	08/30/23 22:23	AL	08/29/23 09:20	OP98695	S4Q728
Run #2 [a]	4Q49883.D	10	08/31/23 22:27	AL	08/29/23 09:20	OP98695	S4Q729
Run #3	4Q49475.D	1	08/24/23 23:44	AL	08/19/23 09:55	OP98527	S4Q724

	Initial Volume	Final Volume
Run #1	60.0 ml	5.0 ml
Run #2	60.0 ml	5.0 ml
Run #3	470 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	67	33	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	33	8.3	ng/l	
307-24-4	Perfluorohexanoic acid [b]	7.6	17	4.2	ng/l	JB
375-85-9	Perfluoroheptanoic acid	ND [c]	2.1	0.53	ng/l	
335-67-1	Perfluorooctanoic acid	ND [c]	2.1	0.53	ng/l	
375-95-1	Perfluorononanoic acid	ND [c]	2.1	0.65	ng/l	
335-76-2	Perfluorodecanoic acid	ND [c]	2.1	0.53	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND [c]	2.1	0.64	ng/l	
307-55-1	Perfluorododecanoic acid	ND [c]	2.1	0.64	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND [c]	2.1	0.89	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND [c]	2.1	0.53	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND [c]	2.1	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND [c]	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND [c]	2.1	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic aci [d]	ND [c]	2.1	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	4.0 [c]	2.1	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid [d]	ND [c]	2.1	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND [c]	2.1	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND [c]	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	67	33	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND [c]	8.5	4.3	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND [c]	8.5	4.4	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND [c]	2.1	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BOBCAT CYLINDERS		
Lab Sample ID:	FC8459-3	**Date Sampled:**	08/02/23
Matrix:	AQ - Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
31506-32-8	MeFOSA	ND [c]	2.1	1.1	ng/l	
4151-50-2	EtFOSA	ND [c]	2.1	1.1	ng/l	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND [c]	2.1	1.1	ng/l	
2991-50-6	EtFOSAA	ND [c]	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND [c]	21	11	ng/l	
1691-99-2	EtFOSE	ND	170	83	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	67	17	ng/l	
919005-14-4	ADONA	ND	67	17	ng/l	
377-73-1	PFMPA	ND	33	8.3	ng/l	
863090-89-5	PFMBA	ND	33	9.5	ng/l	
151772-58-6	NFDHA	ND	33	10	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major) [e]	ND	67	17	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	67	17	ng/l	
113507-82-7	PFEESA	ND	33	8.3	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [e]	ND	83	42	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	420	83	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	420	83	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C4-PFBA	37%	36%	1% [f]	20-150%
	13C5-PFPeA	118%	98%	2% [f]	20-150%
	13C5-PFHxA	112%	108%	7% [f]	20-150%
	13C4-PFHpA	134%	112%	33%	20-150%
	13C8-PFOA	110%	100%	75%	20-150%
	13C9-PFNA	106%	100%	88%	20-150%
	13C6-PFDA	109%	65%	96%	20-150%
	13C7-PFUnDA	117%	96%	102%	20-150%
	13C2-PFDoDA	90%	80%	52%	20-150%
	13C2-PFTeDA	130%	65%	72%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BOBCAT CYLINDERS		
Lab Sample ID:	FC8459-3	**Date Sampled:**	08/02/23
Matrix:	AQ - Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C3-PFBS	113%	91%	20%	20-150%
	13C3-PFHxS	105%	85%	92%	20-150%
	13C8-PFOS	106%	95%	81%	20-150%
	13C8-FOSA	85%	61%	93%	20-150%
	d3-MeFOSA	67%	69%	31%	20-150%
	d5-EtFOSA	65%	64%	27%	20-150%
	d3-MeFOSAA	135%	73%	69%	20-150%
	d5-EtFOSAA	167% [f]	73%	92%	20-150%
	d7-MeFOSE	56%	55%	26%	20-150%
	d9-EtFOSE	60%	56%	12% [f]	20-150%
	13C2-4:2FTS	144%	69%	1% [f]	20-180%
	13C2-6:2FTS	269% [f]	100%	38%	20-180%
	13C2-8:2FTS	152%	69%	67%	20-180%
	13C3-HFPO-DA	99%	107%	6% [f]	20-150%

(a) Confirmation run.
(b) Associated Low Level BS outside of control limits high.
(c) Result is from Run# 3
(d) Associated Low Level BS outside of control limits high, sample was ND.
(e) Associated BS outside control limits high, sample was ND.
(f) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BOBCAT 6WINNER		
Lab Sample ID:	FC8459-4	**Date Sampled:**	08/02/23
Matrix:	AQ - Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q49797.D	1	08/30/23 22:38	AL	08/29/23 09:20	OP98695	S4Q728
Run #2	4Q49476.D	1	08/24/23 23:59	AL	08/19/23 09:55	OP98527	S4Q724

	Initial Volume	Final Volume
Run #1	60.0 ml	5.0 ml
Run #2	475 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	67	33	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	33	8.3	ng/l	
307-24-4	Perfluorohexanoic acid [a]	ND	17	4.2	ng/l	
375-85-9	Perfluoroheptanoic acid	ND [b]	2.1	0.53	ng/l	
335-67-1	Perfluorooctanoic acid	ND [b]	2.1	0.53	ng/l	
375-95-1	Perfluorononanoic acid	ND [b]	2.1	0.64	ng/l	
335-76-2	Perfluorodecanoic acid	ND [b]	2.1	0.53	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND [b]	2.1	0.63	ng/l	
307-55-1	Perfluorododecanoic acid	ND [b]	2.1	0.63	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND [b]	2.1	0.88	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND [b]	2.1	0.53	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	7.5 [b]	2.1	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND [b]	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND [b]	2.1	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid [a]	ND [b]	2.1	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND [b]	2.1	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid [a]	ND [b]	2.1	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND [b]	2.1	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND [b]	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate [a]	ND	67	33	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	6.4 [b]	8.4	4.2	ng/l	J
39108-34-4	8:2 Fluorotelomer sulfonate	ND [b]	8.4	4.3	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND [b]	2.1	1.1	ng/l	
31506-32-8	MeFOSA	ND [b]	2.1	1.1	ng/l	
4151-50-2	EtFOSA	ND [b]	2.1	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BOBCAT 6WINNER		
Lab Sample ID:	FC8459-4	**Date Sampled:**	08/02/23
Matrix:	AQ - Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND [b]	2.1	1.1	ng/l	
2991-50-6	EtFOSAA	1.6 [b]	2.1	1.4	ng/l	J
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND [b]	21	11	ng/l	
1691-99-2	EtFOSE	ND [b]	21	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	67	17	ng/l	
919005-14-4	ADONA	ND	67	17	ng/l	
377-73-1	PFMPA	ND	33	8.3	ng/l	
863090-89-5	PFMBA	ND	33	9.5	ng/l	
151772-58-6	NFDHA	ND	33	10	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major) [c]	ND	67	17	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	67	17	ng/l	
113507-82-7	PFEESA	ND	33	8.3	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [c]	ND	83	42	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	420	83	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	420	83	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	27%	1% [d]	20-150%
	13C5-PFPeA	93%	2% [d]	20-150%
	13C5-PFHxA	111%	15% [d]	20-150%
	13C4-PFHpA	111%	51%	20-150%
	13C8-PFOA	107%	52%	20-150%
	13C9-PFNA	109%	47%	20-150%
	13C6-PFDA	96%	60%	20-150%
	13C7-PFUnDA	105%	73%	20-150%
	13C2-PFDoDA	97%	52%	20-150%
	13C2-PFTeDA	105%	55%	20-150%
	13C3-PFBS	105%	26%	20-150%
	13C3-PFHxS	105%	48%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BOBCAT 6WINNER		
Lab Sample ID:	FC8459-4	**Date Sampled:**	08/02/23
Matrix:	AQ - Water	**Date Received:**	08/05/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	98%	49%	20-150%
	13C8-FOSA	76%	51%	20-150%
	d3-MeFOSA	64%	37%	20-150%
	d5-EtFOSA	70%	25%	20-150%
	d3-MeFOSAA	108%	79%	20-150%
	d5-EtFOSAA	126%	94%	20-150%
	d7-MeFOSE	60%	27%	20-150%
	d9-EtFOSE	62%	23%	20-150%
	13C2-4:2FTS	87%	5% [d]	20-180%
	13C2-6:2FTS	138%	116%	20-180%
	13C2-8:2FTS	105%	86%	20-180%
	13C3-HFPO-DA	98%	12% [d]	20-150%

(a) Associated Low Level BS outside of control limits high, sample was ND.
(b) Result is from Run# 2
(c) Associated BS outside control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FC8459

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote #	SKIFF #

Client / Reporting Information

Company Name: NDDEQ PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58503
Project Contact: S Suggs Email: SSuggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed)
Sampler 1: Sampler 2:

Project Information

Project Name: NDDEQ PFAS
Street: 4201 Normandy St
City: Bismarck State: ND
Project #
Fax #
Client Purchase Order #

Analytical Information

LCMS 1633 LIST 40

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAc	DI WATER	MEOH	LAB USE ONLY
1	NORTHERN PLAINS FINISHING	8/1	10:35	LH	WW	3										
2	ABU TRAILERS	8/1	14:45	LH	WW	3										
3	BOBCAT CYLINDERS	8/2	15:30	LH	WW	3										
4	BOBCAT GWINNER	8/2	10:30	LH	WW	3										

INITIAL ASSESSMENT

LABEL VERIFICATION

3.2° IR#1

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	NDEQ	8/4/23	2 S Suggs	3 S Suggs	8/4/23	4 FedEx
	Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		0915	6 SGS	7		8

0915 05/AUG/23

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 3.2 IR#1

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

FC8459: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC8459 **Client:** NDDEQ PFAS **Project:** NDDEQ PFAS

Date / Time Received: 8/5/2023 9:15:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7820 6357 4960

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.2);

Cooler Temps (Corrected) °C: Cooler 1: (3.0);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230320 pH 10-12 _____ Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: TORYW Date: 8/5/2023 9:15:00 AM Reviewer: _____ Date: _____

FC8459: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-MB	4Q49455.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	0.00090	0.0020	0.00050	ug/l	J
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-MB	4Q49455.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	118%	20-150%
	13C5-PFPeA	112%	20-150%
	13C5-PFHxA	125%	20-150%
	13C4-PFHpA	112%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	97%	20-150%
	13C6-PFDA	108%	20-150%
	13C7-PFUnDA	118%	20-150%
	13C2-PFDoDA	93%	20-150%
	13C2-PFTeDA	97%	20-150%
	13C3-PFBS	112%	20-150%
	13C3-PFHxS	107%	20-150%
	13C8-PFOS	96%	20-150%
	13C8-FOSA	65%	20-150%
	d3-MeFOSA	79%	20-150%
	d5-EtFOSA	71%	20-150%
	d3-MeFOSAA	108%	20-150%
	d5-EtFOSAA	110%	20-150%
	d7-MeFOSE	66%	20-150%
	d9-EtFOSE	69%	20-150%
	13C2-4:2FTS	127%	20-180%
	13C2-6:2FTS	140%	20-180%
	13C2-8:2FTS	124%	20-180%
	13C3-HFPO-DA	98%	20-150%

Method Blank Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98695-MB	4Q49794.D	1	08/30/23	AL	08/29/23	OP98695	S4Q728

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3, FC8459-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	0.0011	0.0020	0.00050	ug/l	J
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98695-MB	4Q49794.D	1	08/30/23	AL	08/29/23	OP98695	S4Q728

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3, FC8459-4

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	130%	20-150%
	13C5-PFPeA	135%	20-150%
	13C5-PFHxA	134%	20-150%
	13C4-PFHpA	135%	20-150%
	13C8-PFOA	137%	20-150%
	13C9-PFNA	127%	20-150%
	13C6-PFDA	117%	20-150%
	13C7-PFUnDA	120%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	96%	20-150%
	13C3-PFBS	129%	20-150%
	13C3-PFHxS	126%	20-150%
	13C8-PFOS	124%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSA	89%	20-150%
	d5-EtFOSA	86%	20-150%
	d3-MeFOSAA	113%	20-150%
	d5-EtFOSAA	109%	20-150%
	d7-MeFOSE	84%	20-150%
	d9-EtFOSE	87%	20-150%
	13C2-4:2FTS	135%	20-180%
	13C2-6:2FTS	149%	20-180%
	13C2-8:2FTS	145%	20-180%
	13C3-HFPO-DA	128%	20-150%

Method Blank Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98695-MB	4Q49878.D	1	08/31/23	AL	08/29/23	OP98695	S4Q729

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3, FC8459-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	0.0012	0.0020	0.00050	ug/l	J
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98695-MB	4Q49878.D	1	08/31/23	AL	08/29/23	OP98695	S4Q729

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3, FC8459-4

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	128%	20-150%
	13C5-PFPeA	136%	20-150%
	13C5-PFHxA	131%	20-150%
	13C4-PFHpA	136%	20-150%
	13C8-PFOA	134%	20-150%
	13C9-PFNA	133%	20-150%
	13C6-PFDA	115%	20-150%
	13C7-PFUnDA	120%	20-150%
	13C2-PFDoDA	105%	20-150%
	13C2-PFTeDA	89%	20-150%
	13C3-PFBS	128%	20-150%
	13C3-PFHxS	124%	20-150%
	13C8-PFOS	119%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSA	88%	20-150%
	d5-EtFOSA	96%	20-150%
	d3-MeFOSAA	105%	20-150%
	d5-EtFOSAA	99%	20-150%
	d7-MeFOSE	83%	20-150%
	d9-EtFOSE	88%	20-150%
	13C2-4:2FTS	129%	20-180%
	13C2-6:2FTS	139%	20-180%
	13C2-8:2FTS	118%	20-180%
	13C3-HFPO-DA	125%	20-150%

Instrument Blank

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-IBLK	4Q49434.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	0.0032	0.0080	0.0010	ug/l	J
4151-50-2	EtFOSA	0.0047	0.0080	0.0010	ug/l	J
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	0.0069	0.040	0.0044	ug/l	J
1691-99-2	EtFOSE	0.0094	0.040	0.0074	ug/l	J
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-IBLK	4Q49434.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	104%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	106%	20-150%
	13C6-PFDA	101%	20-150%
	13C7-PFUnDA	106%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	115%	20-150%
	13C3-PFBS	98%	20-150%
	13C3-PFHxS	89%	20-150%
	13C8-PFOS	94%	20-150%
	13C8-FOSA	112%	20-150%
	d3-MeFOSAA	114%	20-150%
	d5-EtFOSAA	113%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	116%	20-180%
	13C2-8:2FTS	111%	20-180%

Instrument Blank

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q728-IBLK	4Q49764.D	1	08/30/23	AL	n/a	n/a	S4Q728

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3, FC8459-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	0.0042	0.0080	0.0010	ug/l	J
4151-50-2	EtFOSA	0.0051	0.0080	0.0010	ug/l	J
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	0.0092	0.040	0.0044	ug/l	J
1691-99-2	EtFOSE	0.0141	0.040	0.0074	ug/l	J
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	

Instrument Blank

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q728-IBLK	4Q49764.D	1	08/30/23	AL	n/a	n/a	S4Q728

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3, FC8459-4

CAS No.	Compound	Result	RL	MDL	Units	Q
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	93%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	107%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	105%	20-150%
	13C8-PFOS	93%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSAA	101%	20-150%
	d5-EtFOSAA	92%	20-150%
	13C2-4:2FTS	120%	20-180%
	13C2-6:2FTS	112%	20-180%
	13C2-8:2FTS	119%	20-180%

Instrument Blank

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q729-IBLK	4Q49844.D	1	08/31/23	AL	n/a	n/a	S4Q729

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3

CAS No.	Compound	Result	RL	MDL	Units	Q
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	99%	20-150%
	13C5-PFPeA	106%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	100%	20-150%
	13C6-PFDA	100%	20-150%
	13C7-PFUnDA	110%	20-150%
	13C2-PFDoDA	103%	20-150%
	13C2-PFTeDA	106%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	95%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSAA	92%	20-150%
	d5-EtFOSAA	102%	20-150%
	13C2-4:2FTS	114%	20-180%
	13C2-6:2FTS	109%	20-180%
	13C2-8:2FTS	110%	20-180%

Continuing Calibration Blank

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49472.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49472.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	108%	20-150%
	13C5-PFPeA	100%	20-150%
	13C5-PFHxA	111%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	95%	20-150%
	13C9-PFNA	88%	20-150%
	13C6-PFDA	108%	20-150%
	13C7-PFUnDA	118%	20-150%
	13C2-PFDoDA	103%	20-150%
	13C2-PFTeDA	112%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	91%	20-150%
	13C8-FOSA	91%	20-150%
	d3-MeFOSAA	108%	20-150%
	d5-EtFOSAA	104%	20-150%
	13C2-4:2FTS	134%	20-180%
	13C2-6:2FTS	131%	20-180%
	13C2-8:2FTS	120%	20-180%

Continuing Calibration Blank

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q728-ICCB	4Q49790.D	1	08/30/23	AL	n/a	n/a	S4Q728

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3, FC8459-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	

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Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q728-ICCB	4Q49790.D	1	08/30/23	AL	n/a	n/a	S4Q728

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3, FC8459-4

CAS No.	Compound	Result	RL	MDL	Units	Q
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	104%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	97%	20-150%
	13C7-PFUnDA	102%	20-150%
	13C2-PFDoDA	100%	20-150%
	13C2-PFTeDA	99%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	91%	20-150%
	13C8-FOSA	88%	20-150%
	d3-MeFOSAA	94%	20-150%
	d5-EtFOSAA	90%	20-150%
	13C2-4:2FTS	102%	20-180%
	13C2-6:2FTS	106%	20-180%
	13C2-8:2FTS	106%	20-180%

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Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q729-ICCB	4Q49875.D	1	08/31/23	AL	n/a	n/a	S4Q729

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3

CAS No.	Compound	Result	RL	MDL	Units	Q
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	106%	20-150%
	13C5-PFHxA	103%	20-150%
	13C4-PFHpA	104%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	97%	20-150%
	13C7-PFUnDA	105%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	87%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	95%	20-150%
	13C8-PFOS	96%	20-150%
	13C8-FOSA	89%	20-150%
	d3-MeFOSAA	84%	20-150%
	d5-EtFOSAA	86%	20-150%
	13C2-4:2FTS	102%	20-180%
	13C2-6:2FTS	87%	20-180%
	13C2-8:2FTS	92%	20-180%

Continuing Calibration Blank

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q729-ICCB	4Q49886.D	1	08/31/23	AL	n/a	n/a	S4Q729

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3

CAS No.	Compound	Result	RL	MDL	Units	Q
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	100%	20-150%
	13C6-PFDA	90%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	89%	20-150%
	13C2-PFTeDA	88%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	97%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	92%	20-150%
	d3-MeFOSAA	87%	20-150%
	d5-EtFOSAA	88%	20-150%
	13C2-4:2FTS	100%	20-180%
	13C2-6:2FTS	108%	20-180%
	13C2-8:2FTS	105%	20-180%

Continuing Calibration Blank

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49448.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98527-BS, OP98527-LLBS, OP98527-MB

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49448.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98527-BS, OP98527-LLBS, OP98527-MB

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	107%	20-150%
	13C5-PFPeA	100%	20-150%
	13C5-PFHxA	108%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	89%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	116%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	115%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	103%	20-150%
	13C8-PFOS	92%	20-150%
	13C8-FOSA	93%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	106%	20-150%
	13C2-4:2FTS	113%	20-180%
	13C2-6:2FTS	126%	20-180%
	13C2-8:2FTS	110%	20-180%

Continuing Calibration Blank

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49460.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98527-DUP, OP98527-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q724-ICCB	4Q49460.D	1	08/24/23	AL	n/a	n/a	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98527-DUP, OP98527-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	107%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	112%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	94%	20-150%
	13C9-PFNA	88%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	113%	20-150%
	13C2-PFDoDA	103%	20-150%
	13C2-PFTeDA	115%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	97%	20-150%
	13C8-PFOS	88%	20-150%
	13C8-FOSA	87%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	102%	20-150%
	13C2-4:2FTS	108%	20-180%
	13C2-6:2FTS	116%	20-180%
	13C2-8:2FTS	117%	20-180%

Blank Spike Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-LLBS	4Q49454.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0186	116	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0101	126	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0056	140	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0045	113	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0052	130	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0054	135	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0048	120	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0047	118	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0047	118	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0052	130	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0042	105	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0052	147	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0052	138	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0054	148	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0058	152*	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0048	129	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0060	156*	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0052	135	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0040	103	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0198	132	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0189	124	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0202	132	40-150
754-91-6	PFOSA	0.004	0.0050	125	40-150
31506-32-8	MeFOSA	0.008	0.0085	106	40-150
4151-50-2	EtFOSA	0.008	0.0110	138	40-150
2355-31-9	MeFOSAA	0.004	0.0045	113	40-150
2991-50-6	EtFOSAA	0.004	0.0044	110	40-150
24448-09-7	MeFOSE	0.02	0.0251	126	40-150
1691-99-2	EtFOSE	0.02	0.0279	140	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0090	113	40-150
919005-14-4	ADONA	0.00756	0.0100	132	40-150
377-73-1	PFMPA	0.008	0.0092	115	40-150
863090-89-5	PFMBA	0.008	0.0096	120	40-150
151772-58-6	NFDHA	0.008	0.0085	106	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0107	143	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0088	116	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-LLBS	4Q49454.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0071	100	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0176	88	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.108	108	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.110	110	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	114%	20-150%
	13C5-PFPeA	107%	20-150%
	13C5-PFHxA	119%	20-150%
	13C4-PFHpA	111%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	107%	20-150%
	13C7-PFUnDA	117%	20-150%
	13C2-PFDoDA	91%	20-150%
	13C2-PFTeDA	90%	20-150%
	13C3-PFBS	109%	20-150%
	13C3-PFHxS	105%	20-150%
	13C8-PFOS	93%	20-150%
	13C8-FOSA	70%	20-150%
	d3-MeFOSA	77%	20-150%
	d5-EtFOSA	64%	20-150%
	d3-MeFOSAA	102%	20-150%
	d5-EtFOSAA	107%	20-150%
	d7-MeFOSE	65%	20-150%
	d9-EtFOSE	69%	20-150%
	13C2-4:2FTS	121%	20-180%
	13C2-6:2FTS	133%	20-180%
	13C2-8:2FTS	119%	20-180%
	13C3-HFPO-DA	93%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98695-LLBS	4Q49793.D	1	08/30/23	AL	08/29/23	OP98695	S4Q728

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3, FC8459-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0213	133	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0104	130	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0070	175*	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0052	130	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0061	153*	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0049	123	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0061	153*	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0057	143	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0052	130	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0050	125	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0056	140	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0045	127	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0049	130	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0052	142	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0049	129	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0055	148	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0056	146	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0065	168*	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0052	134	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0231	154*	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0184	121	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0215	140	40-150
754-91-6	PFOSA	0.004	0.0057	143	40-150
31506-32-8	MeFOSA	0.008	0.0102	128	40-150
4151-50-2	EtFOSA	0.008	0.010	125	40-150
2355-31-9	MeFOSAA	0.004	0.0046	115	40-150
2991-50-6	EtFOSAA	0.004	0.0057	143	40-150
24448-09-7	MeFOSE	0.02	0.0263	132	40-150
1691-99-2	EtFOSE	0.02	0.0239	120	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0107	134	40-150
919005-14-4	ADONA	0.00756	0.0097	128	40-150
377-73-1	PFMPA	0.008	0.0102	128	40-150
863090-89-5	PFMBA	0.008	0.0099	124	40-150
151772-58-6	NFDHA	0.008	0.0098	123	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0110	147	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0097	128	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98695-LLBS	4Q49793.D	1	08/30/23	AL	08/29/23	OP98695	S4Q728

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3, FC8459-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0087	122	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0224	112	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.119	119	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.125	125	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	104%	20-150%
	13C5-PFPeA	107%	20-150%
	13C5-PFHxA	108%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	93%	20-150%
	13C7-PFUnDA	96%	20-150%
	13C2-PFDoDA	91%	20-150%
	13C2-PFTeDA	78%	20-150%
	13C3-PFBS	107%	20-150%
	13C3-PFHxS	110%	20-150%
	13C8-PFOS	95%	20-150%
	13C8-FOSA	82%	20-150%
	d3-MeFOSA	78%	20-150%
	d5-EtFOSA	83%	20-150%
	d3-MeFOSAA	93%	20-150%
	d5-EtFOSAA	91%	20-150%
	d7-MeFOSE	73%	20-150%
	d9-EtFOSE	82%	20-150%
	13C2-4:2FTS	101%	20-180%
	13C2-6:2FTS	116%	20-180%
	13C2-8:2FTS	107%	20-180%
	13C3-HFPO-DA	99%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98695-LLBS	4Q49877.D	1	08/31/23	AL	08/29/23	OP98695	S4Q729

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3, FC8459-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0206	129	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0103	129	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0063	158*	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0049	123	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0059	148	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0058	145	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0074	185*	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0047	118	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0059	148	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0051	128	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0061	153*	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0050	141	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0052	138	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0055	150	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0045	118	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0052	140	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0051	133	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0050	130	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0053	137	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0194	129	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0179	118	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0241	157*	40-150
754-91-6	PFOSA	0.004	0.0057	143	40-150
31506-32-8	MeFOSA	0.008	0.0093	116	40-150
4151-50-2	EtFOSA	0.008	0.0098	123	40-150
2355-31-9	MeFOSAA	0.004	0.0055	138	40-150
2991-50-6	EtFOSAA	0.004	0.0055	138	40-150
24448-09-7	MeFOSE	0.02	0.0267	134	40-150
1691-99-2	EtFOSE	0.02	0.0240	120	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0110	138	40-150
919005-14-4	ADONA	0.00756	0.0095	126	40-150
377-73-1	PFMPA	0.008	0.0096	120	40-150
863090-89-5	PFMBA	0.008	0.0096	120	40-150
151772-58-6	NFDHA	0.008	0.0107	134	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0107	143	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0102	135	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98695-LLBS	4Q49877.D	1	08/31/23	AL	08/29/23	OP98695	S4Q729

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3, FC8459-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0086	121	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0232	116	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.120	120	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.123	123	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	104%	20-150%
	13C5-PFPeA	109%	20-150%
	13C5-PFHxA	109%	20-150%
	13C4-PFHpA	110%	20-150%
	13C8-PFOA	104%	20-150%
	13C9-PFNA	97%	20-150%
	13C6-PFDA	96%	20-150%
	13C7-PFUnDA	104%	20-150%
	13C2-PFDoDA	93%	20-150%
	13C2-PFTeDA	77%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	103%	20-150%
	13C8-FOSA	75%	20-150%
	d3-MeFOSA	82%	20-150%
	d5-EtFOSA	84%	20-150%
	d3-MeFOSAA	87%	20-150%
	d5-EtFOSAA	86%	20-150%
	d7-MeFOSE	71%	20-150%
	d9-EtFOSE	82%	20-150%
	13C2-4:2FTS	97%	20-180%
	13C2-6:2FTS	106%	20-180%
	13C2-8:2FTS	93%	20-180%
	13C3-HFPO-DA	102%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-BS	4Q49453.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.126	126	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0671	134	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0304	122	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0311	124	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0353	141	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0363	145	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0355	142	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0297	119	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0328	131	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0330	132	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0303	121	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0306	138	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0326	139	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0337	147	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0328	138	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0302	130	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0349	145	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0315	131	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0275	113	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.126	134	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.114	120	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.125	130	40-150
754-91-6	PFOSA	0.025	0.0356	142	40-150
31506-32-8	MeFOSA	0.05	0.0582	116	40-150
4151-50-2	EtFOSA	0.05	0.0690	138	40-150
2355-31-9	MeFOSAA	0.025	0.0322	129	40-150
2991-50-6	EtFOSAA	0.025	0.0318	127	40-150
24448-09-7	MeFOSE	0.125	0.155	124	40-150
1691-99-2	EtFOSE	0.125	0.177	142	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0605	121	40-150
919005-14-4	ADONA	0.0473	0.0711	150	40-150
377-73-1	PFMPA	0.05	0.0344	69	40-150
863090-89-5	PFMBA	0.05	0.0635	127	40-150
151772-58-6	NFDHA	0.05	0.0477	95	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0698	149	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0623	132	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-BS	4Q49453.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0471	106	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.177	142	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.738	118	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.759	121	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	38%	20-150%
	13C5-PFPeA	109%	20-150%
	13C5-PFHxA	125%	20-150%
	13C4-PFHpA	112%	20-150%
	13C8-PFOA	108%	20-150%
	13C9-PFNA	88%	20-150%
	13C6-PFDA	110%	20-150%
	13C7-PFUnDA	121%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	96%	20-150%
	13C3-PFBS	113%	20-150%
	13C3-PFHxS	108%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	78%	20-150%
	d3-MeFOSA	91%	20-150%
	d5-EtFOSA	73%	20-150%
	d3-MeFOSAA	100%	20-150%
	d5-EtFOSAA	107%	20-150%
	d7-MeFOSE	70%	20-150%
	d9-EtFOSE	72%	20-150%
	13C2-4:2FTS	114%	20-180%
	13C2-6:2FTS	134%	20-180%
	13C2-8:2FTS	122%	20-180%
	13C3-HFPO-DA	94%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98695-BS [a]	4Q49792.D	1	08/30/23	AL	08/29/23	OP98695	S4Q728

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3, FC8459-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.134	134	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0702	140	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0337	135	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0340	136	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0323	129	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0362	145	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0387	155*	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0336	134	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0346	138	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0316	126	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0350	140	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0307	138	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0347	148	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0331	145	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0352	148	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0316	136	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0371	154*	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0343	142	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0294	121	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.124	132	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.123	129	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.126	131	40-150
754-91-6	PFOSA	0.025	0.0361	144	40-150
31506-32-8	MeFOSA	0.05	0.0669	134	40-150
4151-50-2	EtFOSA	0.05	0.0663	133	40-150
2355-31-9	MeFOSAA	0.025	0.0361	144	40-150
2991-50-6	EtFOSAA	0.025	0.0357	143	40-150
24448-09-7	MeFOSE	0.125	0.162	130	40-150
1691-99-2	EtFOSE	0.125	0.156	125	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0680	136	40-150
919005-14-4	ADONA	0.0473	0.0677	143	40-150
377-73-1	PFMPA	0.05	0.0392	78	40-150
863090-89-5	PFMBA	0.05	0.0650	130	40-150
151772-58-6	NFDHA	0.05	0.0707	141	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0707	151*	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0673	142	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98695-BS [a]	4Q49792.D	1	08/30/23	AL	08/29/23	OP98695	S4Q728

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3, FC8459-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0575	129	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.254	203*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.844	135	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.853	136	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	42%	20-150%
	13C5-PFPeA	116%	20-150%
	13C5-PFHxA	116%	20-150%
	13C4-PFHpA	118%	20-150%
	13C8-PFOA	116%	20-150%
	13C9-PFNA	105%	20-150%
	13C6-PFDA	102%	20-150%
	13C7-PFUnDA	112%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	81%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	107%	20-150%
	13C8-FOSA	98%	20-150%
	d3-MeFOSA	96%	20-150%
	d5-EtFOSA	93%	20-150%
	d3-MeFOSAA	105%	20-150%
	d5-EtFOSAA	105%	20-150%
	d7-MeFOSE	85%	20-150%
	d9-EtFOSE	90%	20-150%
	13C2-4:2FTS	107%	20-180%
	13C2-6:2FTS	110%	20-180%
	13C2-8:2FTS	107%	20-180%
	13C3-HFPO-DA	110%	20-150%

(a) Insufficient sample for MS/MSD.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98695-BS	4Q49876.D	1	08/31/23	AL	08/29/23	OP98695	S4Q729

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3, FC8459-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.133	133	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0699	140	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0341	136	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0339	136	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0339	136	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0354	142	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0378	151*	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0318	127	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0343	137	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0326	130	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0378	151*	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0315	142	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0334	142	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0322	141	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0304	128	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0301	130	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0344	143	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0319	132	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0280	115	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.127	135	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.120	126	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.140	146	40-150
754-91-6	PFOSA	0.025	0.0365	146	40-150
31506-32-8	MeFOSA	0.05	0.0646	129	40-150
4151-50-2	EtFOSA	0.05	0.0640	128	40-150
2355-31-9	MeFOSAA	0.025	0.0387	155*	40-150
2991-50-6	EtFOSAA	0.025	0.0325	130	40-150
24448-09-7	MeFOSE	0.125	0.165	132	40-150
1691-99-2	EtFOSE	0.125	0.162	130	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0672	134	40-150
919005-14-4	ADONA	0.0473	0.0654	138	40-150
377-73-1	PFMPA	0.05	0.0390	78	40-150
863090-89-5	PFMBA	0.05	0.0649	130	40-150
151772-58-6	NFDHA	0.05	0.0654	131	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0747	160*	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0677	143	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98695-BS	4Q49876.D	1	08/31/23	AL	08/29/23	OP98695	S4Q729

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-2, FC8459-3, FC8459-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0561	126	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.246	197*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.839	134	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.838	134	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	42%	20-150%
	13C5-PFPeA	117%	20-150%
	13C5-PFHxA	118%	20-150%
	13C4-PFHpA	111%	20-150%
	13C8-PFOA	117%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	109%	20-150%
	13C7-PFUnDA	117%	20-150%
	13C2-PFDoDA	105%	20-150%
	13C2-PFTeDA	80%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	97%	20-150%
	13C8-PFOS	114%	20-150%
	13C8-FOSA	92%	20-150%
	d3-MeFOSA	93%	20-150%
	d5-EtFOSA	90%	20-150%
	d3-MeFOSAA	93%	20-150%
	d5-EtFOSAA	97%	20-150%
	d7-MeFOSE	79%	20-150%
	d9-EtFOSE	85%	20-150%
	13C2-4:2FTS	92%	20-180%
	13C2-6:2FTS	97%	20-180%
	13C2-8:2FTS	90%	20-180%
	13C3-HFPO-DA	108%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-MS	4Q49467.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724
FC8472-1	4Q49466.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-1

CAS No.	Compound	FC8472-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	ND		0.104	0.129	124	40-150
2706-90-3	Perfluoropentanoic acid	ND		0.0521	0.0717	138	40-150
307-24-4	Perfluorohexanoic acid	ND		0.026	0.0302	116	40-150
375-85-9	Perfluoroheptanoic acid	ND		0.026	0.0324	124	40-150
335-67-1	Perfluorooctanoic acid	ND		0.026	0.0357	137	40-150
375-95-1	Perfluorononanoic acid	ND		0.026	0.0383	147	40-150
335-76-2	Perfluorodecanoic acid	ND		0.026	0.0342	131	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.026	0.0304	117	40-150
307-55-1	Perfluorododecanoic acid	ND		0.026	0.0353	136	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.026	0.0373	143	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.026	0.0296	114	40-150
375-73-5	Perfluorobutanesulfonic acid	ND		0.0231	0.0329	142	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0245	0.0333	136	40-150
355-46-4	Perfluorohexanesulfonic acid	ND		0.0238	0.0330	139	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0248	0.0349	141	40-150
1763-23-1	Perfluorooctanesulfonic acid	ND		0.0242	0.0293	121	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.0251	0.0334	133	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.0251	0.0296	118	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0253	0.0266	105	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0977	0.134	137	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.099	0.115	116	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.1	0.130	130	40-150
754-91-6	PFOSA	ND		0.026	0.0360	138	40-150
31506-32-8	MeFOSA	ND		0.0521	0.0600	115	40-150
4151-50-2	EtFOSA	ND		0.0521	0.0676	130	40-150
2355-31-9	MeFOSAA	ND		0.026	0.0310	119	40-150
2991-50-6	EtFOSAA	ND		0.026	0.0353	136	40-150
24448-09-7	MeFOSE	ND		0.13	0.161	124	40-150
1691-99-2	EtFOSE	ND		0.13	0.181	139	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.0521	0.0625	120	40-150
919005-14-4	ADONA	ND		0.0492	0.0718	146	40-150
377-73-1	PFMPA	ND		0.0521	0.0651	125	40-150
863090-89-5	PFMBA	ND		0.0521	0.0661	127	40-150
151772-58-6	NFDHA	ND		0.0521	0.0532	102	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0487	0.0681	140	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0492	0.0560	114	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-MS	4Q49467.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724
FC8472-1	4Q49466.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-1

CAS No.	Compound	FC8472-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	ND		0.0464	0.0506	109	40-150
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.13	0.123	94	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.651	0.786	121	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.651	0.789	121	40-150

CAS No.	ID Standard Recoveries	MS	FC8472-1	Limits
	13C4-PFBA	110%	114%	20-150%
	13C5-PFPeA	100%	104%	20-150%
	13C5-PFHxA	114%	121%	20-150%
	13C4-PFHpA	103%	108%	20-150%
	13C8-PFOA	104%	103%	20-150%
	13C9-PFNA	87%	86%	20-150%
	13C6-PFDA	104%	107%	20-150%
	13C7-PFUnDA	107%	106%	20-150%
	13C2-PFDoDA	80%	84%	20-150%
	13C2-PFTeDA	86%	86%	20-150%
	13C3-PFBS	102%	106%	20-150%
	13C3-PFHxS	98%	104%	20-150%
	13C8-PFOS	92%	98%	20-150%
	13C8-FOSA	67%	67%	20-150%
	d3-MeFOSA	68%	66%	20-150%
	d5-EtFOSA	58%	60%	20-150%
	d3-MeFOSAA	98%	96%	20-150%
	d5-EtFOSAA	92%	88%	20-150%
	d7-MeFOSE	57%	60%	20-150%
	d9-EtFOSE	56%	61%	20-150%
	13C2-4:2FTS	104%	114%	20-180%
	13C2-6:2FTS	132%	118%	20-180%
	13C2-8:2FTS	109%	109%	20-180%
	13C3-HFPO-DA	90%	94%	20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-DUP	4Q49469.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724
FC8472-2	4Q49468.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-1

CAS No.	Compound	FC8472-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	ND		ND		nc	30
2706-90-3	Perfluoropentanoic acid	ND		ND		nc	30
307-24-4	Perfluorohexanoic acid	0.0032		0.0032		0	30
375-85-9	Perfluoroheptanoic acid	ND		ND		nc	30
335-67-1	Perfluorooctanoic acid	0.0029		0.0030		3	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	0.0012	J	0.0012	J	0	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC8459
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98527-DUP	4Q49469.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724
FC8472-2	4Q49468.D	1	08/24/23	AL	08/19/23	OP98527	S4Q724

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8459-1

CAS No.	Compound	FC8472-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC8472-2	Limits
	13C4-PFBA	111%	115%	20-150%
	13C5-PFPeA	104%	106%	20-150%
	13C5-PFHxA	116%	122%	20-150%
	13C4-PFHpA	105%	110%	20-150%
	13C8-PFOA	102%	108%	20-150%
	13C9-PFNA	88%	87%	20-150%
	13C6-PFDA	106%	109%	20-150%
	13C7-PFUnDA	116%	114%	20-150%
	13C2-PFDoDA	91%	90%	20-150%
	13C2-PFTeDA	80%	78%	20-150%
	13C3-PFBS	103%	101%	20-150%
	13C3-PFHxS	100%	105%	20-150%
	13C8-PFOS	98%	86%	20-150%
	13C8-FOSA	68%	66%	20-150%
	d3-MeFOSA	77%	69%	20-150%
	d5-EtFOSA	57%	52%	20-150%
	d3-MeFOSAA	98%	92%	20-150%
	d5-EtFOSAA	91%	84%	20-150%
	d7-MeFOSE	60%	57%	20-150%
	d9-EtFOSE	57%	55%	20-150%
	13C2-4:2FTS	116%	118%	20-180%
	13C2-6:2FTS	121%	130%	20-180%
	13C2-8:2FTS	111%	102%	20-180%
	13C3-HFPO-DA	92%	97%	20-150%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC8880

Sampling Dates: 08/15/23 - 08/16/23



Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
ssuggs@nd.gov

ATTN: Shannon Suggs

Total number of pages in report: 53

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC8880

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FC8880-1	08/15/23	12:20	CGRK	08/19/23	AQ	Surface Water	CAVALIER
FC8880-2	08/15/23	13:57	CGRK	08/19/23	AQ	Ground Water	NORTH VALLEY 1
FC8880-3	08/15/23	16:32	CGRK	08/19/23	AQ	Ground Water	NORTH VALLEY 2
FC8880-4	08/16/23	08:25	CGRK	08/19/23	AQ	Surface Water	TURTLE RIVER SOUTH MANVEL
FC8880-5	08/16/23	08:50	CGRK	08/19/23	AQ	Surface Water	TURTLE RIVER 380037
FC8880-6	08/16/23	08:55	CGRK	08/19/23	AQ	Surface Water	DUPLICATE
FC8880-7	08/16/23	09:05	CGRK	08/19/23	AQ	Surface Water	TURTLE RIVER NORTH MANVEL
FC8880-8	08/16/23	10:35	CGRK	08/19/23	AQ	Surface Water	TURTLE RIVER STATE PARK
FC8880-9	08/16/23	10:45	CGRK	08/19/23	AQ	Field Blank Water	FIELD BLANK

2

Summary of Hits

Job Number: FC8880
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 08/15/23 thru 08/16/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC8880-1	**CAVALIER**					
Perfluoropentanoic acid		5.7	3.8	0.95	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		3.6	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		2.2	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		4.1	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		14.5	1.9	0.95	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		1.9	1.9	0.95	ng/l	EPA DRAFT 1633
FC8880-2	**NORTH VALLEY 1**					
Perfluoropentanoic acid		2.5 J	3.8	0.96	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		1.7 J	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		2.0	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.4 J	1.9	0.48	ng/l	EPA DRAFT 1633
FC8880-3	**NORTH VALLEY 2**					
Perfluoropentanoic acid		4.1	3.8	0.96	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		2.0	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		2.0	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.5 J	1.9	0.48	ng/l	EPA DRAFT 1633
FC8880-4	**TURTLE RIVER SOUTH MANVEL**					
Perfluoropentanoic acid		15.1	3.8	0.96	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		10.5	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		5.7	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		4.8	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		2.6	1.9	0.96	ng/l	EPA DRAFT 1633
Perfluoropentanesulfonic acid		2.5	1.9	1.1	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		20.8	1.9	0.96	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		12.6	1.9	0.96	ng/l	EPA DRAFT 1633
FC8880-5	**TURTLE RIVER 380037**					
Perfluorobutanoic acid		8.1	7.6	3.8	ng/l	EPA DRAFT 1633
Perfluoropentanoic acid		18.4	3.8	0.95	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		13.9	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		6.7	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		5.7	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluorononanoic acid		0.72 J	1.9	0.58	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		3.2	1.9	0.95	ng/l	EPA DRAFT 1633
Perfluoropentanesulfonic acid		3.7	1.9	1.1	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		24.9	1.9	0.95	ng/l	EPA DRAFT 1633

Summary of Hits

Job Number: FC8880
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 08/15/23 thru 08/16/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Perfluorooctanesulfonic acid		13.1	1.9	0.95	ng/l	EPA DRAFT 1633
FC8880-6	**DUPLICATE**					
Perfluoropentanoic acid		19.1	3.8	0.96	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		13.7	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		6.4	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		6.0	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluorononanoic acid		0.86 J	1.9	0.59	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		3.2	1.9	0.96	ng/l	EPA DRAFT 1633
Perfluoropentanesulfonic acid		3.4	1.9	1.1	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		24.3	1.9	0.96	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		16.4	1.9	0.96	ng/l	EPA DRAFT 1633
FC8880-7	**TURTLE RIVER NORTH MANVEL**					
Perfluorobutanoic acid		8.9	7.7	3.8	ng/l	EPA DRAFT 1633
Perfluoropentanoic acid		21.9	3.8	0.96	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		16.8	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		8.4	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		6.5	1.9	0.48	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		4.0	1.9	0.96	ng/l	EPA DRAFT 1633
Perfluoropentanesulfonic acid		4.5	1.9	1.1	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		32.1	1.9	0.96	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		13.5	1.9	0.96	ng/l	EPA DRAFT 1633

FC8880-8 **TURTLE RIVER STATE PARK**

No hits reported in this sample.

FC8880-9 **FIELD BLANK**

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	CAVALIER		
Lab Sample ID:	FC8880-1	**Date Sampled:**	08/15/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q24066.D	1	09/09/23 04:32	MV	08/31/23 08:15	OP98754	S6Q346
Run #2							

	Initial Volume	Final Volume
Run #1	525 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.6	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	5.7	3.8	0.95	ng/l	
307-24-4	Perfluorohexanoic acid	3.6	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	2.2	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	4.1	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.58	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.57	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.57	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.80	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.95	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	14.5	1.9	0.95	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.95	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	1.9	1.9	0.95	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.95	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.95	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.6	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.6	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.6	3.9	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.95	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.95	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.95	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CAVALIER		
Lab Sample ID:	FC8880-1	**Date Sampled:**	08/15/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.95	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.5	ng/l	
1691-99-2	EtFOSE	ND	19	9.5	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.6	1.9	ng/l	
919005-14-4	ADONA	ND	7.6	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.95	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.1	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.6	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.6	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.95	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.5	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.5	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.5	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	31%		20-150%
	13C5-PFPeA	79%		20-150%
	13C5-PFHxA	106%		20-150%
	13C4-PFHpA	103%		20-150%
	13C8-PFOA	93%		20-150%
	13C9-PFNA	103%		20-150%
	13C6-PFDA	112%		20-150%
	13C7-PFUnDA	95%		20-150%
	13C2-PFDoDA	91%		20-150%
	13C2-PFTeDA	80%		20-150%
	13C3-PFBS	107%		20-150%
	13C3-PFHxS	107%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CAVALIER		
Lab Sample ID:	FC8880-1	**Date Sampled:**	08/15/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		20-150%
	13C8-FOSA	96%		20-150%
	d3-MeFOSA	84%		20-150%
	d5-EtFOSA	72%		20-150%
	d3-MeFOSAA	92%		20-150%
	d5-EtFOSAA	102%		20-150%
	d7-MeFOSE	86%		20-150%
	d9-EtFOSE	89%		20-150%
	13C2-4:2FTS	97%		20-180%
	13C2-6:2FTS	117%		20-180%
	13C2-8:2FTS	104%		20-180%
	13C3-HFPO-DA	102%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NORTH VALLEY 1		
Lab Sample ID:	FC8880-2	**Date Sampled:**	08/15/23
Matrix:	AQ - Ground Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q24067.D	1	09/09/23 04:46	MV	08/31/23 08:15	OP98754	S6Q346
Run #2 [a]	6Q24242.D	5	09/11/23 05:58	MV	08/31/23 08:15	OP98754	S6Q348

	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2	520 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND	7.7	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	2.5	3.8	0.96	ng/l	J
307-24-4	Perfluorohexanoic acid	1.7	1.9	0.48	ng/l	J
375-85-9	Perfluoroheptanoic acid	2.0	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	1.4	1.9	0.48	ng/l	J
375-95-1	Perfluorononanoic acid	ND	1.9	0.59	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.81	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.96	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.96	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.96	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.96	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.96	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.96	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.7	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.96	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.96	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.96	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NORTH VALLEY 1		
Lab Sample ID:	FC8880-2	**Date Sampled:**	08/15/23
Matrix:	AQ - Ground Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.96	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.6	ng/l	
1691-99-2	EtFOSE	ND	19	9.6	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.7	1.9	ng/l	
919005-14-4	ADONA	ND	7.7	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.96	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.7	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.7	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.96	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.6	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	13% [c]	12% [c]	20-150%
	13C5-PFPeA	65%	72%	20-150%
	13C5-PFHxA	108%	101%	20-150%
	13C4-PFHpA	111%	97%	20-150%
	13C8-PFOA	101%	93%	20-150%
	13C9-PFNA	91%	106%	20-150%
	13C6-PFDA	97%	96%	20-150%
	13C7-PFUnDA	90%	88%	20-150%
	13C2-PFDoDA	70%	73%	20-150%
	13C2-PFTeDA	47%	50%	20-150%
	13C3-PFBS	101%	100%	20-150%
	13C3-PFHxS	94%	97%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NORTH VALLEY 1		
Lab Sample ID:	FC8880-2	**Date Sampled:**	08/15/23
Matrix:	AQ - Ground Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%	101%	20-150%
	13C8-FOSA	102%	95%	20-150%
	d3-MeFOSA	93%	82%	20-150%
	d5-EtFOSA	90%	87%	20-150%
	d3-MeFOSAA	87%	98%	20-150%
	d5-EtFOSAA	96%	87%	20-150%
	d7-MeFOSE	81%	77%	20-150%
	d9-EtFOSE	86%	81%	20-150%
	13C2-4:2FTS	96%	111%	20-180%
	13C2-6:2FTS	98%	107%	20-180%
	13C2-8:2FTS	95%	98%	20-180%
	13C3-HFPO-DA	101%	93%	20-150%

(a) Dilution required (ID recovery standard failure). Confirmation run.
(b) Associated ID Standard outside control limits.
(c) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NORTH VALLEY 2		
Lab Sample ID:	FC8880-3	**Date Sampled:**	08/15/23
Matrix:	AQ - Ground Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q24068.D	1	09/09/23 05:00	MV	08/31/23 08:15	OP98754	S6Q346
Run #2 [a]	6Q24245.D	5	09/11/23 06:41	MV	08/31/23 08:15	OP98754	S6Q348

	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2	520 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND	7.7	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	4.1	3.8	0.96	ng/l	
307-24-4	Perfluorohexanoic acid	2.0	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	2.0	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	1.5	1.9	0.48	ng/l	J
375-95-1	Perfluorononanoic acid	ND	1.9	0.59	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.81	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.96	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.96	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.96	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.96	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.96	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.96	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.7	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.96	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.96	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.96	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NORTH VALLEY 2		
Lab Sample ID:	FC8880-3	**Date Sampled:**	08/15/23
Matrix:	AQ - Ground Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.96	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.6	ng/l	
1691-99-2	EtFOSE	ND	19	9.6	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.7	1.9	ng/l	
919005-14-4	ADONA	ND	7.7	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.96	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.7	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.7	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.96	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.6	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14% [c]	12% [c]	20-150%
	13C5-PFPeA	69%	66%	20-150%
	13C5-PFHxA	117%	84%	20-150%
	13C4-PFHpA	114%	89%	20-150%
	13C8-PFOA	111%	89%	20-150%
	13C9-PFNA	112%	86%	20-150%
	13C6-PFDA	106%	82%	20-150%
	13C7-PFUnDA	95%	78%	20-150%
	13C2-PFDoDA	83%	65%	20-150%
	13C2-PFTeDA	53%	41%	20-150%
	13C3-PFBS	118%	89%	20-150%
	13C3-PFHxS	110%	83%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NORTH VALLEY 2		
Lab Sample ID:	FC8880-3	**Date Sampled:**	08/15/23
Matrix:	AQ - Ground Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	104%	83%	20-150%
	13C8-FOSA	113%	86%	20-150%
	d3-MeFOSA	102%	79%	20-150%
	d5-EtFOSA	88%	74%	20-150%
	d3-MeFOSAA	93%	83%	20-150%
	d5-EtFOSAA	99%	83%	20-150%
	d7-MeFOSE	77%	63%	20-150%
	d9-EtFOSE	79%	63%	20-150%
	13C2-4:2FTS	119%	97%	20-180%
	13C2-6:2FTS	112%	96%	20-180%
	13C2-8:2FTS	107%	98%	20-180%
	13C3-HFPO-DA	104%	87%	20-150%

(a) Dilution required (ID recovery standard failure). Confirmation run.
(b) Associated ID Standard outside control limits.
(c) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TURTLE RIVER SOUTH MANVEL		
Lab Sample ID:	FC8880-4	**Date Sampled:**	08/16/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q24069.D	1	09/09/23 05:15	MV	08/31/23 08:15	OP98754	S6Q346
Run #2							

	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.7	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	15.1	3.8	0.96	ng/l	
307-24-4	Perfluorohexanoic acid	10.5	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	5.7	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	4.8	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.59	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.81	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	2.6	1.9	0.96	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	2.5	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	20.8	1.9	0.96	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.96	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	12.6	1.9	0.96	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.96	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.96	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.7	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.96	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.96	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.96	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TURTLE RIVER SOUTH MANVEL		
Lab Sample ID:	FC8880-4	**Date Sampled:**	08/16/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.96	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.6	ng/l	
1691-99-2	EtFOSE	ND	19	9.6	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.7	1.9	ng/l	
919005-14-4	ADONA	ND	7.7	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.96	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.7	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.7	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.96	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.6	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	39%		20-150%
	13C5-PFPeA	71%		20-150%
	13C5-PFHxA	99%		20-150%
	13C4-PFHpA	94%		20-150%
	13C8-PFOA	98%		20-150%
	13C9-PFNA	92%		20-150%
	13C6-PFDA	108%		20-150%
	13C7-PFUnDA	91%		20-150%
	13C2-PFDoDA	84%		20-150%
	13C2-PFTeDA	58%		20-150%
	13C3-PFBS	109%		20-150%
	13C3-PFHxS	106%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TURTLE RIVER SOUTH MANVEL		
Lab Sample ID:	FC8880-4	**Date Sampled:**	08/16/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	92%		20-150%
	13C8-FOSA	97%		20-150%
	d3-MeFOSA	96%		20-150%
	d5-EtFOSA	83%		20-150%
	d3-MeFOSAA	98%		20-150%
	d5-EtFOSAA	99%		20-150%
	d7-MeFOSE	83%		20-150%
	d9-EtFOSE	84%		20-150%
	13C2-4:2FTS	99%		20-180%
	13C2-6:2FTS	101%		20-180%
	13C2-8:2FTS	101%		20-180%
	13C3-HFPO-DA	89%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TURTLE RIVER 380037		
Lab Sample ID:	FC8880-5	**Date Sampled:**	08/16/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q24070.D	1	09/09/23 05:29	MV	08/31/23 08:15	OP98754	S6Q346
Run #2							

	Initial Volume	Final Volume
Run #1	525 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	8.1	7.6	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	18.4	3.8	0.95	ng/l	
307-24-4	Perfluorohexanoic acid	13.9	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	6.7	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	5.7	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	0.72	1.9	0.58	ng/l	J
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.57	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.57	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.80	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	3.2	1.9	0.95	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	3.7	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	24.9	1.9	0.95	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.95	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	13.1	1.9	0.95	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.95	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.95	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.6	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.6	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.6	3.9	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.95	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.95	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.95	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TURTLE RIVER 380037		
Lab Sample ID:	FC8880-5	**Date Sampled:**	08/16/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.95	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.5	ng/l	
1691-99-2	EtFOSE	ND	19	9.5	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.6	1.9	ng/l	
919005-14-4	ADONA	ND	7.6	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.95	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.1	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.6	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.6	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.95	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.5	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.5	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.5	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	35%		20-150%
	13C5-PFPeA	76%		20-150%
	13C5-PFHxA	109%		20-150%
	13C4-PFHpA	99%		20-150%
	13C8-PFOA	94%		20-150%
	13C9-PFNA	95%		20-150%
	13C6-PFDA	100%		20-150%
	13C7-PFUnDA	90%		20-150%
	13C2-PFDoDA	75%		20-150%
	13C2-PFTeDA	58%		20-150%
	13C3-PFBS	110%		20-150%
	13C3-PFHxS	110%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TURTLE RIVER 380037		
Lab Sample ID:	FC8880-5	**Date Sampled:**	08/16/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	94%		20-150%
	13C8-FOSA	98%		20-150%
	d3-MeFOSA	92%		20-150%
	d5-EtFOSA	84%		20-150%
	d3-MeFOSAA	101%		20-150%
	d5-EtFOSAA	84%		20-150%
	d7-MeFOSE	77%		20-150%
	d9-EtFOSE	74%		20-150%
	13C2-4:2FTS	101%		20-180%
	13C2-6:2FTS	104%		20-180%
	13C2-8:2FTS	98%		20-180%
	13C3-HFPO-DA	92%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUPLICATE		
Lab Sample ID:	FC8880-6	**Date Sampled:**	08/16/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q24071.D	1	09/09/23 05:43	MV	08/31/23 08:15	OP98754	S6Q346
Run #2							

	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.7	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	19.1	3.8	0.96	ng/l	
307-24-4	Perfluorohexanoic acid	13.7	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	6.4	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	6.0	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	0.86	1.9	0.59	ng/l	J
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.81	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	3.2	1.9	0.96	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	3.4	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	24.3	1.9	0.96	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.96	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	16.4	1.9	0.96	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.96	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.96	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.7	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.96	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.96	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.96	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUPLICATE		
Lab Sample ID:	FC8880-6	**Date Sampled:**	08/16/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.96	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.6	ng/l	
1691-99-2	EtFOSE	ND	19	9.6	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.7	1.9	ng/l	
919005-14-4	ADONA	ND	7.7	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.96	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.7	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.7	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.96	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.6	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	37%		20-150%
	13C5-PFPeA	76%		20-150%
	13C5-PFHxA	106%		20-150%
	13C4-PFHpA	106%		20-150%
	13C8-PFOA	92%		20-150%
	13C9-PFNA	100%		20-150%
	13C6-PFDA	94%		20-150%
	13C7-PFUnDA	87%		20-150%
	13C2-PFDoDA	76%		20-150%
	13C2-PFTeDA	51%		20-150%
	13C3-PFBS	104%		20-150%
	13C3-PFHxS	105%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUPLICATE		
Lab Sample ID:	FC8880-6	**Date Sampled:**	08/16/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	103%		20-150%
	13C8-FOSA	96%		20-150%
	d3-MeFOSA	85%		20-150%
	d5-EtFOSA	79%		20-150%
	d3-MeFOSAA	91%		20-150%
	d5-EtFOSAA	94%		20-150%
	d7-MeFOSE	78%		20-150%
	d9-EtFOSE	81%		20-150%
	13C2-4:2FTS	97%		20-180%
	13C2-6:2FTS	95%		20-180%
	13C2-8:2FTS	91%		20-180%
	13C3-HFPO-DA	91%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TURTLE RIVER NORTH MANVEL		
Lab Sample ID:	FC8880-7	**Date Sampled:**	08/16/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q24072.D	1	09/09/23 05:57	MV	08/31/23 08:15	OP98754	S6Q346
Run #2							

	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	8.9	7.7	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	21.9	3.8	0.96	ng/l	
307-24-4	Perfluorohexanoic acid	16.8	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	8.4	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	6.5	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.59	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.81	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	4.0	1.9	0.96	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	4.5	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	32.1	1.9	0.96	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.96	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	13.5	1.9	0.96	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.96	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.96	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.7	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.96	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.96	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.96	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TURTLE RIVER NORTH MANVEL		
Lab Sample ID:	FC8880-7	**Date Sampled:**	08/16/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.96	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.6	ng/l	
1691-99-2	EtFOSE	ND	19	9.6	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.7	1.9	ng/l	
919005-14-4	ADONA	ND	7.7	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.96	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.7	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.7	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.96	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.6	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	51%		20-150%
	13C5-PFPeA	94%		20-150%
	13C5-PFHxA	130%		20-150%
	13C4-PFHpA	127%		20-150%
	13C8-PFOA	119%		20-150%
	13C9-PFNA	131%		20-150%
	13C6-PFDA	122%		20-150%
	13C7-PFUnDA	111%		20-150%
	13C2-PFDoDA	99%		20-150%
	13C2-PFTeDA	70%		20-150%
	13C3-PFBS	137%		20-150%
	13C3-PFHxS	131%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TURTLE RIVER NORTH MANVEL		
Lab Sample ID:	FC8880-7	**Date Sampled:**	08/16/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	119%		20-150%
	13C8-FOSA	118%		20-150%
	d3-MeFOSA	113%		20-150%
	d5-EtFOSA	94%		20-150%
	d3-MeFOSAA	118%		20-150%
	d5-EtFOSAA	114%		20-150%
	d7-MeFOSE	94%		20-150%
	d9-EtFOSE	96%		20-150%
	13C2-4:2FTS	126%		20-180%
	13C2-6:2FTS	138%		20-180%
	13C2-8:2FTS	117%		20-180%
	13C3-HFPO-DA	122%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TURTLE RIVER STATE PARK		
Lab Sample ID:	FC8880-8	**Date Sampled:**	08/16/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q24073.D	1	09/09/23 06:12	MV	08/31/23 08:15	OP98754	S6Q346
Run #2							

	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.7	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.8	0.96	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.59	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.81	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.96	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.96	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.96	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.96	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.96	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.96	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.7	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.7	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.96	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.96	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.96	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TURTLE RIVER STATE PARK		
Lab Sample ID:	FC8880-8	**Date Sampled:**	08/16/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.96	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.6	ng/l	
1691-99-2	EtFOSE	ND	19	9.6	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.7	1.9	ng/l	
919005-14-4	ADONA	ND	7.7	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.96	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.7	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.7	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.96	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.6	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.6	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	32%		20-150%
	13C5-PFPeA	79%		20-150%
	13C5-PFHxA	108%		20-150%
	13C4-PFHpA	107%		20-150%
	13C8-PFOA	97%		20-150%
	13C9-PFNA	100%		20-150%
	13C6-PFDA	97%		20-150%
	13C7-PFUnDA	91%		20-150%
	13C2-PFDoDA	78%		20-150%
	13C2-PFTeDA	52%		20-150%
	13C3-PFBS	112%		20-150%
	13C3-PFHxS	106%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TURTLE RIVER STATE PARK		
Lab Sample ID:	FC8880-8	**Date Sampled:**	08/16/23
Matrix:	AQ - Surface Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	104%		20-150%
	13C8-FOSA	101%		20-150%
	d3-MeFOSA	94%		20-150%
	d5-EtFOSA	87%		20-150%
	d3-MeFOSAA	106%		20-150%
	d5-EtFOSAA	99%		20-150%
	d7-MeFOSE	83%		20-150%
	d9-EtFOSE	82%		20-150%
	13C2-4:2FTS	96%		20-180%
	13C2-6:2FTS	108%		20-180%
	13C2-8:2FTS	102%		20-180%
	13C3-HFPO-DA	95%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	FC8880-9	**Date Sampled:**	08/16/23
Matrix:	AQ - Field Blank Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q24076.D	1	09/09/23 06:55	MV	08/31/23 08:15	OP98754	S6Q346
Run #2							

	Initial Volume	Final Volume
Run #1	525 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.6	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.8	0.95	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.58	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.57	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.57	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.80	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.95	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.95	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.95	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.95	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.95	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.95	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.6	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.6	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.6	3.9	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.95	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.95	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.95	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	FC8880-9	**Date Sampled:**	08/16/23
Matrix:	AQ - Field Blank Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.95	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.5	ng/l	
1691-99-2	EtFOSE	ND	19	9.5	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.6	1.9	ng/l	
919005-14-4	ADONA	ND	7.6	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.95	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.1	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.6	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.6	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.95	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.5	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.5	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.5	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	106%		20-150%
	13C5-PFPeA	74%		20-150%
	13C5-PFHxA	101%		20-150%
	13C4-PFHpA	95%		20-150%
	13C8-PFOA	90%		20-150%
	13C9-PFNA	97%		20-150%
	13C6-PFDA	92%		20-150%
	13C7-PFUnDA	89%		20-150%
	13C2-PFDoDA	86%		20-150%
	13C2-PFTeDA	79%		20-150%
	13C3-PFBS	109%		20-150%
	13C3-PFHxS	101%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	FC8880-9	**Date Sampled:**	08/16/23
Matrix:	AQ - Field Blank Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	99%		20-150%
	13C8-FOSA	85%		20-150%
	d3-MeFOSA	76%		20-150%
	d5-EtFOSA	76%		20-150%
	d3-MeFOSAA	91%		20-150%
	d5-EtFOSAA	95%		20-150%
	d7-MeFOSE	79%		20-150%
	d9-EtFOSE	85%		20-150%
	13C2-4:2FTS	114%		20-180%
	13C2-6:2FTS	114%		20-180%
	13C2-8:2FTS	114%		20-180%
	13C3-HFPO-DA	93%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # SKIFF # FC8880

Client / Reporting Information

Company Name: North Dakota Dept. of Env. Quality
Address: 4201 Normandy St.
City: Bismarck State: ND Zip: 58503
Project Contact: Shannon Suggs Email: ssuggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed)
Sampler 1: Casey Gleich Sampler 2: Ryan Kritzberger

Project Information

Project Name: NDDEQ PFAS
Street: 4201 Normandy St
City: Bismarck State: ND
Project #
Fax #
Client Purchase Order #

Analytical Information

LCID RIDOT 1635 LISTED

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNA	DI WATER	MEOH	LAB USE ONLY
1	Cavalier	8/15/23	12:20	CG/RK	SW	3		X								
	~~Turtle River South Manvel~~															
2	North Valley 1	8/15/23	13:57	CG/RK	GW	3		X								
3	North Valley 2	8/15/23	16:32	CG/RK	GW	3		X								
4	Turtle River South Manvel	8/16/23	8:25	CG,RK	SW	3		X								
5	Turtle River 380037	8/16/23	8:50	CG,RK	SW	3		X								
6	Duplicate	8/16/23	8:55	CG,RK	SW	3		X								
7	Turtle River North Manvel	8/16/23	9:05	CG,RK	SW	3		X								
8	Turtle River State Park	8/16/23	10:35	CG,RK	SW	3		X								
9	Field Blank	8/16/23	10:45	CG,RK	WW	3		X								

INITIAL ASSESSMENT SP

LABEL VERIFICATION SP

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- ☐ COMMERCIAL "A" (RESULTS ONLY)
- ☐ COMMERCIAL "B" (RESULTS PLUS QC)
- ☐ REDT1 (EPA LEVEL 3)
- ☐ FULLT1 (EPA LEVEL 4)
- ☐ EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 S Suggs	8/18/23	2 Fed Ex	3 Fx		4 [signature] 08/19/23 1100
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 5.2 IR #1

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

4.1

4

FC8880: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC8880 **Client:** NDDEQ **Project:** NDDEQ PFAS

Date / Time Received: 8/19/2023 11:00:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7826 6593 4999

Cooler Temps (Raw Measured) °C: Cooler 1: (5.2);

Cooler Temps (Corrected) °C: Cooler 1: (5.0);

Cooler Information	Y	or	N
1. Custody Seals Present:	☑		☐
2. Custody Seals Intact:	☑		☐
3. Temp criteria achieved:	☑		☐
4. Cooler temp verification:	IR Gun		
5. Cooler media:	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑

	W	or	S	N/A
3. Type of TB Received	☐		☐	☐

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles:	☑		☐	
2. Samples presented properly	☑		☐	
3. Suffiient volume/containers recv'd for analysis	☑		☐	
4. Condition of sample:	Intact			
5. Sample recv'd within HT	☑		☐	
6. Dates/Times/IDs on COC match sample label	☐		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☐
11. % Solids Jar Received?	☐		☐	☐
12. Residual Chlorine Present?	☐		☐	☐

Misc Information

Number of Encores: 25 Gram 5 Gram Number of Lab Filtered Metals:

Test Strip Lot #s: pH 0-3: _____ pH 10-12: _____ Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot # _____

Comments

SM089-03
Rev. Date 12/7/17

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC8880
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98754-MB	6Q24058.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8880-1, FC8880-2, FC8880-3, FC8880-4, FC8880-5, FC8880-6, FC8880-7, FC8880-8, FC8880-9

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC8880
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98754-MB	6Q24058.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8880-1, FC8880-2, FC8880-3, FC8880-4, FC8880-5, FC8880-6, FC8880-7, FC8880-8, FC8880-9

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	105%	20-150%
	13C5-PFPeA	78%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	101%	20-150%
	13C8-PFOA	105%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	101%	20-150%
	13C7-PFUnDA	98%	20-150%
	13C2-PFDoDA	89%	20-150%
	13C2-PFTeDA	79%	20-150%
	13C3-PFBS	110%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	102%	20-150%
	13C8-FOSA	92%	20-150%
	d3-MeFOSA	76%	20-150%
	d5-EtFOSA	73%	20-150%
	d3-MeFOSAA	96%	20-150%
	d5-EtFOSAA	91%	20-150%
	d7-MeFOSE	77%	20-150%
	d9-EtFOSE	81%	20-150%
	13C2-4:2FTS	115%	20-180%
	13C2-6:2FTS	118%	20-180%
	13C2-8:2FTS	113%	20-180%
	13C3-HFPO-DA	94%	20-150%

Instrument Blank

Job Number: FC8880
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q346-IBLK	6Q24010.D	1	09/08/23	MV	n/a	n/a	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8880-1, FC8880-2, FC8880-3, FC8880-4, FC8880-5, FC8880-6, FC8880-7, FC8880-8, FC8880-9

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC8880
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q346-IBLK	6Q24010.D	1	09/08/23	MV	n/a	n/a	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8880-1, FC8880-2, FC8880-3, FC8880-4, FC8880-5, FC8880-6, FC8880-7, FC8880-8, FC8880-9

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	97%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	100%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	97%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	98%	20-150%
	13C2-PFDoDA	99%	20-150%
	13C2-PFTeDA	92%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	95%	20-150%
	13C8-PFOS	108%	20-150%
	13C8-FOSA	107%	20-150%
	d3-MeFOSA	100%	20-150%
	d5-EtFOSA	110%	20-150%
	d3-MeFOSAA	105%	20-150%
	d5-EtFOSAA	110%	20-150%
	d7-MeFOSE	107%	20-150%
	d9-EtFOSE	107%	20-150%
	13C2-4:2FTS	103%	20-180%
	13C2-6:2FTS	98%	20-180%
	13C2-8:2FTS	102%	20-180%
	13C3-HFPO-DA	99%	20-150%

Continuing Calibration Blank

Job Number: FC8880
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q346-ICCB	6Q24063.D	1	09/09/23	MV	n/a	n/a	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8880-1, FC8880-2, FC8880-3, FC8880-4, FC8880-5, FC8880-6, FC8880-7, FC8880-8

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8880
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q346-ICCB	6Q24063.D	1	09/09/23	MV	n/a	n/a	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8880-1, FC8880-2, FC8880-3, FC8880-4, FC8880-5, FC8880-6, FC8880-7, FC8880-8

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	104%	20-150%
	13C5-PFPeA	73%	20-150%
	13C5-PFHxA	95%	20-150%
	13C4-PFHpA	96%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	100%	20-150%
	13C7-PFUnDA	96%	20-150%
	13C2-PFDoDA	105%	20-150%
	13C2-PFTeDA	96%	20-150%
	13C3-PFBS	106%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	94%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSA	103%	20-150%
	d5-EtFOSA	104%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	104%	20-150%
	d7-MeFOSE	112%	20-150%
	d9-EtFOSE	119%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	123%	20-180%
	13C2-8:2FTS	124%	20-180%
	13C3-HFPO-DA	86%	20-150%

Continuing Calibration Blank

Job Number: FC8880
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q346-ICCB	6Q24075.D	1	09/09/23	MV	n/a	n/a	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8880-9

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8880
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q346-ICCB	6Q24075.D	1	09/09/23	MV	n/a	n/a	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8880-9

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	104%	20-150%
	13C5-PFPeA	75%	20-150%
	13C5-PFHxA	96%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	94%	20-150%
	13C9-PFNA	93%	20-150%
	13C6-PFDA	96%	20-150%
	13C7-PFUnDA	98%	20-150%
	13C2-PFDoDA	93%	20-150%
	13C2-PFTeDA	89%	20-150%
	13C3-PFBS	115%	20-150%
	13C3-PFHxS	109%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	92%	20-150%
	d3-MeFOSA	99%	20-150%
	d5-EtFOSA	95%	20-150%
	d3-MeFOSAA	103%	20-150%
	d5-EtFOSAA	98%	20-150%
	d7-MeFOSE	93%	20-150%
	d9-EtFOSE	95%	20-150%
	13C2-4:2FTS	118%	20-180%
	13C2-6:2FTS	128%	20-180%
	13C2-8:2FTS	113%	20-180%
	13C3-HFPO-DA	95%	20-150%

Continuing Calibration Blank

Job Number: FC8880
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q346-ICCB	6Q24051.D	1	09/09/23	MV	n/a	n/a	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98754-BS, OP98754-LLBS, OP98754-MB

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8880
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q346-ICCB	6Q24051.D	1	09/09/23	MV	n/a	n/a	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98754-BS, OP98754-LLBS, OP98754-MB

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	103%	20-150%
	13C5-PFPeA	80%	20-150%
	13C5-PFHxA	107%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	92%	20-150%
	13C6-PFDA	109%	20-150%
	13C7-PFUnDA	107%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	101%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	98%	20-150%
	d3-MeFOSAA	95%	20-150%
	d5-EtFOSAA	104%	20-150%
	13C2-4:2FTS	109%	20-180%
	13C2-6:2FTS	112%	20-180%
	13C2-8:2FTS	112%	20-180%

Blank Spike Summary

Job Number: FC8880
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98754-LLBS	6Q24057.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8880-1, FC8880-2, FC8880-3, FC8880-4, FC8880-5, FC8880-6, FC8880-7, FC8880-8, FC8880-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0172	108	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0100	125	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0038	95	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0039	98	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0037	93	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0035	88	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0039	98	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0040	100	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0038	95	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0036	90	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0043	108	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0037	104	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0038	101	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0039	107	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0038	100	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0039	105	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0036	94	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0030	78	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0032	82	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0167	111	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0180	118	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0168	109	40-150
754-91-6	PFOSA	0.004	0.0040	100	40-150
31506-32-8	MeFOSA	0.008	0.0091	114	40-150
4151-50-2	EtFOSA	0.008	0.0090	113	40-150
2355-31-9	MeFOSAA	0.004	0.0047	118	40-150
2991-50-6	EtFOSAA	0.004	0.0046	115	40-150
24448-09-7	MeFOSE	0.02	0.0203	102	40-150
1691-99-2	EtFOSE	0.02	0.0198	99	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0080	100	40-150
919005-14-4	ADONA	0.00756	0.0080	106	40-150
377-73-1	PFMPA	0.008	0.0102	128	40-150
863090-89-5	PFMBA	0.008	0.0100	125	40-150
151772-58-6	NFDHA	0.008	0.0072	90	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0073	98	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0072	95	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8880
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98754-LLBS	6Q24057.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8880-1, FC8880-2, FC8880-3, FC8880-4, FC8880-5, FC8880-6, FC8880-7, FC8880-8, FC8880-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0068	96	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0198	99	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.0986	99	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.101	101	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	103%	20-150%
	13C5-PFPeA	81%	20-150%
	13C5-PFHxA	111%	20-150%
	13C4-PFHpA	109%	20-150%
	13C8-PFOA	94%	20-150%
	13C9-PFNA	103%	20-150%
	13C6-PFDA	111%	20-150%
	13C7-PFUnDA	107%	20-150%
	13C2-PFDoDA	101%	20-150%
	13C2-PFTeDA	80%	20-150%
	13C3-PFBS	110%	20-150%
	13C3-PFHxS	106%	20-150%
	13C8-PFOS	108%	20-150%
	13C8-FOSA	102%	20-150%
	d3-MeFOSA	83%	20-150%
	d5-EtFOSA	79%	20-150%
	d3-MeFOSAA	96%	20-150%
	d5-EtFOSAA	98%	20-150%
	d7-MeFOSE	88%	20-150%
	d9-EtFOSE	90%	20-150%
	13C2-4:2FTS	109%	20-180%
	13C2-6:2FTS	112%	20-180%
	13C2-8:2FTS	113%	20-180%
	13C3-HFPO-DA	100%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8880
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98754-BS	6Q24056.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8880-1, FC8880-2, FC8880-3, FC8880-4, FC8880-5, FC8880-6, FC8880-7, FC8880-8, FC8880-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.115	115	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0648	130	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0255	102	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0268	107	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0257	103	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0250	100	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0275	110	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0287	115	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0295	118	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0261	104	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0304	122	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0231	104	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0260	111	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0244	107	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0256	107	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0271	117	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0268	111	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0238	99	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0218	90	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.107	114	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.110	116	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.111	116	40-150
754-91-6	PFOSA	0.025	0.0267	107	40-150
31506-32-8	MeFOSA	0.05	0.0582	116	40-150
4151-50-2	EtFOSA	0.05	0.0580	116	40-150
2355-31-9	MeFOSAA	0.025	0.0280	112	40-150
2991-50-6	EtFOSAA	0.025	0.0287	115	40-150
24448-09-7	MeFOSE	0.125	0.128	102	40-150
1691-99-2	EtFOSE	0.125	0.148	118	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0548	110	40-150
919005-14-4	ADONA	0.0473	0.0563	119	40-150
377-73-1	PFMPA	0.05	0.0645	129	40-150
863090-89-5	PFMBA	0.05	0.0646	129	40-150
151772-58-6	NFDHA	0.05	0.0526	105	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0525	112	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0496	105	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8880
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98754-BS	6Q24056.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8880-1, FC8880-2, FC8880-3, FC8880-4, FC8880-5, FC8880-6, FC8880-7, FC8880-8, FC8880-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0469	105	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.134	107	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.680	109	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.726	116	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	94%	20-150%
	13C5-PFPeA	84%	20-150%
	13C5-PFHxA	107%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	111%	20-150%
	13C6-PFDA	98%	20-150%
	13C7-PFUnDA	93%	20-150%
	13C2-PFDoDA	83%	20-150%
	13C2-PFTeDA	68%	20-150%
	13C3-PFBS	108%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	94%	20-150%
	d3-MeFOSA	77%	20-150%
	d5-EtFOSA	75%	20-150%
	d3-MeFOSAA	96%	20-150%
	d5-EtFOSAA	91%	20-150%
	d7-MeFOSE	79%	20-150%
	d9-EtFOSE	78%	20-150%
	13C2-4:2FTS	110%	20-180%
	13C2-6:2FTS	113%	20-180%
	13C2-8:2FTS	115%	20-180%
	13C3-HFPO-DA	99%	20-150%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC8880
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98754-MS	6Q24079.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346
OP98754-MSD	6Q24080.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346
FC9137-7	6Q24078.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8880-1, FC8880-2, FC8880-3, FC8880-4, FC8880-5, FC8880-6, FC8880-7, FC8880-8, FC8880-9

CAS No.	Compound	FC9137-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
375-22-4	Perfluorobutanoic acid	0.0078		0.099	0.118	111	0.1	0.119	111	1	40-150/30
2706-90-3	Perfluoropentanoic acid	0.0053		0.0495	0.0752	141	0.05	0.0734	136	2	40-150/30
307-24-4	Perfluorohexanoic acid	0.0040		0.0248	0.0294	103	0.025	0.0290	100	1	40-150/30
375-85-9	Perfluoroheptanoic acid	0.0030		0.0248	0.0302	110	0.025	0.0314	114	4	40-150/30
335-67-1	Perfluorooctanoic acid	0.0099		0.0248	0.0350	101	0.025	0.0367	107	5	40-150/30
375-95-1	Perfluorononanoic acid	ND		0.0248	0.0238	96	0.025	0.0248	99	4	40-150/30
335-76-2	Perfluorodecanoic acid	ND		0.0248	0.0252	102	0.025	0.0257	103	2	40-150/30
2058-94-8	Perfluoroundecanoic acid	ND		0.0248	0.0264	107	0.025	0.0270	108	2	40-150/30
307-55-1	Perfluorododecanoic acid	ND		0.0248	0.0276	112	0.025	0.0288	115	4	40-150/30
72629-94-8	Perfluorotridecanoic acid	ND		0.0248	0.0245	99	0.025	0.0246	98	0	40-150/30
376-06-7	Perfluorotetradecanoic acid	ND		0.0248	0.0300	121	0.025	0.0298	119	1	40-150/30
375-73-5	Perfluorobutanesulfonic acid	0.0025		0.022	0.0253	104	0.0222	0.0269	110	6	40-150/30
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0233	0.0237	102	0.0235	0.0259	110	9	40-150/30
355-46-4	Perfluorohexanesulfonic acid	0.0016	J	0.0226	0.0274	114	0.0229	0.0268	110	2	40-150/30
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0236	0.0221	94	0.0238	0.0252	106	13	40-150/30
1763-23-1	Perfluorooctanesulfonic acid	0.0596		0.023	0.0761	72	0.0232	0.0863	115	13	40-150/30
68259-12-1	Perfluorononanesulfonic acid	ND		0.0238	0.0223	94	0.0241	0.0255	106	13	40-150/30
335-77-3	Perfluorodecanesulfonic acid	ND		0.0239	0.0192	80	0.0241	0.0222	92	14	40-150/30
79780-39-5	Perfluorododecanesulfonic aci	ND		0.024	0.0166	69	0.0243	0.0195	80	16	40-150/30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0928	0.117	126	0.0938	0.109	116	7	40-150/30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.0941	0.108	115	0.095	0.125	132	15	40-150/30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.095	0.126	133	0.096	0.111	116	13	40-150/30
754-91-6	PFOSA	ND		0.0248	0.0263	106	0.025	0.0256	102	3	40-150/30
31506-32-8	MeFOSA	ND		0.0495	0.0562	114	0.05	0.0559	112	1	40-150/30
4151-50-2	EtFOSA	ND		0.0495	0.0580	117	0.05	0.0555	111	4	40-150/30
2355-31-9	MeFOSAA	ND		0.0248	0.0290	117	0.025	0.0303	121	4	40-150/30
2991-50-6	EtFOSAA	ND		0.0248	0.0237	96	0.025	0.0273	109	14	40-150/30
24448-09-7	MeFOSE	ND		0.124	0.133	107	0.125	0.134	107	1	40-150/30
1691-99-2	EtFOSE	ND		0.124	0.138	112	0.125	0.143	114	4	40-150/30
13252-13-6	HFPO-DA (GenX)	ND		0.0495	0.0504	102	0.05	0.0544	109	8	40-150/30
919005-14-4	ADONA	ND		0.0468	0.0526	112	0.0473	0.0565	120	7	40-150/30
377-73-1	PFMPA	ND		0.0495	0.0650	131	0.05	0.0665	133	2	40-150/30
863090-89-5	PFMBA	ND		0.0495	0.0669	135	0.05	0.0672	134	0	40-150/30
151772-58-6	NFDHA	ND		0.0495	0.0482	97	0.05	0.0479	96	1	40-150/30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0463	0.0504	109	0.0468	0.0541	116	7	40-150/30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0468	0.0444	95	0.0473	0.0525	111	17	40-150/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC8880
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98754-MS	6Q24079.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346
OP98754-MSD	6Q24080.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346
FC9137-7	6Q24078.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8880-1, FC8880-2, FC8880-3, FC8880-4, FC8880-5, FC8880-6, FC8880-7, FC8880-8, FC8880-9

CAS No.	Compound	FC9137-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
113507-82-7	PFEESA	ND		0.0441	0.0427	97	0.0445	0.0441	99	3	40-150/30
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.124	0.148	120	0.125	0.151	121	2	40-150/30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.619	0.670	108	0.625	0.718	115	7	40-150/30
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.619	0.682	110	0.625	0.719	115	5	40-150/30

CAS No.	ID Standard Recoveries	MS	MSD	FC9137-7	Limits
	13C4-PFBA	101%	96%	101%	20-150%
	13C5-PFPeA	70%	74%	74%	20-150%
	13C5-PFHxA	97%	103%	103%	20-150%
	13C4-PFHpA	98%	103%	105%	20-150%
	13C8-PFOA	95%	98%	94%	20-150%
	13C9-PFNA	100%	99%	95%	20-150%
	13C6-PFDA	104%	106%	85%	20-150%
	13C7-PFUnDA	96%	92%	81%	20-150%
	13C2-PFDoDA	81%	87%	70%	20-150%
	13C2-PFTeDA	67%	67%	59%	20-150%
	13C3-PFBS	115%	100%	109%	20-150%
	13C3-PFHxS	110%	97%	104%	20-150%
	13C8-PFOS	99%	96%	94%	20-150%
	13C8-FOSA	89%	94%	94%	20-150%
	d3-MeFOSA	72%	85%	80%	20-150%
	d5-EtFOSA	65%	81%	77%	20-150%
	d3-MeFOSAA	84%	86%	84%	20-150%
	d5-EtFOSAA	81%	81%	84%	20-150%
	d7-MeFOSE	70%	78%	79%	20-150%
	d9-EtFOSE	72%	78%	78%	20-150%
	13C2-4:2FTS	94%	85%	89%	20-180%
	13C2-6:2FTS	102%	85%	97%	20-180%
	13C2-8:2FTS	95%	97%	100%	20-180%
	13C3-HFPO-DA	89%	93%	93%	20-150%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC8879

Sampling Dates: 08/16/23 - 08/17/23



Report to:

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Total number of pages in report: 45

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC8879

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FC8879-1	08/16/23	07:54	MK	08/19/23	AQ	Water	NEWMAN SIGNS
FC8879-2	08/16/23	14:25	MK	08/19/23	AQ	Water	GOODRICH
FC8879-3	08/16/23	14:30	MK	08/19/23	AQ	Water	GOODRICH 2
FC8879-4	08/17/23	13:20	MK	08/19/23	AQ	Water	HEARTLAND
FC8879-5	08/17/23	13:35	MK	08/19/23	AQ	Water	COMDEL

Summary of Hits

Job Number: FC8879
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 08/16/23 thru 08/17/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC8879-1	**NEWMAN SIGNS**					
Perfluorobutanoic acid		10.3	7.9	4.0	ng/l	EPA DRAFT 1633
Perfluoropentanoic acid		38.1	4.0	0.99	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		70.3	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		39.7	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		3.4	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluorodecanoic acid		1.5 J	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		5.2	2.0	0.99	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		1.3 J	2.0	0.99	ng/l	EPA DRAFT 1633
Perfluorodecanesulfonic acid		2.5	2.0	0.99	ng/l	EPA DRAFT 1633
5:3 Fluorotelomer carboxylate		58.5	50	9.9	ng/l	EPA DRAFT 1633
FC8879-2	**GOODRICH**					
Perfluorobutanesulfonic acid		1.2 J	2.0	1.0	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		1.4 J	2.0	1.0	ng/l	EPA DRAFT 1633
FC8879-3	**GOODRICH 2**					
Perfluorobutanesulfonic acid		1.3 J	1.9	0.94	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		1.1 J	1.9	0.94	ng/l	EPA DRAFT 1633
FC8879-4	**HEARTLAND**					
No hits reported in this sample.						
FC8879-5	**COMDEL**					
No hits reported in this sample.						

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	NEWMAN SIGNS		
Lab Sample ID:	FC8879-1	**Date Sampled:**	08/16/23
Matrix:	AQ - Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q24059.D	1	09/09/23 02:51	MV	08/31/23 08:15	OP98754	S6Q346
Run #2 [a]	6Q24238.D	5	09/11/23 05:00	MV	08/31/23 08:15	OP98754	S6Q348
Run #3 [a]	6Q24399.D	10	09/13/23 05:58	MV	08/31/23 08:15	OP98754	S6Q350

	Initial Volume	Final Volume
Run #1	505 ml	5.0 ml
Run #2	505 ml	5.0 ml
Run #3	505 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	10.3	7.9	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	38.1	4.0	0.99	ng/l	
307-24-4	Perfluorohexanoic acid	70.3	2.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	39.7	2.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	3.4	2.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.60	ng/l	
335-76-2	Perfluorodecanoic acid	1.5	2.0	0.50	ng/l	J
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.59	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.59	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.83	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	5.2	2.0	0.99	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	1.3	2.0	0.99	ng/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	0.99	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	0.99	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	0.99	ng/l	
335-77-3	Perfluorodecanesulfonic acid	2.5	2.0	0.99	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND [b]	40	20	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND [c]	79	40	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.9	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	0.99	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NEWMAN SIGNS		
Lab Sample ID:	FC8879-1	**Date Sampled:**	08/16/23
Matrix:	AQ - Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
31506-32-8	MeFOSA	ND	2.0	0.99	ng/l	
4151-50-2	EtFOSA	ND	2.0	0.99	ng/l	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	0.99	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	9.9	ng/l	
1691-99-2	EtFOSE	ND	20	9.9	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.9	2.0	ng/l	
919005-14-4	ADONA	ND	7.9	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	0.99	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.9	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.9	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	0.99	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.9	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	58.5	50	9.9	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	9.9	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C4-PFBA	60%	48%	49%	20-150%
	13C5-PFPeA	81%	86%	73%	20-150%
	13C5-PFHxA	104%	96%	79%	20-150%
	13C4-PFHpA	118%	94%	87%	20-150%
	13C8-PFOA	101%	85%	79%	20-150%
	13C9-PFNA	109%	104%	116%	20-150%
	13C6-PFDA	99%	99%	87%	20-150%
	13C7-PFUnDA	92%	85%	82%	20-150%
	13C2-PFDoDA	98%	82%	72%	20-150%
	13C2-PFTeDA	56%	57%	55%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NEWMAN SIGNS		
Lab Sample ID:	FC8879-1	**Date Sampled:**	08/16/23
Matrix:	AQ - Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C3-PFBS	115%	100%	94%	20-150%
	13C3-PFHxS	114%	100%	86%	20-150%
	13C8-PFOS	92%	95%	103%	20-150%
	13C8-FOSA	76%	86%	77%	20-150%
	d3-MeFOSA	78%	75%	65%	20-150%
	d5-EtFOSA	57%	64%	61%	20-150%
	d3-MeFOSAA	92%	134%	120%	20-150%
	d5-EtFOSAA	141%	185% [d]	131%	20-150%
	d7-MeFOSE	90%	80%	72%	20-150%
	d9-EtFOSE	73%	73%	74%	20-150%
	13C2-4:2FTS	241% [d]	159%	113%	20-180%
	13C2-6:2FTS	319% [d]	192% [d]	103%	20-180%
	13C2-8:2FTS	143%	140%	87%	20-180%
	13C3-HFPO-DA	71%	79%	78%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Result is from Run# 2
(c) Result is from Run# 3
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GOODRICH		
Lab Sample ID:	FC8879-2	**Date Sampled:**	08/16/23
Matrix:	AQ - Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q24060.D	1	09/09/23 03:06	MV	08/31/23 08:15	OP98754	S6Q346
Run #2 [a]	6Q24239.D	5	09/11/23 05:15	MV	08/31/23 08:15	OP98754	S6Q348
Run #3 [b]	6Q24413.D	1	09/13/23 14:38	MV	09/12/23 09:35	OP98955	S6Q351

	Initial Volume	Final Volume
Run #1	500 ml	5.0 ml
Run #2	500 ml	5.0 ml
Run #3	545 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [c]	ND	8.0	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.61	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.60	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.60	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.84	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	1.2	2.0	1.0	ng/l	J
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	1.4	2.0	1.0	ng/l	J
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.0	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND [d]	40	20	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.0	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GOODRICH		
Lab Sample ID:	FC8879-2	**Date Sampled:**	08/16/23
Matrix:	AQ - Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND [d]	10	5.0	ng/l	
2991-50-6	EtFOSAA	ND [d]	10	6.7	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.0	2.0	ng/l	
919005-14-4	ADONA	ND	8.0	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	1.0	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.0	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.0	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	50	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C4-PFBA	6% [e]	6% [e]	5% [e]	20-150%
	13C5-PFPeA	28%	32%	25%	20-150%
	13C5-PFHxA	96%	89%	88%	20-150%
	13C4-PFHpA	102%	100%	102%	20-150%
	13C8-PFOA	94%	92%	97%	20-150%
	13C9-PFNA	105%	96%	116%	20-150%
	13C6-PFDA	95%	92%	100%	20-150%
	13C7-PFUnDA	117%	81%	99%	20-150%
	13C2-PFDoDA	96%	74%	76%	20-150%
	13C2-PFTeDA	66%	62%	57%	20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GOODRICH		
Lab Sample ID:	FC8879-2	**Date Sampled:**	08/16/23
Matrix:	AQ - Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C3-PFBS	108%	96%	107%	20-150%
	13C3-PFHxS	97%	86%	95%	20-150%
	13C8-PFOS	92%	100%	90%	20-150%
	13C8-FOSA	131%	96%	88%	20-150%
	d3-MeFOSA	107%	81%	77%	20-150%
	d5-EtFOSA	95%	81%	68%	20-150%
	d3-MeFOSAA	171% e	133%	137%	20-150%
	d5-EtFOSAA	171% e	144%	151% e	20-150%
	d7-MeFOSE	96%	88%	70%	20-150%
	d9-EtFOSE	94%	84%	62%	20-150%
	13C2-4:2FTS	160%	105%	157%	20-180%
	13C2-6:2FTS	242% e	158%	207% e	20-180%
	13C2-8:2FTS	126%	117%	140%	20-180%
	13C3-HFPO-DA	70%	87%	77%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Confirmation run.
(c) Associated ID Standard outside control limits. Confirmed by re-extraction and reanalysis.
(d) Result is from Run# 2
(e) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GOODRICH 2		
Lab Sample ID:	FC8879-3	**Date Sampled:**	08/16/23
Matrix:	AQ - Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q24061.D	1	09/09/23 03:20	MV	08/31/23 08:15	OP98754	S6Q346
Run #2 [a]	6Q24240.D	5	09/11/23 05:29	MV	08/31/23 08:15	OP98754	S6Q348

	Initial Volume	Final Volume
Run #1	530 ml	5.0 ml
Run #2	530 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND [c]	38	19	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.8	0.94	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.47	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.47	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.47	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.58	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.47	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.57	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.57	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.79	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.47	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	1.3	1.9	0.94	ng/l	J
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.94	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.94	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	1.1	1.9	0.94	ng/l	J
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.94	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.94	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.5	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND [c]	38	19	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.5	3.9	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.94	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.94	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.94	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GOODRICH 2		
Lab Sample ID:	FC8879-3	**Date Sampled:**	08/16/23
Matrix:	AQ - Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND [c]	9.4	4.7	ng/l	
2991-50-6	EtFOSAA	ND [c]	9.4	6.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.4	ng/l	
1691-99-2	EtFOSE	ND	19	9.4	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.5	1.9	ng/l	
919005-14-4	ADONA	ND	7.5	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.94	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.1	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.5	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.5	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.94	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.4	4.7	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	47	9.4	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	47	9.4	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	5% [d]	11%	20-150%
	13C5-PFPeA	24%	68%	20-150%
	13C5-PFHxA	91%	93%	20-150%
	13C4-PFHpA	100%	93%	20-150%
	13C8-PFOA	91%	87%	20-150%
	13C9-PFNA	93%	99%	20-150%
	13C6-PFDA	90%	96%	20-150%
	13C7-PFUnDA	92%	81%	20-150%
	13C2-PFDoDA	90%	70%	20-150%
	13C2-PFTeDA	61%	49%	20-150%
	13C3-PFBS	99%	96%	20-150%
	13C3-PFHxS	86%	92%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GOODRICH 2		
Lab Sample ID:	FC8879-3	**Date Sampled:**	08/16/23
Matrix:	AQ - Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%	89%	20-150%
	13C8-FOSA	125%	91%	20-150%
	d3-MeFOSA	110%	83%	20-150%
	d5-EtFOSA	89%	79%	20-150%
	d3-MeFOSAA	159% [d]	91%	20-150%
	d5-EtFOSAA	155% [d]	87%	20-150%
	d7-MeFOSE	91%	68%	20-150%
	d9-EtFOSE	88%	63%	20-150%
	13C2-4:2FTS	160%	96%	20-180%
	13C2-6:2FTS	251% [d]	103%	20-180%
	13C2-8:2FTS	113%	110%	20-180%
	13C3-HFPO-DA	63%	90%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Associated ID Standard outside control limits.
(c) Result is from Run# 2
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HEARTLAND		
Lab Sample ID:	FC8879-4	**Date Sampled:**	08/17/23
Matrix:	AQ - Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q24064.D	1	09/09/23 04:03	MV	08/31/23 08:15	OP98754	S6Q346
Run #2 [a]	6Q24241.D	5	09/11/23 05:43	MV	08/31/23 08:15	OP98754	S6Q348

	Initial Volume	Final Volume
Run #1	485 ml	5.0 ml
Run #2	485 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.2	4.1	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.1	0.52	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.1	0.52	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.1	0.52	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.63	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.52	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.62	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.62	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.87	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.52	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.1	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND [b]	41	21	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND [b]	41	21	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HEARTLAND		
Lab Sample ID:	FC8879-4	**Date Sampled:**	08/17/23
Matrix:	AQ - Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND [b]	10	5.2	ng/l	
2991-50-6	EtFOSAA	ND [b]	10	6.9	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.1	ng/l	
919005-14-4	ADONA	ND	8.2	2.1	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.1	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	10	5.2	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	42%	35%	20-150%
	13C5-PFPeA	78%	85%	20-150%
	13C5-PFHxA	110%	93%	20-150%
	13C4-PFHpA	109%	93%	20-150%
	13C8-PFOA	107%	89%	20-150%
	13C9-PFNA	110%	102%	20-150%
	13C6-PFDA	110%	90%	20-150%
	13C7-PFUnDA	107%	77%	20-150%
	13C2-PFDoDA	123%	87%	20-150%
	13C2-PFTeDA	79%	65%	20-150%
	13C3-PFBS	128%	86%	20-150%
	13C3-PFHxS	121%	81%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HEARTLAND		
Lab Sample ID:	FC8879-4	**Date Sampled:**	08/17/23
Matrix:	AQ - Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%	92%	20-150%
	13C8-FOSA	95%	84%	20-150%
	d3-MeFOSA	89%	82%	20-150%
	d5-EtFOSA	83%	84%	20-150%
	d3-MeFOSAA	176% [c]	109%	20-150%
	d5-EtFOSAA	183% [c]	104%	20-150%
	d7-MeFOSE	104%	98%	20-150%
	d9-EtFOSE	93%	93%	20-150%
	13C2-4:2FTS	150%	99%	20-180%
	13C2-6:2FTS	361% [c]	146%	20-180%
	13C2-8:2FTS	291% [c]	136%	20-180%
	13C3-HFPO-DA	94%	92%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Result is from Run# 2
(c) Outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	COMDEL		
Lab Sample ID:	FC8879-5	**Date Sampled:**	08/17/23
Matrix:	AQ - Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q24065.D	1	09/09/23 04:17	MV	08/31/23 08:15	OP98754	S6Q346
Run #2							

	Initial Volume	Final Volume
Run #1	465 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.6	4.3	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.3	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.2	0.54	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.2	0.54	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.2	0.54	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	0.66	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.54	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.65	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.65	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.90	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.54	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.6	4.3	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.6	4.3	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.6	4.4	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	COMDEL		
Lab Sample ID:	FC8879-5	**Date Sampled:**	08/17/23
Matrix:	AQ - Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.6	2.2	ng/l	
919005-14-4	ADONA	ND	8.6	2.2	ng/l	
377-73-1	PFMPA	ND	4.3	1.1	ng/l	
863090-89-5	PFMBA	ND	4.3	1.2	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.6	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.6	2.2	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	11	5.4	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	54	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	54	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	100%		20-150%
	13C5-PFPeA	73%		20-150%
	13C5-PFHxA	97%		20-150%
	13C4-PFHpA	96%		20-150%
	13C8-PFOA	90%		20-150%
	13C9-PFNA	86%		20-150%
	13C6-PFDA	79%		20-150%
	13C7-PFUnDA	63%		20-150%
	13C2-PFDoDA	55%		20-150%
	13C2-PFTeDA	52%		20-150%
	13C3-PFBS	97%		20-150%
	13C3-PFHxS	92%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	COMDEL		
Lab Sample ID:	FC8879-5	**Date Sampled:**	08/17/23
Matrix:	AQ - Water	**Date Received:**	08/19/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	80%		20-150%
	13C8-FOSA	87%		20-150%
	d3-MeFOSA	71%		20-150%
	d5-EtFOSA	67%		20-150%
	d3-MeFOSAA	86%		20-150%
	d5-EtFOSAA	77%		20-150%
	d7-MeFOSE	86%		20-150%
	d9-EtFOSE	85%		20-150%
	13C2-4:2FTS	110%		20-180%
	13C2-6:2FTS	117%		20-180%
	13C2-8:2FTS	102%		20-180%
	13C3-HFPO-DA	90%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # SKIFF # FC8879

Client / Reporting Information	Project Information
Company Name: NDDEQ PFAS	Project Name: NDDEQ PFAS
Address: 4201 Normandy St	Street 4201 Normandy St
City: Bismarck State: ND Zip: 58503	City Bismarck State ND
Project Contact: Sharon Suggs Email: ssuggs@nd.gov	Project #
Phone #: 701-328-6109	Fax #
Sampler(s) Name(s) (Printed) Sampler 1: Sampler 2:	Client Purchase Order #

Analytical Information

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LAB USE ONLY
1	Newman Sigas	8/16/23	7:54	MLK	WW	3										
2	Good Rich	8/16/23	14:25	MLK	WW	3										
3	Good Rich 2	8/16/23	14:30	MLK	WW	3										
4	Heartland	8/17/23	13:20	MLK	WW	3										
5	Combel	8/17/23	13:35	MLK	WW	3										

INITIAL ASSESSMENT SP

LABEL VERIFICATION SP

Turnaround Time (Business days)	Data Deliverable Information	Comments / Remarks
10 Day (Business) Approved By: / Date:	☐ COMMERCIAL "A" (RESULTS ONLY)	
7 Day	☐ COMMERCIAL "B" (RESULTS PLUS QC)	
5 Day	☐ REDT1 (EPA LEVEL 3)	
3 Day *RUSH*	☐ FULLT1 (EPA LEVEL 4)	
2 Day *RUSH*	☐ EDD'S	
1 Day *RUSH*		
Other		
Rush T/A Data Available VIA Email or Lablink		

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 SSuggs	8/18/23	2 Fed Ex	3 Fx		4 08/19/23 1100
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 5.2 FR#1

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

FC8879: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC8879 **Client:** NDDEQ PFAS **Project:** NDDEQ PFAS

Date / Time Received: 8/19/2023 11:00:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7826 6593 4999

Cooler Temps (Raw Measured) °C: Cooler 1: (5.2);

Cooler Temps (Corrected) °C: Cooler 1: (5.0);

Cooler Information	Y	or	N
1. Custody Seals Present:	☑		☐
2. Custody Seals Intact:	☑		☐
3. Temp criteria achieved:	☑		☐
4. Cooler temp verification:	IR Gun		
5. Cooler media:	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑

	W	or	S	N/A
3. Type of TB Received	☐		☐	☐

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles:	☑		☐	
2. Samples presented properly	☑		☐	
3. Suffiient volume/containers recv'd for analysis	☑		☐	
4. Condition of sample:	Intact			
5. Sample recv'd within HT	☑		☐	
6. Dates/Times/IDs on COC match sample label	☐		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☐
11. % Solids Jar Received?	☐		☐	☐
12. Residual Chlorine Present?	☐		☐	☐

Misc Information

Number of Encores: 25 Gram 5 Gram Number of Lab Filtered Metals:

Test Strip Lot #s: pH 0-3: _____ pH 10-12: _____ Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot # _____

Comments

SM089-03
Rev. Date 12/7/17

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98754-MB	6Q24058.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-1, FC8879-2, FC8879-3, FC8879-4, FC8879-5

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98754-MB	6Q24058.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-1, FC8879-2, FC8879-3, FC8879-4, FC8879-5

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	105%	20-150%
	13C5-PFPeA	78%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	101%	20-150%
	13C8-PFOA	105%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	101%	20-150%
	13C7-PFUnDA	98%	20-150%
	13C2-PFDoDA	89%	20-150%
	13C2-PFTeDA	79%	20-150%
	13C3-PFBS	110%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	102%	20-150%
	13C8-FOSA	92%	20-150%
	d3-MeFOSA	76%	20-150%
	d5-EtFOSA	73%	20-150%
	d3-MeFOSAA	96%	20-150%
	d5-EtFOSAA	91%	20-150%
	d7-MeFOSE	77%	20-150%
	d9-EtFOSE	81%	20-150%
	13C2-4:2FTS	115%	20-180%
	13C2-6:2FTS	118%	20-180%
	13C2-8:2FTS	113%	20-180%
	13C3-HFPO-DA	94%	20-150%

Instrument Blank

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q346-IBLK	6Q24010.D	1	09/08/23	MV	n/a	n/a	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-1, FC8879-2, FC8879-3, FC8879-4, FC8879-5

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q346-IBLK	6Q24010.D	1	09/08/23	MV	n/a	n/a	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-1, FC8879-2, FC8879-3, FC8879-4, FC8879-5

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	97%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	100%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	97%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	98%	20-150%
	13C2-PFDoDA	99%	20-150%
	13C2-PFTeDA	92%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	95%	20-150%
	13C8-PFOS	108%	20-150%
	13C8-FOSA	107%	20-150%
	d3-MeFOSA	100%	20-150%
	d5-EtFOSA	110%	20-150%
	d3-MeFOSAA	105%	20-150%
	d5-EtFOSAA	110%	20-150%
	d7-MeFOSE	107%	20-150%
	d9-EtFOSE	107%	20-150%
	13C2-4:2FTS	103%	20-180%
	13C2-6:2FTS	98%	20-180%
	13C2-8:2FTS	102%	20-180%
	13C3-HFPO-DA	99%	20-150%

Instrument Blank

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q348-IBLK	6Q24170.D	1	09/10/23	MV	n/a	n/a	S6Q348

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-1, FC8879-2, FC8879-3, FC8879-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	103%	20-150%
	13C5-PFPeA	96%	20-150%
	13C5-PFHxA	103%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	107%	20-150%
	13C6-PFDA	99%	20-150%
	13C7-PFUnDA	107%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	103%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	96%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSA	100%	20-150%
	d5-EtFOSA	102%	20-150%
	d3-MeFOSAA	103%	20-150%
	d5-EtFOSAA	97%	20-150%
	d7-MeFOSE	101%	20-150%
	d9-EtFOSE	106%	20-150%
	13C2-4:2FTS	106%	20-180%
	13C2-6:2FTS	105%	20-180%
	13C2-8:2FTS	109%	20-180%
	13C3-HFPO-DA	99%	20-150%

Instrument Blank

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q350-IBLK	6Q24321.D	1	09/12/23	MV	n/a	n/a	S6Q350

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-1

CAS No.	Compound	Result	RL	MDL	Units	Q
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	86%	20-150%
	13C5-PFHxA	96%	20-150%
	13C4-PFHpA	101%	20-150%
	13C8-PFOA	97%	20-150%
	13C9-PFNA	116%	20-150%
	13C6-PFDA	99%	20-150%
	13C7-PFUnDA	93%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	103%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	96%	20-150%
	13C8-FOSA	102%	20-150%
	d3-MeFOSAA	95%	20-150%
	d5-EtFOSAA	82%	20-150%
	13C2-4:2FTS	93%	20-180%
	13C2-6:2FTS	93%	20-180%
	13C2-8:2FTS	97%	20-180%

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Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q346-ICCB	6Q24051.D	1	09/09/23	MV	n/a	n/a	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-1, FC8879-2, FC8879-3

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	

Continuing Calibration Blank

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q346-ICCB	6Q24051.D	1	09/09/23	MV	n/a	n/a	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-1, FC8879-2, FC8879-3

CAS No.	Compound	Result	RL	MDL	Units	Q
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	103%	20-150%
	13C5-PFPeA	80%	20-150%
	13C5-PFHxA	107%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	92%	20-150%
	13C6-PFDA	109%	20-150%
	13C7-PFUnDA	107%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	101%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	98%	20-150%
	d3-MeFOSAA	95%	20-150%
	d5-EtFOSAA	104%	20-150%
	13C2-4:2FTS	109%	20-180%
	13C2-6:2FTS	112%	20-180%
	13C2-8:2FTS	112%	20-180%

Continuing Calibration Blank

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q346-ICCB	6Q24063.D	1	09/09/23	MV	n/a	n/a	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-4, FC8879-5

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q346-ICCB	6Q24063.D	1	09/09/23	MV	n/a	n/a	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-4, FC8879-5

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	104%	20-150%
	13C5-PFPeA	73%	20-150%
	13C5-PFHxA	95%	20-150%
	13C4-PFHpA	96%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	100%	20-150%
	13C7-PFUnDA	96%	20-150%
	13C2-PFDoDA	105%	20-150%
	13C2-PFTeDA	96%	20-150%
	13C3-PFBS	106%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	94%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSA	103%	20-150%
	d5-EtFOSA	104%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	104%	20-150%
	d7-MeFOSE	112%	20-150%
	d9-EtFOSE	119%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	123%	20-180%
	13C2-8:2FTS	124%	20-180%
	13C3-HFPO-DA	86%	20-150%

Continuing Calibration Blank

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q348-ICCB	6Q24232.D	1	09/11/23	MV	n/a	n/a	S6Q348

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-1, FC8879-2, FC8879-3, FC8879-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	92%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	94%	20-150%
	13C9-PFNA	108%	20-150%
	13C6-PFDA	99%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	95%	20-150%
	13C2-PFTeDA	97%	20-150%
	13C3-PFBS	107%	20-150%
	13C3-PFHxS	105%	20-150%
	13C8-PFOS	102%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSA	101%	20-150%
	d5-EtFOSA	104%	20-150%
	d3-MeFOSAA	101%	20-150%
	d5-EtFOSAA	102%	20-150%
	d7-MeFOSE	105%	20-150%
	d9-EtFOSE	107%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	117%	20-180%
	13C2-8:2FTS	120%	20-180%
	13C3-HFPO-DA	98%	20-150%

Continuing Calibration Blank

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q350-ICCB	6Q24394.D	1	09/13/23	MV	n/a	n/a	S6Q350

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-1

CAS No.	Compound	Result	RL	MDL	Units	Q
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	88%	20-150%
	13C5-PFHxA	99%	20-150%
	13C4-PFHpA	100%	20-150%
	13C8-PFOA	104%	20-150%
	13C9-PFNA	109%	20-150%
	13C6-PFDA	100%	20-150%
	13C7-PFUnDA	98%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	102%	20-150%
	13C3-PFBS	108%	20-150%
	13C3-PFHxS	103%	20-150%
	13C8-PFOS	90%	20-150%
	13C8-FOSA	95%	20-150%
	d3-MeFOSAA	88%	20-150%
	d5-EtFOSAA	78%	20-150%
	13C2-4:2FTS	96%	20-180%
	13C2-6:2FTS	93%	20-180%
	13C2-8:2FTS	94%	20-180%

Continuing Calibration Blank

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q350-ICCB	6Q24401.D	1	09/13/23	MV	n/a	n/a	S6Q350

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-1

CAS No.	Compound	Result	RL	MDL	Units	Q
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	85%	20-150%
	13C5-PFHxA	93%	20-150%
	13C4-PFHpA	97%	20-150%
	13C8-PFOA	94%	20-150%
	13C9-PFNA	106%	20-150%
	13C6-PFDA	97%	20-150%
	13C7-PFUnDA	98%	20-150%
	13C2-PFDoDA	103%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	106%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	111%	20-150%
	13C8-FOSA	107%	20-150%
	d3-MeFOSAA	103%	20-150%
	d5-EtFOSAA	100%	20-150%
	13C2-4:2FTS	103%	20-180%
	13C2-6:2FTS	100%	20-180%
	13C2-8:2FTS	96%	20-180%

Continuing Calibration Blank

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q346-ICCB	6Q24075.D	1	09/09/23	MV	n/a	n/a	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98754-MS, OP98754-MSD

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q346-ICCB	6Q24075.D	1	09/09/23	MV	n/a	n/a	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP98754-MS, OP98754-MSD

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	104%	20-150%
	13C5-PFPeA	75%	20-150%
	13C5-PFHxA	96%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	94%	20-150%
	13C9-PFNA	93%	20-150%
	13C6-PFDA	96%	20-150%
	13C7-PFUnDA	98%	20-150%
	13C2-PFDoDA	93%	20-150%
	13C2-PFTeDA	89%	20-150%
	13C3-PFBS	115%	20-150%
	13C3-PFHxS	109%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	92%	20-150%
	d3-MeFOSA	99%	20-150%
	d5-EtFOSA	95%	20-150%
	d3-MeFOSAA	103%	20-150%
	d5-EtFOSAA	98%	20-150%
	d7-MeFOSE	93%	20-150%
	d9-EtFOSE	95%	20-150%
	13C2-4:2FTS	118%	20-180%
	13C2-6:2FTS	128%	20-180%
	13C2-8:2FTS	113%	20-180%
	13C3-HFPO-DA	95%	20-150%

Blank Spike Summary

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98754-LLBS	6Q24057.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-1, FC8879-2, FC8879-3, FC8879-4, FC8879-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0172	108	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0100	125	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0038	95	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0039	98	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0037	93	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0035	88	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0039	98	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0040	100	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0038	95	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0036	90	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0043	108	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0037	104	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0038	101	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0039	107	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0038	100	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0039	105	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0036	94	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0030	78	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0032	82	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0167	111	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0180	118	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0168	109	40-150
754-91-6	PFOSA	0.004	0.0040	100	40-150
31506-32-8	MeFOSA	0.008	0.0091	114	40-150
4151-50-2	EtFOSA	0.008	0.0090	113	40-150
2355-31-9	MeFOSAA	0.004	0.0047	118	40-150
2991-50-6	EtFOSAA	0.004	0.0046	115	40-150
24448-09-7	MeFOSE	0.02	0.0203	102	40-150
1691-99-2	EtFOSE	0.02	0.0198	99	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0080	100	40-150
919005-14-4	ADONA	0.00756	0.0080	106	40-150
377-73-1	PFMPA	0.008	0.0102	128	40-150
863090-89-5	PFMBA	0.008	0.0100	125	40-150
151772-58-6	NFDHA	0.008	0.0072	90	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0073	98	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0072	95	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98754-LLBS	6Q24057.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-1, FC8879-2, FC8879-3, FC8879-4, FC8879-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0068	96	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0198	99	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.0986	99	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.101	101	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	103%	20-150%
	13C5-PFPeA	81%	20-150%
	13C5-PFHxA	111%	20-150%
	13C4-PFHpA	109%	20-150%
	13C8-PFOA	94%	20-150%
	13C9-PFNA	103%	20-150%
	13C6-PFDA	111%	20-150%
	13C7-PFUnDA	107%	20-150%
	13C2-PFDoDA	101%	20-150%
	13C2-PFTeDA	80%	20-150%
	13C3-PFBS	110%	20-150%
	13C3-PFHxS	106%	20-150%
	13C8-PFOS	108%	20-150%
	13C8-FOSA	102%	20-150%
	d3-MeFOSA	83%	20-150%
	d5-EtFOSA	79%	20-150%
	d3-MeFOSAA	96%	20-150%
	d5-EtFOSAA	98%	20-150%
	d7-MeFOSE	88%	20-150%
	d9-EtFOSE	90%	20-150%
	13C2-4:2FTS	109%	20-180%
	13C2-6:2FTS	112%	20-180%
	13C2-8:2FTS	113%	20-180%
	13C3-HFPO-DA	100%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98754-BS	6Q24056.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-1, FC8879-2, FC8879-3, FC8879-4, FC8879-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.115	115	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0648	130	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0255	102	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0268	107	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0257	103	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0250	100	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0275	110	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0287	115	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0295	118	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0261	104	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0304	122	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0231	104	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0260	111	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0244	107	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0256	107	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0271	117	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0268	111	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0238	99	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0218	90	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.107	114	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.110	116	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.111	116	40-150
754-91-6	PFOSA	0.025	0.0267	107	40-150
31506-32-8	MeFOSA	0.05	0.0582	116	40-150
4151-50-2	EtFOSA	0.05	0.0580	116	40-150
2355-31-9	MeFOSAA	0.025	0.0280	112	40-150
2991-50-6	EtFOSAA	0.025	0.0287	115	40-150
24448-09-7	MeFOSE	0.125	0.128	102	40-150
1691-99-2	EtFOSE	0.125	0.148	118	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0548	110	40-150
919005-14-4	ADONA	0.0473	0.0563	119	40-150
377-73-1	PFMPA	0.05	0.0645	129	40-150
863090-89-5	PFMBA	0.05	0.0646	129	40-150
151772-58-6	NFDHA	0.05	0.0526	105	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0525	112	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0496	105	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98754-BS	6Q24056.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-1, FC8879-2, FC8879-3, FC8879-4, FC8879-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0469	105	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.134	107	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.680	109	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.726	116	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	94%	20-150%
	13C5-PFPeA	84%	20-150%
	13C5-PFHxA	107%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	111%	20-150%
	13C6-PFDA	98%	20-150%
	13C7-PFUnDA	93%	20-150%
	13C2-PFDoDA	83%	20-150%
	13C2-PFTeDA	68%	20-150%
	13C3-PFBS	108%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	94%	20-150%
	d3-MeFOSA	77%	20-150%
	d5-EtFOSA	75%	20-150%
	d3-MeFOSAA	96%	20-150%
	d5-EtFOSAA	91%	20-150%
	d7-MeFOSE	79%	20-150%
	d9-EtFOSE	78%	20-150%
	13C2-4:2FTS	110%	20-180%
	13C2-6:2FTS	113%	20-180%
	13C2-8:2FTS	115%	20-180%
	13C3-HFPO-DA	99%	20-150%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98754-MS	6Q24079.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346
OP98754-MSD	6Q24080.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346
FC9137-7	6Q24078.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-1, FC8879-2, FC8879-3, FC8879-4, FC8879-5

CAS No.	Compound	FC9137-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
375-22-4	Perfluorobutanoic acid	0.0078		0.099	0.118	111	0.1	0.119	111	1	40-150/30
2706-90-3	Perfluoropentanoic acid	0.0053		0.0495	0.0752	141	0.05	0.0734	136	2	40-150/30
307-24-4	Perfluorohexanoic acid	0.0040		0.0248	0.0294	103	0.025	0.0290	100	1	40-150/30
375-85-9	Perfluoroheptanoic acid	0.0030		0.0248	0.0302	110	0.025	0.0314	114	4	40-150/30
335-67-1	Perfluorooctanoic acid	0.0099		0.0248	0.0350	101	0.025	0.0367	107	5	40-150/30
375-95-1	Perfluorononanoic acid	ND		0.0248	0.0238	96	0.025	0.0248	99	4	40-150/30
335-76-2	Perfluorodecanoic acid	ND		0.0248	0.0252	102	0.025	0.0257	103	2	40-150/30
2058-94-8	Perfluoroundecanoic acid	ND		0.0248	0.0264	107	0.025	0.0270	108	2	40-150/30
307-55-1	Perfluorododecanoic acid	ND		0.0248	0.0276	112	0.025	0.0288	115	4	40-150/30
72629-94-8	Perfluorotridecanoic acid	ND		0.0248	0.0245	99	0.025	0.0246	98	0	40-150/30
376-06-7	Perfluorotetradecanoic acid	ND		0.0248	0.0300	121	0.025	0.0298	119	1	40-150/30
375-73-5	Perfluorobutanesulfonic acid	0.0025		0.022	0.0253	104	0.0222	0.0269	110	6	40-150/30
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0233	0.0237	102	0.0235	0.0259	110	9	40-150/30
355-46-4	Perfluorohexanesulfonic acid	0.0016	J	0.0226	0.0274	114	0.0229	0.0268	110	2	40-150/30
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0236	0.0221	94	0.0238	0.0252	106	13	40-150/30
1763-23-1	Perfluorooctanesulfonic acid	0.0596		0.023	0.0761	72	0.0232	0.0863	115	13	40-150/30
68259-12-1	Perfluorononanesulfonic acid	ND		0.0238	0.0223	94	0.0241	0.0255	106	13	40-150/30
335-77-3	Perfluorodecanesulfonic acid	ND		0.0239	0.0192	80	0.0241	0.0222	92	14	40-150/30
79780-39-5	Perfluorododecanesulfonic aci	ND		0.024	0.0166	69	0.0243	0.0195	80	16	40-150/30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0928	0.117	126	0.0938	0.109	116	7	40-150/30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.0941	0.108	115	0.095	0.125	132	15	40-150/30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.095	0.126	133	0.096	0.111	116	13	40-150/30
754-91-6	PFOSA	ND		0.0248	0.0263	106	0.025	0.0256	102	3	40-150/30
31506-32-8	MeFOSA	ND		0.0495	0.0562	114	0.05	0.0559	112	1	40-150/30
4151-50-2	EtFOSA	ND		0.0495	0.0580	117	0.05	0.0555	111	4	40-150/30
2355-31-9	MeFOSAA	ND		0.0248	0.0290	117	0.025	0.0303	121	4	40-150/30
2991-50-6	EtFOSAA	ND		0.0248	0.0237	96	0.025	0.0273	109	14	40-150/30
24448-09-7	MeFOSE	ND		0.124	0.133	107	0.125	0.134	107	1	40-150/30
1691-99-2	EtFOSE	ND		0.124	0.138	112	0.125	0.143	114	4	40-150/30
13252-13-6	HFPO-DA (GenX)	ND		0.0495	0.0504	102	0.05	0.0544	109	8	40-150/30
919005-14-4	ADONA	ND		0.0468	0.0526	112	0.0473	0.0565	120	7	40-150/30
377-73-1	PFMPA	ND		0.0495	0.0650	131	0.05	0.0665	133	2	40-150/30
863090-89-5	PFMBA	ND		0.0495	0.0669	135	0.05	0.0672	134	0	40-150/30
151772-58-6	NFDHA	ND		0.0495	0.0482	97	0.05	0.0479	96	1	40-150/30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0463	0.0504	109	0.0468	0.0541	116	7	40-150/30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0468	0.0444	95	0.0473	0.0525	111	17	40-150/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC8879
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98754-MS	6Q24079.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346
OP98754-MSD	6Q24080.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346
FC9137-7	6Q24078.D	1	09/09/23	MV	08/31/23	OP98754	S6Q346

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC8879-1, FC8879-2, FC8879-3, FC8879-4, FC8879-5

CAS No.	Compound	FC9137-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
113507-82-7	PFEESA	ND		0.0441	0.0427	97	0.0445	0.0441	99	3	40-150/30
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.124	0.148	120	0.125	0.151	121	2	40-150/30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.619	0.670	108	0.625	0.718	115	7	40-150/30
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.619	0.682	110	0.625	0.719	115	5	40-150/30

CAS No.	ID Standard Recoveries	MS	MSD	FC9137-7	Limits
	13C4-PFBA	101%	96%	101%	20-150%
	13C5-PFPeA	70%	74%	74%	20-150%
	13C5-PFHxA	97%	103%	103%	20-150%
	13C4-PFHpA	98%	103%	105%	20-150%
	13C8-PFOA	95%	98%	94%	20-150%
	13C9-PFNA	100%	99%	95%	20-150%
	13C6-PFDA	104%	106%	85%	20-150%
	13C7-PFUnDA	96%	92%	81%	20-150%
	13C2-PFDoDA	81%	87%	70%	20-150%
	13C2-PFTeDA	67%	67%	59%	20-150%
	13C3-PFBS	115%	100%	109%	20-150%
	13C3-PFHxS	110%	97%	104%	20-150%
	13C8-PFOS	99%	96%	94%	20-150%
	13C8-FOSA	89%	94%	94%	20-150%
	d3-MeFOSA	72%	85%	80%	20-150%
	d5-EtFOSA	65%	81%	77%	20-150%
	d3-MeFOSAA	84%	86%	84%	20-150%
	d5-EtFOSAA	81%	81%	84%	20-150%
	d7-MeFOSE	70%	78%	79%	20-150%
	d9-EtFOSE	72%	78%	78%	20-150%
	13C2-4:2FTS	94%	85%	89%	20-180%
	13C2-6:2FTS	102%	85%	97%	20-180%
	13C2-8:2FTS	95%	97%	100%	20-180%
	13C3-HFPO-DA	89%	93%	93%	20-150%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC9829

Sampling Date: 09/20/23



Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
ssuggs@nd.gov

ATTN: Shannon Suggs

Total number of pages in report: 30

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC9829

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FC9829-1	09/20/23	10:00	MS	09/23/23	AQ	Surface Water	553265

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

Summary of Hits

Job Number: FC9829
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 09/20/23

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC9829-1	**553265**					

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	553265		
Lab Sample ID:	FC9829-1	**Date Sampled:**	09/20/23
Matrix:	AQ - Surface Water	**Date Received:**	09/23/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q26338.D	1	10/13/23 05:38	MV	10/04/23 08:30	OP99345	S6Q370
Run #2							

	Initial Volume	Final Volume
Run #1	405 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	9.9	4.9	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.9	1.2	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.5	0.62	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.5	0.62	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.5	0.62	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.5	0.75	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.5	0.62	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.5	0.74	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.5	0.74	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.5	1.0	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.5	0.62	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.5	1.2	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.5	1.4	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.5	1.2	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.5	1.2	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.5	1.2	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.5	1.2	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.5	1.2	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.5	1.4	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	9.9	4.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	9.9	4.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	9.9	5.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.5	1.2	ng/l	
31506-32-8	MeFOSA	ND	2.5	1.2	ng/l	
4151-50-2	EtFOSA	ND	2.5	1.2	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	553265		
Lab Sample ID:	FC9829-1	**Date Sampled:**	09/20/23
Matrix:	AQ - Surface Water	**Date Received:**	09/23/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.5	1.2	ng/l	
2991-50-6	EtFOSAA	ND	2.5	1.6	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	25	12	ng/l	
1691-99-2	EtFOSE	ND	25	12	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	9.9	2.5	ng/l	
919005-14-4	ADONA	ND	9.9	2.5	ng/l	
377-73-1	PFMPA	ND	4.9	1.2	ng/l	
863090-89-5	PFMBA	ND	4.9	1.4	ng/l	
151772-58-6	NFDHA	ND	4.9	1.5	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	9.9	2.5	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	9.9	2.5	ng/l	
113507-82-7	PFEESA	ND	4.9	1.2	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	12	6.2	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	62	12	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	62	12	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	51%		20-150%
	13C5-PFPeA	99%		20-150%
	13C5-PFHxA	101%		20-150%
	13C4-PFHpA	97%		20-150%
	13C8-PFOA	102%		20-150%
	13C9-PFNA	105%		20-150%
	13C6-PFDA	101%		20-150%
	13C7-PFUnDA	82%		20-150%
	13C2-PFDoDA	61%		20-150%
	13C2-PFTeDA	53%		20-150%
	13C3-PFBS	99%		20-150%
	13C3-PFHxS	99%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	553265		
Lab Sample ID:	FC9829-1	**Date Sampled:**	09/20/23
Matrix:	AQ - Surface Water	**Date Received:**	09/23/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		20-150%
	13C8-FOSA	95%		20-150%
	d3-MeFOSA	63%		20-150%
	d5-EtFOSA	59%		20-150%
	d3-MeFOSAA	80%		20-150%
	d5-EtFOSAA	75%		20-150%
	d7-MeFOSE	60%		20-150%
	d9-EtFOSE	57%		20-150%
	13C2-4:2FTS	110%		20-180%
	13C2-6:2FTS	103%		20-180%
	13C2-8:2FTS	93%		20-180%
	13C3-HFPO-DA	96%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

FC9829

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: NDDEQ PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58503
Project Contact: S Suggs Email: ssuggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed)
Sampler 1: Sampler 2:

Project Information

Project Name: NDDEQ PFAS
Street 4201 Normandy St
City Bismarck State ND
Project #
Fax #
Client Purchase Order #

Analytical Information

LCID1633 LIST 40

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LCID1633 LIST 40	LAB USE ONLY
1	553265	9-20-23	10:00	MS	SW	3										X	

INITIAL ASSESSMENT

LABEL VERIFICATION

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- ☐ COMMERCIAL "A" (RESULTS ONLY)
- ☐ COMMERCIAL "B" (RESULTS PLUS QC)
- ☐ REDT1 (EPA LEVEL 3)
- ☐ FULLT1 (EPA LEVEL 4)
- ☐ EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 S Suggs	9/22	2 FedEx	3 FedEx		4 09/23/23 1030
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 3.8 IR#1

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

4.1

4

FC9829: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: fc9829 **Client:** NDDEQ PFAS **Project:** NDDEQ PFAS

Date / Time Received: 9/23/2023 10:30:00 AM **Delivery Method:** FED EX **Airbill #'s:** N/A

Cooler Temps (Raw Measured) °C: Cooler 1: (3.8);

Cooler Temps (Corrected) °C: Cooler 1: (3.6);

Cooler Information	Y	or	N
1. Custody Seals Present:	☑		☐
2. Custody Seals Intact:	☑		☐
3. Temp criteria achieved:	☑		☐
4. Cooler temp verification:	IR Gun		
5. Cooler media:	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑

	W	or	S	N/A
3. Type of TB Received	☐		☐	☐

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles:	☑		☐	
2. Samples presented properly	☑		☐	
3. Suffiient volume/containers recv'd for analysis	☑		☐	
4. Condition of sample:	Intact			
5. Sample recv'd within HT	☑		☐	
6. Dates/Times/IDs on COC match sample label	☐		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☐
11. % Solids Jar Received?	☐		☐	☐
12. Residual Chlorine Present?	☐		☐	☐

Misc Information

Number of Encores: 25 Gram 5 Gram Number of Lab Filtered Metals:

Test Strip Lot #s: pH 0-3: _____ pH 10-12: _____ Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot # _____

Comments

SM001
Rev. Date 05/04/17

Technician: SHAYLAP Date: 9/23/2023 11:15:44 AM Reviewer: _____ Date: _____

FC9829: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-MB	6Q26337.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9829-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-MB	6Q26337.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9829-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	92%	20-150%
	13C5-PFPeA	94%	20-150%
	13C5-PFHxA	95%	20-150%
	13C4-PFHpA	93%	20-150%
	13C8-PFOA	94%	20-150%
	13C9-PFNA	96%	20-150%
	13C6-PFDA	96%	20-150%
	13C7-PFUnDA	96%	20-150%
	13C2-PFDoDA	78%	20-150%
	13C2-PFTeDA	53%	20-150%
	13C3-PFBS	91%	20-150%
	13C3-PFHxS	95%	20-150%
	13C8-PFOS	89%	20-150%
	13C8-FOSA	61%	20-150%
	d3-MeFOSA	35%	20-150%
	d5-EtFOSA	40%	20-150%
	d3-MeFOSAA	88%	20-150%
	d5-EtFOSAA	82%	20-150%
	d7-MeFOSE	49%	20-150%
	d9-EtFOSE	47%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	98%	20-180%
	13C2-8:2FTS	97%	20-180%
	13C3-HFPO-DA	94%	20-150%

Instrument Blank

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-IBLK	6Q26258.D	1	10/12/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9829-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-IBLK	6Q26258.D	1	10/12/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9829-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	99%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	107%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	107%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSAA	95%	20-150%
	d5-EtFOSAA	97%	20-150%
	13C2-4:2FTS	125%	20-180%
	13C2-6:2FTS	110%	20-180%
	13C2-8:2FTS	116%	20-180%

Instrument Blank

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-IBLK	6Q26350.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9829-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-IBLK	6Q26350.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9829-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	98%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	107%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	103%	20-150%
	13C6-PFDA	100%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	99%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	105%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	100%	20-150%
	13C2-4:2FTS	120%	20-180%
	13C2-6:2FTS	114%	20-180%
	13C2-8:2FTS	105%	20-180%

Continuing Calibration Blank

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-ICCB	6Q26334.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9829-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-ICCB	6Q26334.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9829-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	98%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	96%	20-150%
	13C9-PFNA	96%	20-150%
	13C6-PFDA	106%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	103%	20-150%
	13C2-PFTeDA	104%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	95%	20-150%
	13C8-FOSA	97%	20-150%
	d3-MeFOSAA	97%	20-150%
	d5-EtFOSAA	96%	20-150%
	13C2-4:2FTS	113%	20-180%
	13C2-6:2FTS	113%	20-180%
	13C2-8:2FTS	115%	20-180%

Continuing Calibration Blank

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-ICCB	6Q26346.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q370-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-ICCB	6Q26346.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q370-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	98%	20-150%
	13C5-PFPeA	97%	20-150%
	13C5-PFHxA	94%	20-150%
	13C4-PFHpA	96%	20-150%
	13C8-PFOA	106%	20-150%
	13C9-PFNA	102%	20-150%
	13C6-PFDA	107%	20-150%
	13C7-PFUnDA	102%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	105%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	96%	20-150%
	13C2-4:2FTS	113%	20-180%
	13C2-6:2FTS	112%	20-180%
	13C2-8:2FTS	109%	20-180%

Blank Spike Summary

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-LLBS	6Q26336.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9829-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0153	96	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0074	93	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0040	100	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0037	93	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0038	95	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0038	95	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0041	103	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0035	88	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0039	98	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0032	80	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0037	93	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0037	104	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0041	109	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0036	98	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0037	97	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0038	102	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0036	94	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0036	93	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0031	80	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0152	101	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0151	99	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0134	87	40-150
754-91-6	PFOSA	0.004	0.0041	103	40-150
31506-32-8	MeFOSA	0.008	0.0080	100	40-150
4151-50-2	EtFOSA	0.008	0.0083	104	40-150
2355-31-9	MeFOSAA	0.004	0.0043	108	40-150
2991-50-6	EtFOSAA	0.004	0.0040	100	40-150
24448-09-7	MeFOSE	0.02	0.0205	103	40-150
1691-99-2	EtFOSE	0.02	0.0192	96	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0081	101	40-150
919005-14-4	ADONA	0.00756	0.0079	104	40-150
377-73-1	PFMPA	0.008	0.0075	94	40-150
863090-89-5	PFMBA	0.008	0.0075	94	40-150
151772-58-6	NFDHA	0.008	0.0085	106	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0072	96	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0061	81	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-LLBS	6Q26336.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9829-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0066	93	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0191	96	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.0999	100	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.105	105	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	95%	20-150%
	13C5-PFPeA	98%	20-150%
	13C5-PFHxA	93%	20-150%
	13C4-PFHpA	94%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	92%	20-150%
	13C7-PFUnDA	92%	20-150%
	13C2-PFDoDA	87%	20-150%
	13C2-PFTeDA	67%	20-150%
	13C3-PFBS	94%	20-150%
	13C3-PFHxS	93%	20-150%
	13C8-PFOS	93%	20-150%
	13C8-FOSA	86%	20-150%
	d3-MeFOSA	53%	20-150%
	d5-EtFOSA	53%	20-150%
	d3-MeFOSAA	88%	20-150%
	d5-EtFOSAA	85%	20-150%
	d7-MeFOSE	66%	20-150%
	d9-EtFOSE	65%	20-150%
	13C2-4:2FTS	107%	20-180%
	13C2-6:2FTS	106%	20-180%
	13C2-8:2FTS	113%	20-180%
	13C3-HFPO-DA	95%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-BS	6Q26335.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9829-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.101	101	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0502	100	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0259	104	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0256	102	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0242	97	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0247	99	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0249	100	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0251	100	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0267	107	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0257	103	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0247	99	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0221	100	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0230	98	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0213	93	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0264	111	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0252	109	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0255	106	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0246	102	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0252	104	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.0953	102	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.103	108	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.0898	94	40-150
754-91-6	PFOSA	0.025	0.0254	102	40-150
31506-32-8	MeFOSA	0.05	0.0539	108	40-150
4151-50-2	EtFOSA	0.05	0.0541	108	40-150
2355-31-9	MeFOSAA	0.025	0.0270	108	40-150
2991-50-6	EtFOSAA	0.025	0.0273	109	40-150
24448-09-7	MeFOSE	0.125	0.128	102	40-150
1691-99-2	EtFOSE	0.125	0.131	105	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0528	106	40-150
919005-14-4	ADONA	0.0473	0.0493	104	40-150
377-73-1	PFMPA	0.05	0.0489	98	40-150
863090-89-5	PFMBA	0.05	0.0496	99	40-150
151772-58-6	NFDHA	0.05	0.0513	103	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0503	108	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0451	95	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-BS	6Q26335.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9829-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0450	101	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.110	88	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.631	101	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.680	109	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	95%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	105%	20-150%
	13C6-PFDA	111%	20-150%
	13C7-PFUnDA	110%	20-150%
	13C2-PFDoDA	98%	20-150%
	13C2-PFTeDA	94%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	109%	20-150%
	13C8-PFOS	91%	20-150%
	13C8-FOSA	92%	20-150%
	d3-MeFOSA	78%	20-150%
	d5-EtFOSA	75%	20-150%
	d3-MeFOSAA	98%	20-150%
	d5-EtFOSAA	91%	20-150%
	d7-MeFOSE	83%	20-150%
	d9-EtFOSE	85%	20-150%
	13C2-4:2FTS	108%	20-180%
	13C2-6:2FTS	102%	20-180%
	13C2-8:2FTS	106%	20-180%
	13C3-HFPO-DA	98%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-MS	6Q26339.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370
FC9829-1	6Q26338.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9829-1

CAS No.	Compound	FC9829-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	ND		0.122	0.120	98	40-150
2706-90-3	Perfluoropentanoic acid	ND		0.061	0.0566	93	40-150
307-24-4	Perfluorohexanoic acid	ND		0.0305	0.0293	96	40-150
375-85-9	Perfluoroheptanoic acid	ND		0.0305	0.0293	96	40-150
335-67-1	Perfluorooctanoic acid	ND		0.0305	0.0295	97	40-150
375-95-1	Perfluorononanoic acid	ND		0.0305	0.0293	96	40-150
335-76-2	Perfluorodecanoic acid	ND		0.0305	0.0297	97	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.0305	0.0305	100	40-150
307-55-1	Perfluorododecanoic acid	ND		0.0305	0.0357	117	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.0305	0.0311	102	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.0305	0.0348	114	40-150
375-73-5	Perfluorobutanesulfonic acid	ND		0.027	0.0273	101	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0287	0.0290	101	40-150
355-46-4	Perfluorohexanesulfonic acid	ND		0.0279	0.0268	96	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0291	0.0299	103	40-150
1763-23-1	Perfluorooctanesulfonic acid	ND		0.0283	0.0265	94	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.0293	0.0227	77	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.0294	0.0201	68	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0296	0.0170	57	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.114	0.110	96	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.116	0.120	104	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.117	0.105	90	40-150
754-91-6	PFOSA	ND		0.0305	0.0324	106	40-150
31506-32-8	MeFOSA	ND		0.061	0.0701	115	40-150
4151-50-2	EtFOSA	ND		0.061	0.0658	108	40-150
2355-31-9	MeFOSAA	ND		0.0305	0.0316	104	40-150
2991-50-6	EtFOSAA	ND		0.0305	0.0347	114	40-150
24448-09-7	MeFOSE	ND		0.152	0.161	106	40-150
1691-99-2	EtFOSE	ND		0.152	0.167	110	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.061	0.0593	97	40-150
919005-14-4	ADONA	ND		0.0576	0.0566	98	40-150
377-73-1	PFMPA	ND		0.061	0.0472	77	40-150
863090-89-5	PFMBA	ND		0.061	0.0574	94	40-150
151772-58-6	NFDHA	ND		0.061	0.0578	95	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.057	0.0523	92	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0576	0.0386	67	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-MS	6Q26339.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370
FC9829-1	6Q26338.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9829-1

CAS No.	Compound	FC9829-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	ND		0.0543	0.0516	95	40-150
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.152	0.316	207*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.762	0.759	100	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.762	0.770	101	40-150

CAS No.	ID Standard Recoveries	MS	FC9829-1	Limits
	13C4-PFBA	44%	51%	20-150%
	13C5-PFPeA	101%	99%	20-150%
	13C5-PFHxA	99%	101%	20-150%
	13C4-PFHpA	95%	97%	20-150%
	13C8-PFOA	99%	102%	20-150%
	13C9-PFNA	108%	105%	20-150%
	13C6-PFDA	98%	101%	20-150%
	13C7-PFUnDA	81%	82%	20-150%
	13C2-PFDoDA	59%	61%	20-150%
	13C2-PFTeDA	51%	53%	20-150%
	13C3-PFBS	101%	99%	20-150%
	13C3-PFHxS	103%	99%	20-150%
	13C8-PFOS	103%	96%	20-150%
	13C8-FOSA	92%	95%	20-150%
	d3-MeFOSA	66%	63%	20-150%
	d5-EtFOSA	64%	59%	20-150%
	d3-MeFOSAA	85%	80%	20-150%
	d5-EtFOSAA	74%	75%	20-150%
	d7-MeFOSE	62%	60%	20-150%
	d9-EtFOSE	60%	57%	20-150%
	13C2-4:2FTS	117%	110%	20-180%
	13C2-6:2FTS	108%	103%	20-180%
	13C2-8:2FTS	106%	93%	20-180%
	13C3-HFPO-DA	99%	96%	20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-DUP	6Q26341.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370
FC9830-1	6Q26340.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9829-1

CAS No.	Compound	FC9830-1 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	ND		ND		nc	30
2706-90-3	Perfluoropentanoic acid	ND		ND		nc	30
307-24-4	Perfluorohexanoic acid	ND		ND		nc	30
375-85-9	Perfluoroheptanoic acid	ND		ND		nc	30
335-67-1	Perfluorooctanoic acid	ND		ND		nc	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	ND		ND		nc	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC9829
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-DUP	6Q26341.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370
FC9830-1	6Q26340.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9829-1

CAS No.	Compound	FC9830-1 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC9830-1	Limits
	13C4-PFBA	42%	35%	20-150%
	13C5-PFPeA	98%	94%	20-150%
	13C5-PFHxA	101%	98%	20-150%
	13C4-PFHpA	99%	99%	20-150%
	13C8-PFOA	103%	97%	20-150%
	13C9-PFNA	96%	95%	20-150%
	13C6-PFDA	105%	96%	20-150%
	13C7-PFUnDA	92%	97%	20-150%
	13C2-PFDoDA	75%	81%	20-150%
	13C2-PFTeDA	69%	73%	20-150%
	13C3-PFBS	97%	105%	20-150%
	13C3-PFHxS	102%	95%	20-150%
	13C8-PFOS	99%	88%	20-150%
	13C8-FOSA	87%	87%	20-150%
	d3-MeFOSA	58%	74%	20-150%
	d5-EtFOSA	57%	75%	20-150%
	d3-MeFOSAA	97%	98%	20-150%
	d5-EtFOSAA	90%	84%	20-150%
	d7-MeFOSE	59%	75%	20-150%
	d9-EtFOSE	62%	77%	20-150%
	13C2-4:2FTS	110%	121%	20-180%
	13C2-6:2FTS	97%	101%	20-180%
	13C2-8:2FTS	101%	102%	20-180%
	13C3-HFPO-DA	98%	100%	20-150%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC10065

Sampling Date: 09/27/23



Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
ssuggs@nd.gov

ATTN: Shannon Suggs

Total number of pages in report: **43**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC10065

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FC10065-1	09/27/23	13:50	EJ	10/02/23	AQ	Surface Water	CRYSTAL SPRINGS PUBLIC BOAT RAMP

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

Summary of Hits

Job Number: FC10065
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 09/27/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC10065-1	**CRYSTAL SPRINGS PUBLIC BOAT RAMP**					
Perfluoroheptanoic acid		0.69 J	2.0	0.49	ng/l	EPA DRAFT 1633

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	CRYSTAL SPRINGS PUBLIC BOAT RAMP		
Lab Sample ID:	FC10065-1	**Date Sampled:**	09/27/23
Matrix:	AQ - Surface Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q26308.D	1	10/12/23 22:29	MV	10/07/23 08:10	OP99405	S6Q370
Run #2							

	Initial Volume	Final Volume
Run #1	510 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.8	3.9	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.9	0.98	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.49	ng/l	
375-85-9	Perfluoroheptanoic acid	0.69	2.0	0.49	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.0	0.49	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.60	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.49	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.59	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.59	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.82	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.49	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	0.98	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	0.98	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	0.98	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	0.98	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	0.98	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	0.98	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.8	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	0.98	ng/l	
31506-32-8	MeFOSA	ND	2.0	0.98	ng/l	
4151-50-2	EtFOSA	ND	2.0	0.98	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CRYSTAL SPRINGS PUBLIC BOAT RAMP		
Lab Sample ID:	FC10065-1	**Date Sampled:**	09/27/23
Matrix:	AQ - Surface Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	0.98	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	9.8	ng/l	
1691-99-2	EtFOSE	ND	20	9.8	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.8	2.0	ng/l	
919005-14-4	ADONA	ND	7.8	2.0	ng/l	
377-73-1	PFMPA	ND	3.9	0.98	ng/l	
863090-89-5	PFMBA	ND	3.9	1.1	ng/l	
151772-58-6	NFDHA	ND	3.9	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.8	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.8	2.0	ng/l	
113507-82-7	PFEESA	ND	3.9	0.98	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.8	4.9	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	49	9.8	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	49	9.8	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	23%		20-150%
	13C5-PFPeA	90%		20-150%
	13C5-PFHxA	100%		20-150%
	13C4-PFHpA	97%		20-150%
	13C8-PFOA	103%		20-150%
	13C9-PFNA	111%		20-150%
	13C6-PFDA	93%		20-150%
	13C7-PFUnDA	95%		20-150%
	13C2-PFDoDA	75%		20-150%
	13C2-PFTeDA	49%		20-150%
	13C3-PFBS	97%		20-150%
	13C3-PFHxS	95%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CRYSTAL SPRINGS PUBLIC BOAT RAMP		
Lab Sample ID:	FC10065-1	**Date Sampled:**	09/27/23
Matrix:	AQ - Surface Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	111%		20-150%
	13C8-FOSA	88%		20-150%
	d3-MeFOSA	81%		20-150%
	d5-EtFOSA	83%		20-150%
	d3-MeFOSAA	98%		20-150%
	d5-EtFOSAA	93%		20-150%
	d7-MeFOSE	74%		20-150%
	d9-EtFOSE	70%		20-150%
	13C2-4:2FTS	105%		20-180%
	13C2-6:2FTS	92%		20-180%
	13C2-8:2FTS	106%		20-180%
	13C3-HFPO-DA	96%		20-150%

(a) Associated BS outside control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FC10065

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: NDDEQ PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58503
Project Contact: S Suggs Email: SSuggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed)
Sampler 1: Sampler 2:

Project Information

Project Name: NDDEQ PFAS
Street
City State
Project #
Fax #
Client Purchase Order #

Analytical Information

ICID 1633 LIST 40

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	ICID 1633 LIST 40	LAB USE ONLY
1	Crystal Springs Public Boat Ramp	9/27/23	1350	EJ	Sw	3										X	

INITIAL ASSESSMENT

LABEL VERIFICATION

11.2
IR#1

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- ☐ COMMERCIAL "A" (RESULTS ONLY)
- ☐ COMMERCIAL "B" (RESULTS PLUS QC)
- ☐ REDT1 (EPA LEVEL 3)
- ☐ FULLT1 (EPA LEVEL 4)
- ☐ EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery. 0922

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 S Suggs		2 Fed Ex	3 Fed Ex	10/2/23	4 [signature] Delgado
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

4.1
4

FC10065: Chain of Custody
Page 1 of 3

SGS Sample Receipt Summary

Job Number: fc10065 **Client:** NDDEQ PFAS **Project:** NDDEQ PFAS

Date / Time Received: 10/2/2023 9:22:00 AM **Delivery Method:** FEDEX **Airbill #'s:** 7843 8352 3593

Cooler Temps (Raw Measured) °C: Cooler 1: (11.2);

Cooler Temps (Corrected) °C: Cooler 1: (11.6);

Cooler Information	Y	or	N
1. Custody Seals Present:	☑		☐
2. Custody Seals Intact:	☑		☐
3. Temp criteria achieved:	☑		☐
4. Cooler temp verification:			IR Gun
5. Cooler media:			Other

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑

3. Type of TB Received	W	or	S	N/A
	☐		☐	☐

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles:	☑		☐	
2. Samples presented properly	☑		☐	
3. Suffiient volume/containers recv'd for analysis	☑		☐	
4. Condition of sample:	Intact			
5. Sample recv'd within HT	☑		☐	
6. Dates/Times/IDs on COC match sample label	☐		☐	
7. VOCs have headspace	☐		☐	☐
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☐
11. % Solids Jar Received?	☐		☐	☐
12. Residual Chlorine Present?	☐		☐	☐

Misc Information

Number of Encores: 25 Gram 5 Gram Number of Lab Filtered Metals:

Test Strip Lot #s: pH 0-3: _____ pH 10-12: _____ Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot # _____

Comments RECEIVED AT 11.2C DUE TO MELTED ICE

SM089-03
Rev. Date 12/7/17

Andrea Colby 10/2/23

Please analyze the samples per Shannon Suggs.

FC10065: Chain of Custody
Page 3 of 3

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-MB	6Q26027.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-MB	6Q26027.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	106%	20-150%
	13C5-PFHxA	105%	20-150%
	13C4-PFHpA	104%	20-150%
	13C8-PFOA	105%	20-150%
	13C9-PFNA	110%	20-150%
	13C6-PFDA	111%	20-150%
	13C7-PFUnDA	99%	20-150%
	13C2-PFDoDA	91%	20-150%
	13C2-PFTeDA	82%	20-150%
	13C3-PFBS	108%	20-150%
	13C3-PFHxS	107%	20-150%
	13C8-PFOS	104%	20-150%
	13C8-FOSA	76%	20-150%
	d3-MeFOSA	70%	20-150%
	d5-EtFOSA	71%	20-150%
	d3-MeFOSAA	89%	20-150%
	d5-EtFOSAA	87%	20-150%
	d7-MeFOSE	76%	20-150%
	d9-EtFOSE	81%	20-150%
	13C2-4:2FTS	123%	20-180%
	13C2-6:2FTS	111%	20-180%
	13C2-8:2FTS	115%	20-180%
	13C3-HFPO-DA	105%	20-150%

Method Blank Summary

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-MB	6Q26301.D	1	10/12/23	MV	10/07/23	OP99405	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-MB	6Q26301.D	1	10/12/23	MV	10/07/23	OP99405	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	98%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	105%	20-150%
	13C4-PFHpA	97%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	99%	20-150%
	13C7-PFUnDA	91%	20-150%
	13C2-PFDoDA	85%	20-150%
	13C2-PFTeDA	75%	20-150%
	13C3-PFBS	94%	20-150%
	13C3-PFHxS	95%	20-150%
	13C8-PFOS	93%	20-150%
	13C8-FOSA	71%	20-150%
	d3-MeFOSA	63%	20-150%
	d5-EtFOSA	64%	20-150%
	d3-MeFOSAA	84%	20-150%
	d5-EtFOSAA	85%	20-150%
	d7-MeFOSE	70%	20-150%
	d9-EtFOSE	74%	20-150%
	13C2-4:2FTS	114%	20-180%
	13C2-6:2FTS	105%	20-180%
	13C2-8:2FTS	100%	20-180%
	13C3-HFPO-DA	99%	20-150%

Instrument Blank

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-IBLK	6Q26258.D	1	10/12/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-IBLK	6Q26258.D	1	10/12/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	99%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	107%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	107%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSAA	95%	20-150%
	d5-EtFOSAA	97%	20-150%
	13C2-4:2FTS	125%	20-180%
	13C2-6:2FTS	110%	20-180%
	13C2-8:2FTS	116%	20-180%

Instrument Blank

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-IBLK	6Q26350.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-IBLK	6Q26350.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	98%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	107%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	103%	20-150%
	13C6-PFDA	100%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	99%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	105%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	100%	20-150%
	13C2-4:2FTS	120%	20-180%
	13C2-6:2FTS	114%	20-180%
	13C2-8:2FTS	105%	20-180%

Continuing Calibration Blank

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-ICCB	6Q26298.D	1	10/12/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-ICCB	6Q26298.D	1	10/12/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	99%	20-150%
	13C5-PFPeA	98%	20-150%
	13C5-PFHxA	95%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	104%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	101%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	96%	20-150%
	13C2-PFTeDA	97%	20-150%
	13C3-PFBS	103%	20-150%
	13C3-PFHxS	106%	20-150%
	13C8-PFOS	102%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSAA	100%	20-150%
	d5-EtFOSAA	101%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	107%	20-180%
	13C2-8:2FTS	109%	20-180%

Instrument Blank

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q367-IBLK	6Q25948.D	1	10/08/23	MV	n/a	n/a	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP99405-BS, OP99405-LLBS, OP99405-DUP, OP99405-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q367-IBLK	6Q25948.D	1	10/08/23	MV	n/a	n/a	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP99405-BS, OP99405-LLBS, OP99405-DUP, OP99405-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	99%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	97%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	98%	20-150%
	13C7-PFUnDA	99%	20-150%
	13C2-PFDoDA	93%	20-150%
	13C2-PFTeDA	100%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	97%	20-150%
	13C8-FOSA	98%	20-150%
	d3-MeFOSA	99%	20-150%
	d5-EtFOSA	96%	20-150%
	d3-MeFOSAA	100%	20-150%
	d5-EtFOSAA	103%	20-150%
	d7-MeFOSE	99%	20-150%
	d9-EtFOSE	99%	20-150%
	13C2-4:2FTS	102%	20-180%
	13C2-6:2FTS	103%	20-180%
	13C2-8:2FTS	99%	20-180%
	13C3-HFPO-DA	97%	20-150%

Instrument Blank

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q367-IBLK	6Q26048.D	1	10/09/23	MV	n/a	n/a	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP99405-BS, OP99405-LLBS, OP99405-DUP, OP99405-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q367-IBLK	6Q26048.D	1	10/09/23	MV	n/a	n/a	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP99405-BS, OP99405-LLBS, OP99405-DUP, OP99405-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	99%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	101%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	107%	20-150%
	13C6-PFDA	109%	20-150%
	13C7-PFUnDA	106%	20-150%
	13C2-PFDoDA	98%	20-150%
	13C2-PFTeDA	106%	20-150%
	13C3-PFBS	103%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	101%	20-150%
	d3-MeFOSA	95%	20-150%
	d5-EtFOSA	99%	20-150%
	d3-MeFOSAA	101%	20-150%
	d5-EtFOSAA	100%	20-150%
	d7-MeFOSE	97%	20-150%
	d9-EtFOSE	96%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	104%	20-180%
	13C2-8:2FTS	106%	20-180%
	13C3-HFPO-DA	103%	20-150%

Continuing Calibration Blank

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q367-ICCB	6Q26023.D	1	10/09/23	MV	n/a	n/a	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP99405-BS, OP99405-LLBS, OP99405-DUP, OP99405-MB, OP99405-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q367-ICCB	6Q26023.D	1	10/09/23	MV	n/a	n/a	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP99405-BS, OP99405-LLBS, OP99405-DUP, OP99405-MB, OP99405-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	99%	20-150%
	13C5-PFPeA	98%	20-150%
	13C5-PFHxA	94%	20-150%
	13C4-PFHpA	95%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	94%	20-150%
	13C6-PFDA	101%	20-150%
	13C7-PFUnDA	99%	20-150%
	13C2-PFDoDA	95%	20-150%
	13C2-PFTeDA	96%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	95%	20-150%
	13C8-FOSA	97%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	99%	20-150%
	13C2-4:2FTS	105%	20-180%
	13C2-6:2FTS	104%	20-180%
	13C2-8:2FTS	97%	20-180%

Continuing Calibration Blank

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-ICCB	6Q26346.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q370-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-ICCB	6Q26346.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q370-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	98%	20-150%
	13C5-PFPeA	97%	20-150%
	13C5-PFHxA	94%	20-150%
	13C4-PFHpA	96%	20-150%
	13C8-PFOA	106%	20-150%
	13C9-PFNA	102%	20-150%
	13C6-PFDA	107%	20-150%
	13C7-PFUnDA	102%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	105%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	96%	20-150%
	13C2-4:2FTS	113%	20-180%
	13C2-6:2FTS	112%	20-180%
	13C2-8:2FTS	109%	20-180%

Blank Spike Summary

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-LLBS	6Q26026.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0148	93	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0075	94	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0037	93	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0037	93	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0033	83	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0038	95	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0037	93	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0033	83	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0039	98	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0037	93	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0042	105	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0033	93	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0037	98	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0032	88	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0036	94	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0035	94	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0036	94	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0036	93	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0037	95	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0144	96	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0166	109	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0147	96	40-150
754-91-6	PFOSA	0.004	0.0038	95	40-150
31506-32-8	MeFOSA	0.008	0.0078	98	40-150
4151-50-2	EtFOSA	0.008	0.0075	94	40-150
2355-31-9	MeFOSAA	0.004	0.0039	98	40-150
2991-50-6	EtFOSAA	0.004	0.0033	83	40-150
24448-09-7	MeFOSE	0.02	0.0179	90	40-150
1691-99-2	EtFOSE	0.02	0.0189	95	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0076	95	40-150
919005-14-4	ADONA	0.00756	0.0073	97	40-150
377-73-1	PFMPA	0.008	0.0076	95	40-150
863090-89-5	PFMBA	0.008	0.0076	95	40-150
151772-58-6	NFDHA	0.008	0.0075	94	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0071	95	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0075	99	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-LLBS	6Q26026.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0065	91	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0162	81	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.0952	95	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.0917	92	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	105%	20-150%
	13C5-PFPeA	107%	20-150%
	13C5-PFHxA	108%	20-150%
	13C4-PFHpA	107%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	108%	20-150%
	13C6-PFDA	111%	20-150%
	13C7-PFUnDA	111%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	84%	20-150%
	13C3-PFBS	116%	20-150%
	13C3-PFHxS	115%	20-150%
	13C8-PFOS	112%	20-150%
	13C8-FOSA	86%	20-150%
	d3-MeFOSA	75%	20-150%
	d5-EtFOSA	79%	20-150%
	d3-MeFOSAA	107%	20-150%
	d5-EtFOSAA	107%	20-150%
	d7-MeFOSE	83%	20-150%
	d9-EtFOSE	81%	20-150%
	13C2-4:2FTS	130%	20-180%
	13C2-6:2FTS	107%	20-180%
	13C2-8:2FTS	115%	20-180%
	13C3-HFPO-DA	105%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-LLBS	6Q26300.D	1	10/12/23	MV	10/07/23	OP99405	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0150	94	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0072	90	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0039	98	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0035	88	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0035	88	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0039	98	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0039	98	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0037	93	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0039	98	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0035	88	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0039	98	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0035	99	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0036	96	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0035	96	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0035	92	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0036	97	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0036	94	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0031	80	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0028	72	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0137	91	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0156	103	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0150	98	40-150
754-91-6	PFOSA	0.004	0.0035	88	40-150
31506-32-8	MeFOSA	0.008	0.0074	93	40-150
4151-50-2	EtFOSA	0.008	0.0079	99	40-150
2355-31-9	MeFOSAA	0.004	0.0038	95	40-150
2991-50-6	EtFOSAA	0.004	0.0033	83	40-150
24448-09-7	MeFOSE	0.02	0.0184	92	40-150
1691-99-2	EtFOSE	0.02	0.0177	89	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0078	98	40-150
919005-14-4	ADONA	0.00756	0.0071	94	40-150
377-73-1	PFMPA	0.008	0.0073	91	40-150
863090-89-5	PFMBA	0.008	0.0072	90	40-150
151772-58-6	NFDHA	0.008	0.0076	95	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0066	88	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0063	83	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-LLBS	6Q26300.D	1	10/12/23	MV	10/07/23	OP99405	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0066	93	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0158	79	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.0869	87	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.0929	93	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	107%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	100%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	87%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	106%	20-150%
	13C8-FOSA	82%	20-150%
	d3-MeFOSA	69%	20-150%
	d5-EtFOSA	71%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	100%	20-150%
	d7-MeFOSE	76%	20-150%
	d9-EtFOSE	78%	20-150%
	13C2-4:2FTS	117%	20-180%
	13C2-6:2FTS	100%	20-180%
	13C2-8:2FTS	101%	20-180%
	13C3-HFPO-DA	106%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-BS	6Q26025.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.0931	93	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0469	94	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0239	96	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0249	100	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0226	90	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0231	92	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0234	94	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0246	98	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0234	94	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0237	95	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0229	92	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0206	93	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0217	92	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0210	92	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0220	92	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0216	93	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0224	93	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0224	93	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0211	87	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.0917	98	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.0960	101	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.0836	87	40-150
754-91-6	PFOSA	0.025	0.0241	96	40-150
31506-32-8	MeFOSA	0.05	0.0486	97	40-150
4151-50-2	EtFOSA	0.05	0.0473	95	40-150
2355-31-9	MeFOSAA	0.025	0.0242	97	40-150
2991-50-6	EtFOSAA	0.025	0.0222	89	40-150
24448-09-7	MeFOSE	0.125	0.118	94	40-150
1691-99-2	EtFOSE	0.125	0.119	95	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0472	94	40-150
919005-14-4	ADONA	0.0473	0.0460	97	40-150
377-73-1	PFMPA	0.05	0.0308	62	40-150
863090-89-5	PFMBA	0.05	0.0486	97	40-150
151772-58-6	NFDHA	0.05	0.0496	99	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0432	92	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0433	92	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-BS	6Q26025.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0418	94	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.191	153*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.626	100	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.627	100	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	37%	20-150%
	13C5-PFPeA	108%	20-150%
	13C5-PFHxA	108%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	111%	20-150%
	13C9-PFNA	113%	20-150%
	13C6-PFDA	109%	20-150%
	13C7-PFUnDA	104%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	97%	20-150%
	13C3-PFBS	124%	20-150%
	13C3-PFHxS	123%	20-150%
	13C8-PFOS	103%	20-150%
	13C8-FOSA	89%	20-150%
	d3-MeFOSA	84%	20-150%
	d5-EtFOSA	85%	20-150%
	d3-MeFOSAA	102%	20-150%
	d5-EtFOSAA	97%	20-150%
	d7-MeFOSE	76%	20-150%
	d9-EtFOSE	78%	20-150%
	13C2-4:2FTS	138%	20-180%
	13C2-6:2FTS	125%	20-180%
	13C2-8:2FTS	130%	20-180%
	13C3-HFPO-DA	110%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-BS	6Q26299.D	1	10/12/23	MV	10/07/23	OP99405	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.0935	94	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0455	91	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0227	91	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0232	93	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0231	92	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0221	88	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0234	94	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0225	90	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0223	89	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0232	93	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0225	90	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0215	97	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0231	98	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0207	91	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0229	96	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0215	93	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0217	90	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0211	87	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0221	91	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.0908	97	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.0976	103	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.0840	88	40-150
754-91-6	PFOSA	0.025	0.0241	96	40-150
31506-32-8	MeFOSA	0.05	0.0535	107	40-150
4151-50-2	EtFOSA	0.05	0.0469	94	40-150
2355-31-9	MeFOSAA	0.025	0.0237	95	40-150
2991-50-6	EtFOSAA	0.025	0.0253	101	40-150
24448-09-7	MeFOSE	0.125	0.111	89	40-150
1691-99-2	EtFOSE	0.125	0.116	93	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0493	99	40-150
919005-14-4	ADONA	0.0473	0.0436	92	40-150
377-73-1	PFMPA	0.05	0.0292	58	40-150
863090-89-5	PFMBA	0.05	0.0469	94	40-150
151772-58-6	NFDHA	0.05	0.0481	96	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0456	98	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0410	87	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-BS	6Q26299.D	1	10/12/23	MV	10/07/23	OP99405	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0400	90	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.189	151*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.546	87	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.555	89	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	35%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	106%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	106%	20-150%
	13C9-PFNA	109%	20-150%
	13C6-PFDA	109%	20-150%
	13C7-PFUnDA	106%	20-150%
	13C2-PFDoDA	106%	20-150%
	13C2-PFTeDA	95%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	103%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	83%	20-150%
	d3-MeFOSA	76%	20-150%
	d5-EtFOSA	81%	20-150%
	d3-MeFOSAA	105%	20-150%
	d5-EtFOSAA	97%	20-150%
	d7-MeFOSE	78%	20-150%
	d9-EtFOSE	78%	20-150%
	13C2-4:2FTS	117%	20-180%
	13C2-6:2FTS	107%	20-180%
	13C2-8:2FTS	103%	20-180%
	13C3-HFPO-DA	100%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-MS	6Q26029.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367
FC10063-2	6Q26028.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	FC10063-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	ND		0.098	0.0980	100	40-150
2706-90-3	Perfluoropentanoic acid	ND		0.049	0.0468	95	40-150
307-24-4	Perfluorohexanoic acid	ND		0.0245	0.0243	99	40-150
375-85-9	Perfluoroheptanoic acid	ND		0.0245	0.0241	98	40-150
335-67-1	Perfluorooctanoic acid	ND		0.0245	0.0229	93	40-150
375-95-1	Perfluorononanoic acid	ND		0.0245	0.0227	93	40-150
335-76-2	Perfluorodecanoic acid	ND		0.0245	0.0224	91	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.0245	0.0248	101	40-150
307-55-1	Perfluorododecanoic acid	ND		0.0245	0.0247	101	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.0245	0.0235	96	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.0245	0.0261	106	40-150
375-73-5	Perfluorobutanesulfonic acid	ND		0.0217	0.0220	101	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0231	0.0235	102	40-150
355-46-4	Perfluorohexanesulfonic acid	ND		0.0224	0.0223	100	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0234	0.0233	100	40-150
1763-23-1	Perfluorooctanesulfonic acid	ND		0.0227	0.0236	104	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.0236	0.0206	87	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.0237	0.0191	81	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0238	0.0187	79	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0919	0.0926	101	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.0931	0.106	114	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.0941	0.0972	103	40-150
754-91-6	PFOSA	ND		0.0245	0.0252	103	40-150
31506-32-8	MeFOSA	ND		0.049	0.0519	106	40-150
4151-50-2	EtFOSA	ND		0.049	0.0496	101	40-150
2355-31-9	MeFOSAA	ND		0.0245	0.0243	99	40-150
2991-50-6	EtFOSAA	ND		0.0245	0.0240	98	40-150
24448-09-7	MeFOSE	ND		0.123	0.119	97	40-150
1691-99-2	EtFOSE	ND		0.123	0.128	104	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.049	0.0486	99	40-150
919005-14-4	ADONA	ND		0.0463	0.0462	100	40-150
377-73-1	PFMPA	ND		0.049	0.0426	87	40-150
863090-89-5	PFMBA	ND		0.049	0.0478	98	40-150
151772-58-6	NFDHA	ND		0.049	0.0532	109	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0458	0.0418	91	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0463	0.0358	77	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-MS	6Q26029.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367
FC10063-2	6Q26028.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	FC10063-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	ND		0.0436	0.0441	101	40-150
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.123	0.138	113	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.613	0.595	97	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.613	0.615	100	40-150

CAS No.	ID Standard Recoveries	MS	FC10063-2	Limits
	13C4-PFBA	58%	76%	20-150%
	13C5-PFPeA	105%	102%	20-150%
	13C5-PFHxA	102%	98%	20-150%
	13C4-PFHpA	104%	99%	20-150%
	13C8-PFOA	105%	105%	20-150%
	13C9-PFNA	103%	103%	20-150%
	13C6-PFDA	103%	100%	20-150%
	13C7-PFUnDA	91%	83%	20-150%
	13C2-PFDoDA	83%	81%	20-150%
	13C2-PFTeDA	71%	68%	20-150%
	13C3-PFBS	107%	106%	20-150%
	13C3-PFHxS	106%	102%	20-150%
	13C8-PFOS	98%	91%	20-150%
	13C8-FOSA	74%	76%	20-150%
	d3-MeFOSA	73%	70%	20-150%
	d5-EtFOSA	75%	64%	20-150%
	d3-MeFOSAA	93%	85%	20-150%
	d5-EtFOSAA	85%	80%	20-150%
	d7-MeFOSE	72%	64%	20-150%
	d9-EtFOSE	71%	66%	20-150%
	13C2-4:2FTS	115%	114%	20-180%
	13C2-6:2FTS	99%	104%	20-180%
	13C2-8:2FTS	102%	97%	20-180%
	13C3-HFPO-DA	107%	96%	20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-DUP	6Q26031.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367
FC10063-3	6Q26030.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	FC10063-3 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	ND		ND		nc	30
2706-90-3	Perfluoropentanoic acid	ND		ND		nc	30
307-24-4	Perfluorohexanoic acid	ND		ND		nc	30
375-85-9	Perfluoroheptanoic acid	ND		ND		nc	30
335-67-1	Perfluorooctanoic acid	ND		ND		nc	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	ND		ND		nc	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC10065
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-DUP	6Q26031.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367
FC10063-3	6Q26030.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10065-1

CAS No.	Compound	FC10063-3 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC10063-3	Limits
	13C4-PFBA	68%	67%	20-150%
	13C5-PFPeA	107%	104%	20-150%
	13C5-PFHxA	109%	107%	20-150%
	13C4-PFHpA	103%	106%	20-150%
	13C8-PFOA	110%	111%	20-150%
	13C9-PFNA	107%	99%	20-150%
	13C6-PFDA	105%	100%	20-150%
	13C7-PFUnDA	102%	96%	20-150%
	13C2-PFDoDA	91%	86%	20-150%
	13C2-PFTeDA	83%	86%	20-150%
	13C3-PFBS	107%	106%	20-150%
	13C3-PFHxS	98%	111%	20-150%
	13C8-PFOS	97%	100%	20-150%
	13C8-FOSA	75%	77%	20-150%
	d3-MeFOSA	75%	76%	20-150%
	d5-EtFOSA	70%	81%	20-150%
	d3-MeFOSAA	93%	100%	20-150%
	d5-EtFOSAA	86%	90%	20-150%
	d7-MeFOSE	70%	75%	20-150%
	d9-EtFOSE	69%	79%	20-150%
	13C2-4:2FTS	111%	110%	20-180%
	13C2-6:2FTS	102%	103%	20-180%
	13C2-8:2FTS	107%	105%	20-180%
	13C3-HFPO-DA	105%	101%	20-150%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

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Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC10063

Sampling Date: 09/28/23



Report to:

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Bismark, ND 58503
ssuggs@nd.gov

ATTN: Shannon Suggs

Total number of pages in report: **60**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC10063

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FC10063-1	09/28/23	09:10	SS	10/02/23	AQ	Field Blank Water	14508811ABA2-FB
FC10063-2	09/28/23	10:02	SS	10/02/23	AQ	Ground Water	14508811ABA2
FC10063-3	09/28/23	10:07	SS	10/02/23	AQ	Ground Water	14508811ABA2-D
FC10063-4	09/28/23	10:40	SS	10/02/23	AQ	Field Blank Water	14608827CCD3-FB
FC10063-5	09/28/23	11:34	SS	10/02/23	AQ	Ground Water	14608827CCD3
FC10063-6	09/28/23	11:39	SS	10/02/23	AQ	Ground Water	14608827CCD3-D

Summary of Hits

Job Number: FC10063
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 09/28/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC10063-1	**14508811ABA2-FB**					
No hits reported in this sample.						
FC10063-2	**14508811ABA2**					
No hits reported in this sample.						
FC10063-3	**14508811ABA2-D**					
No hits reported in this sample.						
FC10063-4	**14608827CCD3-FB**					
No hits reported in this sample.						
FC10063-5	**14608827CCD3**					
Perfluorohexanoic acid		0.66 J	1.9	0.46	ng/l	EPA DRAFT 1633
6:2 Fluorotelomer sulfonate		10.9	7.4	3.7	ng/l	EPA DRAFT 1633
FC10063-6	**14608827CCD3-D**					
Perfluoropentanoic acid		2.3 J	3.9	0.98	ng/l	EPA DRAFT 1633
6:2 Fluorotelomer sulfonate		10.8	7.8	3.9	ng/l	EPA DRAFT 1633

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	14508811ABA2-FB		
Lab Sample ID:	FC10063-1	**Date Sampled:**	09/28/23
Matrix:	AQ - Field Blank Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q26304.D	1	10/12/23 21:31	MV	10/07/23 08:10	OP99405	S6Q370
Run #2							

	Initial Volume	Final Volume
Run #1	550 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.3	3.6	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.6	0.91	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.8	0.45	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.8	0.45	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.8	0.45	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.8	0.55	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.8	0.45	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.8	0.55	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.8	0.55	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.8	0.76	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.8	0.45	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.8	0.91	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.8	1.0	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.8	0.91	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.8	0.91	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.8	0.91	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.8	0.91	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.8	0.91	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.8	1.0	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.3	3.6	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.3	3.6	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.3	3.7	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.8	0.91	ng/l	
31506-32-8	MeFOSA	ND	1.8	0.91	ng/l	
4151-50-2	EtFOSA	ND	1.8	0.91	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	14508811ABA2-FB		
Lab Sample ID:	FC10063-1	**Date Sampled:**	09/28/23
Matrix:	AQ - Field Blank Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.8	0.91	ng/l	
2991-50-6	EtFOSAA	ND	1.8	1.2	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	18	9.1	ng/l	
1691-99-2	EtFOSE	ND	18	9.1	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.3	1.8	ng/l	
919005-14-4	ADONA	ND	7.3	1.8	ng/l	
377-73-1	PFMPA	ND	3.6	0.91	ng/l	
863090-89-5	PFMBA	ND	3.6	1.0	ng/l	
151772-58-6	NFDHA	ND	3.6	1.1	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.3	1.8	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.3	1.8	ng/l	
113507-82-7	PFEESA	ND	3.6	0.91	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.1	4.5	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	45	9.1	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	45	9.1	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	99%		20-150%
	13C5-PFPeA	102%		20-150%
	13C5-PFHxA	104%		20-150%
	13C4-PFHpA	102%		20-150%
	13C8-PFOA	98%		20-150%
	13C9-PFNA	89%		20-150%
	13C6-PFDA	93%		20-150%
	13C7-PFUnDA	88%		20-150%
	13C2-PFDoDA	84%		20-150%
	13C2-PFTeDA	81%		20-150%
	13C3-PFBS	102%		20-150%
	13C3-PFHxS	94%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	14508811ABA2-FB		
Lab Sample ID:	FC10063-1	**Date Sampled:**	09/28/23
Matrix:	AQ - Field Blank Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	80%		20-150%
	13C8-FOSA	71%		20-150%
	d3-MeFOSA	69%		20-150%
	d5-EtFOSA	75%		20-150%
	d3-MeFOSAA	89%		20-150%
	d5-EtFOSAA	83%		20-150%
	d7-MeFOSE	74%		20-150%
	d9-EtFOSE	73%		20-150%
	13C2-4:2FTS	126%		20-180%
	13C2-6:2FTS	110%		20-180%
	13C2-8:2FTS	97%		20-180%
	13C3-HFPO-DA	100%		20-150%

(a) Associated BS outside control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	14508811ABA2		
Lab Sample ID:	FC10063-2	**Date Sampled:**	09/28/23
Matrix:	AQ - Ground Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q26028.D	1	10/09/23 10:35	MV	10/07/23 08:10	OP99405	S6Q367
Run #2							

	Initial Volume	Final Volume
Run #1	550 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.3	3.6	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.6	0.91	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.8	0.45	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.8	0.45	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.8	0.45	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.8	0.55	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.8	0.45	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.8	0.55	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.8	0.55	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.8	0.76	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.8	0.45	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.8	0.91	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.8	1.0	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.8	0.91	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.8	0.91	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.8	0.91	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.8	0.91	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.8	0.91	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.8	1.0	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.3	3.6	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.3	3.6	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.3	3.7	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.8	0.91	ng/l	
31506-32-8	MeFOSA	ND	1.8	0.91	ng/l	
4151-50-2	EtFOSA	ND	1.8	0.91	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	14508811ABA2		
Lab Sample ID:	FC10063-2	**Date Sampled:**	09/28/23
Matrix:	AQ - Ground Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.8	0.91	ng/l	
2991-50-6	EtFOSAA	ND	1.8	1.2	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	18	9.1	ng/l	
1691-99-2	EtFOSE	ND	18	9.1	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.3	1.8	ng/l	
919005-14-4	ADONA	ND	7.3	1.8	ng/l	
377-73-1	PFMPA	ND	3.6	0.91	ng/l	
863090-89-5	PFMBA	ND	3.6	1.0	ng/l	
151772-58-6	NFDHA	ND	3.6	1.1	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.3	1.8	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.3	1.8	ng/l	
113507-82-7	PFEESA	ND	3.6	0.91	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.1	4.5	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	45	9.1	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	45	9.1	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	76%		20-150%
	13C5-PFPeA	102%		20-150%
	13C5-PFHxA	98%		20-150%
	13C4-PFHpA	99%		20-150%
	13C8-PFOA	105%		20-150%
	13C9-PFNA	103%		20-150%
	13C6-PFDA	100%		20-150%
	13C7-PFUnDA	83%		20-150%
	13C2-PFDoDA	81%		20-150%
	13C2-PFTeDA	68%		20-150%
	13C3-PFBS	106%		20-150%
	13C3-PFHxS	102%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	14508811ABA2		
Lab Sample ID:	FC10063-2	**Date Sampled:**	09/28/23
Matrix:	AQ - Ground Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		20-150%
	13C8-FOSA	76%		20-150%
	d3-MeFOSA	70%		20-150%
	d5-EtFOSA	64%		20-150%
	d3-MeFOSAA	85%		20-150%
	d5-EtFOSAA	80%		20-150%
	d7-MeFOSE	64%		20-150%
	d9-EtFOSE	66%		20-150%
	13C2-4:2FTS	114%		20-180%
	13C2-6:2FTS	104%		20-180%
	13C2-8:2FTS	97%		20-180%
	13C3-HFPO-DA	96%		20-150%

(a) Associated BS outside control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	14508811ABA2-D		
Lab Sample ID:	FC10063-3	**Date Sampled:**	09/28/23
Matrix:	AQ - Ground Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q26030.D	1	10/09/23 11:04	MV	10/07/23 08:10	OP99405	S6Q367
Run #2							

	Initial Volume	Final Volume
Run #1	550 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.3	3.6	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.6	0.91	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.8	0.45	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.8	0.45	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.8	0.45	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.8	0.55	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.8	0.45	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.8	0.55	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.8	0.55	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.8	0.76	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.8	0.45	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.8	0.91	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.8	1.0	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.8	0.91	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.8	0.91	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.8	0.91	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.8	0.91	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.8	0.91	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.8	1.0	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.3	3.6	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.3	3.6	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.3	3.7	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.8	0.91	ng/l	
31506-32-8	MeFOSA	ND	1.8	0.91	ng/l	
4151-50-2	EtFOSA	ND	1.8	0.91	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	14508811ABA2-D		
Lab Sample ID:	FC10063-3	**Date Sampled:**	09/28/23
Matrix:	AQ - Ground Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.8	0.91	ng/l	
2991-50-6	EtFOSAA	ND	1.8	1.2	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	18	9.1	ng/l	
1691-99-2	EtFOSE	ND	18	9.1	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.3	1.8	ng/l	
919005-14-4	ADONA	ND	7.3	1.8	ng/l	
377-73-1	PFMPA	ND	3.6	0.91	ng/l	
863090-89-5	PFMBA	ND	3.6	1.0	ng/l	
151772-58-6	NFDHA	ND	3.6	1.1	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.3	1.8	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.3	1.8	ng/l	
113507-82-7	PFEESA	ND	3.6	0.91	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.1	4.5	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	45	9.1	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	45	9.1	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	67%		20-150%
	13C5-PFPeA	104%		20-150%
	13C5-PFHxA	107%		20-150%
	13C4-PFHpA	106%		20-150%
	13C8-PFOA	111%		20-150%
	13C9-PFNA	99%		20-150%
	13C6-PFDA	100%		20-150%
	13C7-PFUnDA	96%		20-150%
	13C2-PFDoDA	86%		20-150%
	13C2-PFTeDA	86%		20-150%
	13C3-PFBS	106%		20-150%
	13C3-PFHxS	111%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	14508811ABA2-D		
Lab Sample ID:	FC10063-3	**Date Sampled:**	09/28/23
Matrix:	AQ - Ground Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	100%		20-150%
	13C8-FOSA	77%		20-150%
	d3-MeFOSA	76%		20-150%
	d5-EtFOSA	81%		20-150%
	d3-MeFOSAA	100%		20-150%
	d5-EtFOSAA	90%		20-150%
	d7-MeFOSE	75%		20-150%
	d9-EtFOSE	79%		20-150%
	13C2-4:2FTS	110%		20-180%
	13C2-6:2FTS	103%		20-180%
	13C2-8:2FTS	105%		20-180%
	13C3-HFPO-DA	101%		20-150%

(a) Associated BS outside control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	14608827CCD3-FB		
Lab Sample ID:	FC10063-4	**Date Sampled:**	09/28/23
Matrix:	AQ - Field Blank Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q26305.D	1	10/12/23 21:46	MV	10/07/23 08:10	OP99405	S6Q370
Run #2							

	Initial Volume	Final Volume
Run #1	550 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.3	3.6	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.6	0.91	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.8	0.45	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.8	0.45	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.8	0.45	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.8	0.55	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.8	0.45	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.8	0.55	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.8	0.55	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.8	0.76	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.8	0.45	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.8	0.91	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.8	1.0	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.8	0.91	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.8	0.91	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.8	0.91	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.8	0.91	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.8	0.91	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.8	1.0	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.3	3.6	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.3	3.6	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.3	3.7	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.8	0.91	ng/l	
31506-32-8	MeFOSA	ND	1.8	0.91	ng/l	
4151-50-2	EtFOSA	ND	1.8	0.91	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	14608827CCD3-FB		
Lab Sample ID:	FC10063-4	**Date Sampled:**	09/28/23
Matrix:	AQ - Field Blank Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.8	0.91	ng/l	
2991-50-6	EtFOSAA	ND	1.8	1.2	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	18	9.1	ng/l	
1691-99-2	EtFOSE	ND	18	9.1	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.3	1.8	ng/l	
919005-14-4	ADONA	ND	7.3	1.8	ng/l	
377-73-1	PFMPA	ND	3.6	0.91	ng/l	
863090-89-5	PFMBA	ND	3.6	1.0	ng/l	
151772-58-6	NFDHA	ND	3.6	1.1	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.3	1.8	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.3	1.8	ng/l	
113507-82-7	PFEESA	ND	3.6	0.91	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.1	4.5	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	45	9.1	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	45	9.1	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	99%		20-150%
	13C5-PFPeA	101%		20-150%
	13C5-PFHxA	104%		20-150%
	13C4-PFHpA	99%		20-150%
	13C8-PFOA	93%		20-150%
	13C9-PFNA	92%		20-150%
	13C6-PFDA	92%		20-150%
	13C7-PFUnDA	82%		20-150%
	13C2-PFDoDA	75%		20-150%
	13C2-PFTeDA	71%		20-150%
	13C3-PFBS	104%		20-150%
	13C3-PFHxS	98%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	14608827CCD3-FB		
Lab Sample ID:	FC10063-4	**Date Sampled:**	09/28/23
Matrix:	AQ - Field Blank Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%		20-150%
	13C8-FOSA	73%		20-150%
	d3-MeFOSA	73%		20-150%
	d5-EtFOSA	75%		20-150%
	d3-MeFOSAA	87%		20-150%
	d5-EtFOSAA	76%		20-150%
	d7-MeFOSE	73%		20-150%
	d9-EtFOSE	73%		20-150%
	13C2-4:2FTS	122%		20-180%
	13C2-6:2FTS	103%		20-180%
	13C2-8:2FTS	95%		20-180%
	13C3-HFPO-DA	96%		20-150%

(a) Associated BS outside control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	14608827CCD3		
Lab Sample ID:	FC10063-5	**Date Sampled:**	09/28/23
Matrix:	AQ - Ground Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q26306.D	1	10/12/23 22:00	MV	10/07/23 08:10	OP99405	S6Q370
Run #2							

	Initial Volume	Final Volume
Run #1	540 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.4	3.7	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.7	0.93	ng/l	
307-24-4	Perfluorohexanoic acid	0.66	1.9	0.46	ng/l	J
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.46	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.46	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.56	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.46	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.56	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.56	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.78	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.46	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.93	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.0	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.93	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.93	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.93	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.93	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.93	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.4	3.7	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	10.9	7.4	3.7	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.4	3.8	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.93	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.93	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.93	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	14608827CCD3		
Lab Sample ID:	FC10063-5	**Date Sampled:**	09/28/23
Matrix:	AQ - Ground Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.93	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.2	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.3	ng/l	
1691-99-2	EtFOSE	ND	19	9.3	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.4	1.9	ng/l	
919005-14-4	ADONA	ND	7.4	1.9	ng/l	
377-73-1	PFMPA	ND	3.7	0.93	ng/l	
863090-89-5	PFMBA	ND	3.7	1.1	ng/l	
151772-58-6	NFDHA	ND	3.7	1.1	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.4	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.4	1.9	ng/l	
113507-82-7	PFEESA	ND	3.7	0.93	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.3	4.6	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	46	9.3	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	46	9.3	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	65%		20-150%
	13C5-PFPeA	101%		20-150%
	13C5-PFHxA	99%		20-150%
	13C4-PFHpA	99%		20-150%
	13C8-PFOA	101%		20-150%
	13C9-PFNA	100%		20-150%
	13C6-PFDA	99%		20-150%
	13C7-PFUnDA	92%		20-150%
	13C2-PFDoDA	80%		20-150%
	13C2-PFTeDA	71%		20-150%
	13C3-PFBS	103%		20-150%
	13C3-PFHxS	97%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	14608827CCD3		
Lab Sample ID:	FC10063-5	**Date Sampled:**	09/28/23
Matrix:	AQ - Ground Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	96%		20-150%
	13C8-FOSA	78%		20-150%
	d3-MeFOSA	64%		20-150%
	d5-EtFOSA	71%		20-150%
	d3-MeFOSAA	82%		20-150%
	d5-EtFOSAA	76%		20-150%
	d7-MeFOSE	72%		20-150%
	d9-EtFOSE	67%		20-150%
	13C2-4:2FTS	108%		20-180%
	13C2-6:2FTS	103%		20-180%
	13C2-8:2FTS	100%		20-180%
	13C3-HFPO-DA	98%		20-150%

(a) Associated BS outside control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	14608827CCD3-D		
Lab Sample ID:	FC10063-6	**Date Sampled:**	09/28/23
Matrix:	AQ - Ground Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q26307.D	1	10/12/23 22:14	MV	10/07/23 08:10	OP99405	S6Q370
Run #2							

	Initial Volume	Final Volume
Run #1	510 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.8	3.9	ng/l	
2706-90-3	Perfluoropentanoic acid	2.3	3.9	0.98	ng/l	J
307-24-4	Perfluorohexanoic acid	ND	2.0	0.49	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.49	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.49	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.60	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.49	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.59	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.59	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.82	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.49	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	0.98	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	0.98	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	0.98	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	0.98	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	0.98	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	0.98	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	10.8	7.8	3.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.8	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	0.98	ng/l	
31506-32-8	MeFOSA	ND	2.0	0.98	ng/l	
4151-50-2	EtFOSA	ND	2.0	0.98	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	14608827CCD3-D		
Lab Sample ID:	FC10063-6	**Date Sampled:**	09/28/23
Matrix:	AQ - Ground Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	0.98	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	9.8	ng/l	
1691-99-2	EtFOSE	ND	20	9.8	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.8	2.0	ng/l	
919005-14-4	ADONA	ND	7.8	2.0	ng/l	
377-73-1	PFMPA	ND	3.9	0.98	ng/l	
863090-89-5	PFMBA	ND	3.9	1.1	ng/l	
151772-58-6	NFDHA	ND	3.9	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.8	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.8	2.0	ng/l	
113507-82-7	PFEESA	ND	3.9	0.98	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.8	4.9	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	49	9.8	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	49	9.8	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	63%		20-150%
	13C5-PFPeA	98%		20-150%
	13C5-PFHxA	101%		20-150%
	13C4-PFHpA	98%		20-150%
	13C8-PFOA	94%		20-150%
	13C9-PFNA	88%		20-150%
	13C6-PFDA	88%		20-150%
	13C7-PFUnDA	84%		20-150%
	13C2-PFDoDA	78%		20-150%
	13C2-PFTeDA	69%		20-150%
	13C3-PFBS	99%		20-150%
	13C3-PFHxS	97%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	14608827CCD3-D		
Lab Sample ID:	FC10063-6	**Date Sampled:**	09/28/23
Matrix:	AQ - Ground Water	**Date Received:**	10/02/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	80%		20-150%
	13C8-FOSA	74%		20-150%
	d3-MeFOSA	68%		20-150%
	d5-EtFOSA	68%		20-150%
	d3-MeFOSAA	84%		20-150%
	d5-EtFOSAA	73%		20-150%
	d7-MeFOSE	67%		20-150%
	d9-EtFOSE	69%		20-150%
	13C2-4:2FTS	104%		20-180%
	13C2-6:2FTS	96%		20-180%
	13C2-8:2FTS	97%		20-180%
	13C3-HFPO-DA	97%		20-150%

(a) Associated BS outside control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

FC10063

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: NDDEQ PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58503
Project Contact: SSuggs Email: ssuggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed)
Sampler 1: Sampler 2:

Project Information

Project Name: NDDEQ PFAS
Street 4201 Normandy St
City Bismarck State ND
Project #
Fax #
Client Purchase Order #

Analytical Information

LCID 16331 LIST 40

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	CONTAINER INFORMATION MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LAB USE ONLY
1	145088 11 ABA2-FB	9/28	0910	AS/RK	GW	3		X								
2	145088 11 ABA2	9/28	1002	AS/RK	GW	3		X								
3	145088 11 ABA2-D	9/28	1007	AS/RK	GW	3		X								
4	146088 27 CCD3-FB	9/28	1040	AS/RK	GW	3		X								
5	146088 27 CCD3	9/28	1134	AS/RK	GW	3		X								
6	146088 27 CCD3-D	9/28	1139	AS/RK	GW	3		X								

INITIAL ASSESSMENT

LABEL VERIFICATION

11.2
12#1
(MELTED)

Turnaround Time (Business days)

10 Day (Business)
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Approved By: / Date:
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery. 922

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	SSuggs	9/28	2 Fed Ex	3 Fed Ex	10/2/23	
5	Relinquished by/Affiliation	Date Time:	6 Received By/Affiliation	7 Relinquished By/Affiliation	Date Time:	8 Received By/Affiliation

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

FC10063: Chain of Custody
Page 1 of 3

SGS Sample Receipt Summary

Job Number: fc10063 **Client:** NDDEQ PFAS **Project:** NDDEQ PFAS

Date / Time Received: 10/2/2023 9:22:00 AM **Delivery Method:** FEDEX **Airbill #'s:** 7843 8352 3593

Cooler Temps (Raw Measured) °C: Cooler 1: (11.2);

Cooler Temps (Corrected) °C: Cooler 1: (11.6);

Cooler Information	Y	or	N
1. Custody Seals Present:	☑		☐
2. Custody Seals Intact:	☑		☐
3. Temp criteria achieved:	☑		☐
4. Cooler temp verification:			IR Gun
5. Cooler media:			Other

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑

3. Type of TB Received	W	or	S	N/A
	☐		☐	☐

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles:	☑		☐	
2. Samples presented properly	☑		☐	
3. Suffiient volume/containers recv'd for analysis	☑		☐	
4. Condition of sample:	Intact			
5. Sample recv'd within HT	☑		☐	
6. Dates/Times/IDs on COC match sample label	☐		☐	
7. VOCs have headspace	☐		☐	☐
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☐
11. % Solids Jar Received?	☐		☐	☐
12. Residual Chlorine Present?	☐		☐	☐

Misc Information

Number of Encores: 25 Gram 5 Gram Number of Lab Filtered Metals:

Test Strip Lot #s: pH 0-3: _____ pH 10-12: _____ Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot # _____

Comments RECEIVED AT 11.2C DUE TO MELTED ICE.

SM089-03
Rev. Date 12/7/17

FC10063: Chain of Custody
Page 2 of 3

Andrea Colby 10/2/23

Please analyze the samples per Shannon Suggs.

FC10063: Chain of Custody
Page 3 of 3

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-MB	6Q26027.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-2, FC10063-3, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-MB	6Q26027.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-2, FC10063-3, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	106%	20-150%
	13C5-PFHxA	105%	20-150%
	13C4-PFHpA	104%	20-150%
	13C8-PFOA	105%	20-150%
	13C9-PFNA	110%	20-150%
	13C6-PFDA	111%	20-150%
	13C7-PFUnDA	99%	20-150%
	13C2-PFDoDA	91%	20-150%
	13C2-PFTeDA	82%	20-150%
	13C3-PFBS	108%	20-150%
	13C3-PFHxS	107%	20-150%
	13C8-PFOS	104%	20-150%
	13C8-FOSA	76%	20-150%
	d3-MeFOSA	70%	20-150%
	d5-EtFOSA	71%	20-150%
	d3-MeFOSAA	89%	20-150%
	d5-EtFOSAA	87%	20-150%
	d7-MeFOSE	76%	20-150%
	d9-EtFOSE	81%	20-150%
	13C2-4:2FTS	123%	20-180%
	13C2-6:2FTS	111%	20-180%
	13C2-8:2FTS	115%	20-180%
	13C3-HFPO-DA	105%	20-150%

Method Blank Summary

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-MB	6Q26301.D	1	10/12/23	MV	10/07/23	OP99405	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-2, FC10063-3, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-MB	6Q26301.D	1	10/12/23	MV	10/07/23	OP99405	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-2, FC10063-3, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	98%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	105%	20-150%
	13C4-PFHpA	97%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	99%	20-150%
	13C7-PFUnDA	91%	20-150%
	13C2-PFDoDA	85%	20-150%
	13C2-PFTeDA	75%	20-150%
	13C3-PFBS	94%	20-150%
	13C3-PFHxS	95%	20-150%
	13C8-PFOS	93%	20-150%
	13C8-FOSA	71%	20-150%
	d3-MeFOSA	63%	20-150%
	d5-EtFOSA	64%	20-150%
	d3-MeFOSAA	84%	20-150%
	d5-EtFOSAA	85%	20-150%
	d7-MeFOSE	70%	20-150%
	d9-EtFOSE	74%	20-150%
	13C2-4:2FTS	114%	20-180%
	13C2-6:2FTS	105%	20-180%
	13C2-8:2FTS	100%	20-180%
	13C3-HFPO-DA	99%	20-150%

Instrument Blank

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q367-IBLK	6Q25948.D	1	10/08/23	MV	n/a	n/a	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-2, FC10063-3

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q367-IBLK	6Q25948.D	1	10/08/23	MV	n/a	n/a	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-2, FC10063-3

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	99%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	97%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	98%	20-150%
	13C7-PFUnDA	99%	20-150%
	13C2-PFDoDA	93%	20-150%
	13C2-PFTeDA	100%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	97%	20-150%
	13C8-FOSA	98%	20-150%
	d3-MeFOSA	99%	20-150%
	d5-EtFOSA	96%	20-150%
	d3-MeFOSAA	100%	20-150%
	d5-EtFOSAA	103%	20-150%
	d7-MeFOSE	99%	20-150%
	d9-EtFOSE	99%	20-150%
	13C2-4:2FTS	102%	20-180%
	13C2-6:2FTS	103%	20-180%
	13C2-8:2FTS	99%	20-180%
	13C3-HFPO-DA	97%	20-150%

Instrument Blank

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q367-IBLK	6Q26048.D	1	10/09/23	MV	n/a	n/a	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-2, FC10063-3

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q367-IBLK	6Q26048.D	1	10/09/23	MV	n/a	n/a	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-2, FC10063-3

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	99%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	101%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	107%	20-150%
	13C6-PFDA	109%	20-150%
	13C7-PFUnDA	106%	20-150%
	13C2-PFDoDA	98%	20-150%
	13C2-PFTeDA	106%	20-150%
	13C3-PFBS	103%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	101%	20-150%
	d3-MeFOSA	95%	20-150%
	d5-EtFOSA	99%	20-150%
	d3-MeFOSAA	101%	20-150%
	d5-EtFOSAA	100%	20-150%
	d7-MeFOSE	97%	20-150%
	d9-EtFOSE	96%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	104%	20-180%
	13C2-8:2FTS	106%	20-180%
	13C3-HFPO-DA	103%	20-150%

Instrument Blank

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-IBLK	6Q26258.D	1	10/12/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-IBLK	6Q26258.D	1	10/12/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	99%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	107%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	107%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSAA	95%	20-150%
	d5-EtFOSAA	97%	20-150%
	13C2-4:2FTS	125%	20-180%
	13C2-6:2FTS	110%	20-180%
	13C2-8:2FTS	116%	20-180%

Instrument Blank

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-IBLK	6Q26350.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-IBLK	6Q26350.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	98%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	107%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	103%	20-150%
	13C6-PFDA	100%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	99%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	105%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	100%	20-150%
	13C2-4:2FTS	120%	20-180%
	13C2-6:2FTS	114%	20-180%
	13C2-8:2FTS	105%	20-180%

Continuing Calibration Blank

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q367-ICCB	6Q26023.D	1	10/09/23	MV	n/a	n/a	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-2, FC10063-3

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q367-ICCB	6Q26023.D	1	10/09/23	MV	n/a	n/a	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-2, FC10063-3

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	99%	20-150%
	13C5-PFPeA	98%	20-150%
	13C5-PFHxA	94%	20-150%
	13C4-PFHpA	95%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	94%	20-150%
	13C6-PFDA	101%	20-150%
	13C7-PFUnDA	99%	20-150%
	13C2-PFDoDA	95%	20-150%
	13C2-PFTeDA	96%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	95%	20-150%
	13C8-FOSA	97%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	99%	20-150%
	13C2-4:2FTS	105%	20-180%
	13C2-6:2FTS	104%	20-180%
	13C2-8:2FTS	97%	20-180%

Continuing Calibration Blank

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-ICCB	6Q26298.D	1	10/12/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-ICCB	6Q26298.D	1	10/12/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	99%	20-150%
	13C5-PFPeA	98%	20-150%
	13C5-PFHxA	95%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	104%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	101%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	96%	20-150%
	13C2-PFTeDA	97%	20-150%
	13C3-PFBS	103%	20-150%
	13C3-PFHxS	106%	20-150%
	13C8-PFOS	102%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSAA	100%	20-150%
	d5-EtFOSAA	101%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	107%	20-180%
	13C2-8:2FTS	109%	20-180%

Continuing Calibration Blank

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q367-ICCB	6Q26044.D	1	10/09/23	MV	n/a	n/a	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q367-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q367-ICCB	6Q26044.D	1	10/09/23	MV	n/a	n/a	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q367-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	99%	20-150%
	13C5-PFPeA	100%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	97%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	102%	20-150%
	13C6-PFDA	102%	20-150%
	13C7-PFUnDA	98%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	102%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	104%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSAA	109%	20-150%
	d5-EtFOSAA	107%	20-150%
	13C2-4:2FTS	109%	20-180%
	13C2-6:2FTS	108%	20-180%
	13C2-8:2FTS	108%	20-180%

Continuing Calibration Blank

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-ICCB	6Q26346.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q370-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-ICCB	6Q26346.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q370-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	98%	20-150%
	13C5-PFPeA	97%	20-150%
	13C5-PFHxA	94%	20-150%
	13C4-PFHpA	96%	20-150%
	13C8-PFOA	106%	20-150%
	13C9-PFNA	102%	20-150%
	13C6-PFDA	107%	20-150%
	13C7-PFUnDA	102%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	105%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	96%	20-150%
	13C2-4:2FTS	113%	20-180%
	13C2-6:2FTS	112%	20-180%
	13C2-8:2FTS	109%	20-180%

Blank Spike Summary

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-LLBS	6Q26026.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-2, FC10063-3, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0148	93	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0075	94	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0037	93	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0037	93	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0033	83	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0038	95	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0037	93	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0033	83	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0039	98	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0037	93	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0042	105	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0033	93	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0037	98	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0032	88	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0036	94	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0035	94	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0036	94	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0036	93	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0037	95	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0144	96	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0166	109	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0147	96	40-150
754-91-6	PFOSA	0.004	0.0038	95	40-150
31506-32-8	MeFOSA	0.008	0.0078	98	40-150
4151-50-2	EtFOSA	0.008	0.0075	94	40-150
2355-31-9	MeFOSAA	0.004	0.0039	98	40-150
2991-50-6	EtFOSAA	0.004	0.0033	83	40-150
24448-09-7	MeFOSE	0.02	0.0179	90	40-150
1691-99-2	EtFOSE	0.02	0.0189	95	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0076	95	40-150
919005-14-4	ADONA	0.00756	0.0073	97	40-150
377-73-1	PFMPA	0.008	0.0076	95	40-150
863090-89-5	PFMBA	0.008	0.0076	95	40-150
151772-58-6	NFDHA	0.008	0.0075	94	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0071	95	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0075	99	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-LLBS	6Q26026.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-2, FC10063-3, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0065	91	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0162	81	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.0952	95	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.0917	92	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	105%	20-150%
	13C5-PFPeA	107%	20-150%
	13C5-PFHxA	108%	20-150%
	13C4-PFHpA	107%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	108%	20-150%
	13C6-PFDA	111%	20-150%
	13C7-PFUnDA	111%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	84%	20-150%
	13C3-PFBS	116%	20-150%
	13C3-PFHxS	115%	20-150%
	13C8-PFOS	112%	20-150%
	13C8-FOSA	86%	20-150%
	d3-MeFOSA	75%	20-150%
	d5-EtFOSA	79%	20-150%
	d3-MeFOSAA	107%	20-150%
	d5-EtFOSAA	107%	20-150%
	d7-MeFOSE	83%	20-150%
	d9-EtFOSE	81%	20-150%
	13C2-4:2FTS	130%	20-180%
	13C2-6:2FTS	107%	20-180%
	13C2-8:2FTS	115%	20-180%
	13C3-HFPO-DA	105%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-LLBS	6Q26300.D	1	10/12/23	MV	10/07/23	OP99405	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-2, FC10063-3, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0150	94	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0072	90	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0039	98	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0035	88	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0035	88	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0039	98	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0039	98	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0037	93	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0039	98	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0035	88	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0039	98	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0035	99	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0036	96	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0035	96	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0035	92	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0036	97	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0036	94	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0031	80	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0028	72	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0137	91	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0156	103	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0150	98	40-150
754-91-6	PFOSA	0.004	0.0035	88	40-150
31506-32-8	MeFOSA	0.008	0.0074	93	40-150
4151-50-2	EtFOSA	0.008	0.0079	99	40-150
2355-31-9	MeFOSAA	0.004	0.0038	95	40-150
2991-50-6	EtFOSAA	0.004	0.0033	83	40-150
24448-09-7	MeFOSE	0.02	0.0184	92	40-150
1691-99-2	EtFOSE	0.02	0.0177	89	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0078	98	40-150
919005-14-4	ADONA	0.00756	0.0071	94	40-150
377-73-1	PFMPA	0.008	0.0073	91	40-150
863090-89-5	PFMBA	0.008	0.0072	90	40-150
151772-58-6	NFDHA	0.008	0.0076	95	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0066	88	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0063	83	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-LLBS	6Q26300.D	1	10/12/23	MV	10/07/23	OP99405	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-2, FC10063-3, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0066	93	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0158	79	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.0869	87	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.0929	93	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	107%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	100%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	87%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	106%	20-150%
	13C8-FOSA	82%	20-150%
	d3-MeFOSA	69%	20-150%
	d5-EtFOSA	71%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	100%	20-150%
	d7-MeFOSE	76%	20-150%
	d9-EtFOSE	78%	20-150%
	13C2-4:2FTS	117%	20-180%
	13C2-6:2FTS	100%	20-180%
	13C2-8:2FTS	101%	20-180%
	13C3-HFPO-DA	106%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-BS	6Q26025.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-2, FC10063-3, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.0931	93	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0469	94	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0239	96	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0249	100	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0226	90	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0231	92	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0234	94	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0246	98	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0234	94	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0237	95	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0229	92	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0206	93	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0217	92	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0210	92	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0220	92	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0216	93	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0224	93	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0224	93	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0211	87	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.0917	98	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.0960	101	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.0836	87	40-150
754-91-6	PFOSA	0.025	0.0241	96	40-150
31506-32-8	MeFOSA	0.05	0.0486	97	40-150
4151-50-2	EtFOSA	0.05	0.0473	95	40-150
2355-31-9	MeFOSAA	0.025	0.0242	97	40-150
2991-50-6	EtFOSAA	0.025	0.0222	89	40-150
24448-09-7	MeFOSE	0.125	0.118	94	40-150
1691-99-2	EtFOSE	0.125	0.119	95	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0472	94	40-150
919005-14-4	ADONA	0.0473	0.0460	97	40-150
377-73-1	PFMPA	0.05	0.0308	62	40-150
863090-89-5	PFMBA	0.05	0.0486	97	40-150
151772-58-6	NFDHA	0.05	0.0496	99	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0432	92	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0433	92	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-BS	6Q26025.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-2, FC10063-3, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0418	94	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.191	153*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.626	100	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.627	100	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	37%	20-150%
	13C5-PFPeA	108%	20-150%
	13C5-PFHxA	108%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	111%	20-150%
	13C9-PFNA	113%	20-150%
	13C6-PFDA	109%	20-150%
	13C7-PFUnDA	104%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	97%	20-150%
	13C3-PFBS	124%	20-150%
	13C3-PFHxS	123%	20-150%
	13C8-PFOS	103%	20-150%
	13C8-FOSA	89%	20-150%
	d3-MeFOSA	84%	20-150%
	d5-EtFOSA	85%	20-150%
	d3-MeFOSAA	102%	20-150%
	d5-EtFOSAA	97%	20-150%
	d7-MeFOSE	76%	20-150%
	d9-EtFOSE	78%	20-150%
	13C2-4:2FTS	138%	20-180%
	13C2-6:2FTS	125%	20-180%
	13C2-8:2FTS	130%	20-180%
	13C3-HFPO-DA	110%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-BS	6Q26299.D	1	10/12/23	MV	10/07/23	OP99405	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-2, FC10063-3, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.0935	94	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0455	91	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0227	91	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0232	93	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0231	92	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0221	88	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0234	94	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0225	90	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0223	89	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0232	93	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0225	90	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0215	97	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0231	98	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0207	91	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0229	96	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0215	93	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0217	90	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0211	87	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0221	91	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.0908	97	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.0976	103	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.0840	88	40-150
754-91-6	PFOSA	0.025	0.0241	96	40-150
31506-32-8	MeFOSA	0.05	0.0535	107	40-150
4151-50-2	EtFOSA	0.05	0.0469	94	40-150
2355-31-9	MeFOSAA	0.025	0.0237	95	40-150
2991-50-6	EtFOSAA	0.025	0.0253	101	40-150
24448-09-7	MeFOSE	0.125	0.111	89	40-150
1691-99-2	EtFOSE	0.125	0.116	93	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0493	99	40-150
919005-14-4	ADONA	0.0473	0.0436	92	40-150
377-73-1	PFMPA	0.05	0.0292	58	40-150
863090-89-5	PFMBA	0.05	0.0469	94	40-150
151772-58-6	NFDHA	0.05	0.0481	96	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0456	98	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0410	87	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-BS	6Q26299.D	1	10/12/23	MV	10/07/23	OP99405	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-2, FC10063-3, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0400	90	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.189	151*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.546	87	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.555	89	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	35%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	106%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	106%	20-150%
	13C9-PFNA	109%	20-150%
	13C6-PFDA	109%	20-150%
	13C7-PFUnDA	106%	20-150%
	13C2-PFDoDA	106%	20-150%
	13C2-PFTeDA	95%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	103%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	83%	20-150%
	d3-MeFOSA	76%	20-150%
	d5-EtFOSA	81%	20-150%
	d3-MeFOSAA	105%	20-150%
	d5-EtFOSAA	97%	20-150%
	d7-MeFOSE	78%	20-150%
	d9-EtFOSE	78%	20-150%
	13C2-4:2FTS	117%	20-180%
	13C2-6:2FTS	107%	20-180%
	13C2-8:2FTS	103%	20-180%
	13C3-HFPO-DA	100%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-MS	6Q26029.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367
FC10063-2	6Q26028.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-2, FC10063-3, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	FC10063-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	ND		0.098	0.0980	100	40-150
2706-90-3	Perfluoropentanoic acid	ND		0.049	0.0468	95	40-150
307-24-4	Perfluorohexanoic acid	ND		0.0245	0.0243	99	40-150
375-85-9	Perfluoroheptanoic acid	ND		0.0245	0.0241	98	40-150
335-67-1	Perfluorooctanoic acid	ND		0.0245	0.0229	93	40-150
375-95-1	Perfluorononanoic acid	ND		0.0245	0.0227	93	40-150
335-76-2	Perfluorodecanoic acid	ND		0.0245	0.0224	91	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.0245	0.0248	101	40-150
307-55-1	Perfluorododecanoic acid	ND		0.0245	0.0247	101	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.0245	0.0235	96	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.0245	0.0261	106	40-150
375-73-5	Perfluorobutanesulfonic acid	ND		0.0217	0.0220	101	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0231	0.0235	102	40-150
355-46-4	Perfluorohexanesulfonic acid	ND		0.0224	0.0223	100	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0234	0.0233	100	40-150
1763-23-1	Perfluorooctanesulfonic acid	ND		0.0227	0.0236	104	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.0236	0.0206	87	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.0237	0.0191	81	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0238	0.0187	79	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0919	0.0926	101	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.0931	0.106	114	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.0941	0.0972	103	40-150
754-91-6	PFOSA	ND		0.0245	0.0252	103	40-150
31506-32-8	MeFOSA	ND		0.049	0.0519	106	40-150
4151-50-2	EtFOSA	ND		0.049	0.0496	101	40-150
2355-31-9	MeFOSAA	ND		0.0245	0.0243	99	40-150
2991-50-6	EtFOSAA	ND		0.0245	0.0240	98	40-150
24448-09-7	MeFOSE	ND		0.123	0.119	97	40-150
1691-99-2	EtFOSE	ND		0.123	0.128	104	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.049	0.0486	99	40-150
919005-14-4	ADONA	ND		0.0463	0.0462	100	40-150
377-73-1	PFMPA	ND		0.049	0.0426	87	40-150
863090-89-5	PFMBA	ND		0.049	0.0478	98	40-150
151772-58-6	NFDHA	ND		0.049	0.0532	109	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0458	0.0418	91	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0463	0.0358	77	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-MS	6Q26029.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367
FC10063-2	6Q26028.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-2, FC10063-3, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	FC10063-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	ND		0.0436	0.0441	101	40-150
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.123	0.138	113	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.613	0.595	97	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.613	0.615	100	40-150

CAS No.	ID Standard Recoveries	MS	FC10063-2	Limits
	13C4-PFBA	58%	76%	20-150%
	13C5-PFPeA	105%	102%	20-150%
	13C5-PFHxA	102%	98%	20-150%
	13C4-PFHpA	104%	99%	20-150%
	13C8-PFOA	105%	105%	20-150%
	13C9-PFNA	103%	103%	20-150%
	13C6-PFDA	103%	100%	20-150%
	13C7-PFUnDA	91%	83%	20-150%
	13C2-PFDoDA	83%	81%	20-150%
	13C2-PFTeDA	71%	68%	20-150%
	13C3-PFBS	107%	106%	20-150%
	13C3-PFHxS	106%	102%	20-150%
	13C8-PFOS	98%	91%	20-150%
	13C8-FOSA	74%	76%	20-150%
	d3-MeFOSA	73%	70%	20-150%
	d5-EtFOSA	75%	64%	20-150%
	d3-MeFOSAA	93%	85%	20-150%
	d5-EtFOSAA	85%	80%	20-150%
	d7-MeFOSE	72%	64%	20-150%
	d9-EtFOSE	71%	66%	20-150%
	13C2-4:2FTS	115%	114%	20-180%
	13C2-6:2FTS	99%	104%	20-180%
	13C2-8:2FTS	102%	97%	20-180%
	13C3-HFPO-DA	107%	96%	20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-DUP	6Q26031.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367
FC10063-3	6Q26030.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-2, FC10063-3, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	FC10063-3 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	ND		ND		nc	30
2706-90-3	Perfluoropentanoic acid	ND		ND		nc	30
307-24-4	Perfluorohexanoic acid	ND		ND		nc	30
375-85-9	Perfluoroheptanoic acid	ND		ND		nc	30
335-67-1	Perfluorooctanoic acid	ND		ND		nc	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	ND		ND		nc	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC10063
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99405-DUP	6Q26031.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367
FC10063-3	6Q26030.D	1	10/09/23	MV	10/07/23	OP99405	S6Q367

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10063-1, FC10063-2, FC10063-3, FC10063-4, FC10063-5, FC10063-6

CAS No.	Compound	FC10063-3 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC10063-3	Limits
	13C4-PFBA	68%	67%	20-150%
	13C5-PFPeA	107%	104%	20-150%
	13C5-PFHxA	109%	107%	20-150%
	13C4-PFHpA	103%	106%	20-150%
	13C8-PFOA	110%	111%	20-150%
	13C9-PFNA	107%	99%	20-150%
	13C6-PFDA	105%	100%	20-150%
	13C7-PFUnDA	102%	96%	20-150%
	13C2-PFDoDA	91%	86%	20-150%
	13C2-PFTeDA	83%	86%	20-150%
	13C3-PFBS	107%	106%	20-150%
	13C3-PFHxS	98%	111%	20-150%
	13C8-PFOS	97%	100%	20-150%
	13C8-FOSA	75%	77%	20-150%
	d3-MeFOSA	75%	76%	20-150%
	d5-EtFOSA	70%	81%	20-150%
	d3-MeFOSAA	93%	100%	20-150%
	d5-EtFOSAA	86%	90%	20-150%
	d7-MeFOSE	70%	75%	20-150%
	d9-EtFOSE	69%	79%	20-150%
	13C2-4:2FTS	111%	110%	20-180%
	13C2-6:2FTS	102%	103%	20-180%
	13C2-8:2FTS	107%	105%	20-180%
	13C3-HFPO-DA	105%	101%	20-150%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC9830

Sampling Date: 09/20/23



Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
ssuggs@nd.gov

ATTN: Shannon Suggs

Total number of pages in report: 45

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC9830

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
FC9830-1	09/20/23	12:20	IS	09/23/23	AQ	Ground Water	WELL 5D
FC9830-2	09/20/23	13:00	IS	09/23/23	AQ	Water	S2 LEACHATE POND

Summary of Hits

Job Number: FC9830
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 09/20/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC9830-1	**WELL 5D**					
No hits reported in this sample.						
FC9830-2	**S2 LEACHATE POND**					
Perfluorohexanoic acid		7.4 J	17	4.2	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		15.2	2.0	0.51	ng/l	EPA DRAFT 1633
6:2 Fluorotelomer sulfonate		10.7	8.1	4.0	ng/l	EPA DRAFT 1633

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	WELL 5D		
Lab Sample ID:	FC9830-1	**Date Sampled:**	09/20/23
Matrix:	AQ - Ground Water	**Date Received:**	09/23/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q26340.D	1	10/13/23 06:07	MV	10/04/23 08:30	OP99345	S6Q370
Run #2							

	Initial Volume	Final Volume
Run #1	525 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.6	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.8	0.95	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.58	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.57	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.57	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.80	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.95	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.95	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.95	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.95	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.95	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.95	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.6	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.6	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.6	3.9	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.95	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.95	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.95	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL 5D		
Lab Sample ID:	FC9830-1	**Date Sampled:**	09/20/23
Matrix:	AQ - Ground Water	**Date Received:**	09/23/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.95	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.5	ng/l	
1691-99-2	EtFOSE	ND	19	9.5	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.6	1.9	ng/l	
919005-14-4	ADONA	ND	7.6	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.95	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.1	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.6	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.6	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.95	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	9.5	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.5	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.5	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	35%		20-150%
	13C5-PFPeA	94%		20-150%
	13C5-PFHxA	98%		20-150%
	13C4-PFHpA	99%		20-150%
	13C8-PFOA	97%		20-150%
	13C9-PFNA	95%		20-150%
	13C6-PFDA	96%		20-150%
	13C7-PFUnDA	97%		20-150%
	13C2-PFDoDA	81%		20-150%
	13C2-PFTeDA	73%		20-150%
	13C3-PFBS	105%		20-150%
	13C3-PFHxS	95%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WELL 5D		
Lab Sample ID:	FC9830-1	**Date Sampled:**	09/20/23
Matrix:	AQ - Ground Water	**Date Received:**	09/23/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%		20-150%
	13C8-FOSA	87%		20-150%
	d3-MeFOSA	74%		20-150%
	d5-EtFOSA	75%		20-150%
	d3-MeFOSAA	98%		20-150%
	d5-EtFOSAA	84%		20-150%
	d7-MeFOSE	75%		20-150%
	d9-EtFOSE	77%		20-150%
	13C2-4:2FTS	121%		20-180%
	13C2-6:2FTS	101%		20-180%
	13C2-8:2FTS	102%		20-180%
	13C3-HFPO-DA	100%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S2 LEACHATE POND		
Lab Sample ID:	FC9830-2	**Date Sampled:**	09/20/23
Matrix:	AQ - Water	**Date Received:**	09/23/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q26513.D	1	10/17/23 02:58	MV	10/04/23 08:30	OP99345	S6Q372
Run #2	4Q52278.D	1	10/19/23 22:20	AL	10/18/23 09:45	OP99586	S4Q766
Run #3 [a]	4Q52279.D	10	10/19/23 22:34	AL	10/18/23 09:45	OP99586	S4Q766

	Initial Volume	Final Volume
Run #1	495 ml	5.0 ml
Run #2	60.0 ml	5.0 ml
Run #3	60.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND [b]	67	33	ng/l	
2706-90-3	Perfluoropentanoic acid	ND [b]	33	8.3	ng/l	
307-24-4	Perfluorohexanoic acid	7.4 [b]	17	4.2	ng/l	J
375-85-9	Perfluoroheptanoic acid	15.2	2.0	0.51	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.51	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.85	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND [c]	170	83	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.1	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	10.7	8.1	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.1	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S2 LEACHATE POND		
Lab Sample ID:	FC9830-2	**Date Sampled:**	09/20/23
Matrix:	AQ - Water	**Date Received:**	09/23/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND [b]	67	17	ng/l	
919005-14-4	ADONA	ND [b]	67	17	ng/l	
377-73-1	PFMPA	ND [b]	33	8.3	ng/l	
863090-89-5	PFMBA	ND [b]	33	9.5	ng/l	
151772-58-6	NFDHA	ND [b]	33	10	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND [b]	67	17	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND [b]	67	17	ng/l	
113507-82-7	PFEESA	ND [b]	33	8.3	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND [b]	83	42	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND [b]	420	83	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND [b]	420	83	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C4-PFBA	1% [d]	59%	61%	20-150%
	13C5-PFPeA	1% [d]	88%	82%	20-150%
	13C5-PFHxA	8% [d]	85%	80%	20-150%
	13C4-PFHpA	29%	88%	86%	20-150%
	13C8-PFOA	82%	84%	90%	20-150%
	13C9-PFNA	85%	81%	88%	20-150%
	13C6-PFDA	80%	69%	59%	20-150%
	13C7-PFUnDA	94%	68%	65%	20-150%
	13C2-PFDoDA	99%	71%	62%	20-150%
	13C2-PFTeDA	108%	59%	55%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S2 LEACHATE POND		
Lab Sample ID:	FC9830-2	**Date Sampled:**	09/20/23
Matrix:	AQ - Water	**Date Received:**	09/23/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C3-PFBS	3% [d]	322% [d]	127%	20-150%
	13C3-PFHxS	84%	88%	112%	20-150%
	13C8-PFOS	77%	68%	63%	20-150%
	13C8-FOSA	113%	81%	79%	20-150%
	d3-MeFOSA	49%	62%	63%	20-150%
	d5-EtFOSA	54%	65%	62%	20-150%
	d3-MeFOSAA	70%	107%	79%	20-150%
	d5-EtFOSAA	98%	117%	64%	20-150%
	d7-MeFOSE	64%	75%	78%	20-150%
	d9-EtFOSE	41%	70%	72%	20-150%
	13C2-4:2FTS	76%	260% [d]	122%	20-180%
	13C2-6:2FTS	53%	242% [d]	122%	20-180%
	13C2-8:2FTS	161%	227% [d]	102%	20-180%
	13C3-HFPO-DA	5% [d]	76%	85%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Result is from Run# 2
(c) Result is from Run# 3
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FC9830

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: NDDEQ PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58503
Project Contact: SSwiggs Email: ssuggs@nd.gov
Phone #: 701-328-6[illegible]
Sampler(s) Name(s) (Printed)
Sampler 1: Sampler 2:

Project Information

Project Name: NDDEQ PFAS
Street: 4201 Normandy St
City: Bismarck State: ND
Project #
Fax #
Client Purchase Order #

Analytical Information

LCED 1633 LIST 40

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNA	DI WATER	MEOH	LCED 1633 LIST 40	LAB USE ONLY
1	Well SD	9/20/23	12:20pm	1S	GW	3										X	
2	S2 Leachate Pond	9/20/23	1pm	1S	Liq	3										X	

INITIAL ASSESSMENT [signature]

LABEL VERIFICATION [signature]

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- ☐ COMMERCIAL "A" (RESULTS ONLY)
- ☐ COMMERCIAL "B" (RESULTS PLUS QC)
- ☐ REDT1 (EPA LEVEL 3)
- ☐ FULLT1 (EPA LEVEL 4)
- ☐ EDD'S

Comments / Remarks

1030

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 SSwiggs	9/21	2 FedEx	3 FedEx		4 [signature] 09/23/23
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 3.8 IC#1

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

4.1

4

FC9830: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: fc9830 **Client:** NDDEQ PFAS **Project:** NDDEQ PFAS

Date / Time Received: 9/23/2023 10:30:00 AM **Delivery Method:** FED EX **Airbill #'s:** N/A

Cooler Temps (Raw Measured) °C: Cooler 1: (3.8);

Cooler Temps (Corrected) °C: Cooler 1: (3.6);

Cooler Information	Y	or	N
1. Custody Seals Present:	☑		☐
2. Custody Seals Intact:	☑		☐
3. Temp criteria achieved:	☑		☐
4. Cooler temp verification:	IR Gun		
5. Cooler media:	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑

	W	or	S	N/A
3. Type of TB Received	☐		☐	☐

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles:	☑		☐	
2. Samples presented properly	☑		☐	
3. Suffiient volume/containers recv'd for analysis	☑		☐	
4. Condition of sample:	Intact			
5. Sample recv'd within HT	☑		☐	
6. Dates/Times/IDs on COC match sample label	☐		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☐
11. % Solids Jar Received?	☐		☐	☐
12. Residual Chlorine Present?	☐		☐	☐

Misc Information

Number of Encores: 25 Gram 5 Gram Number of Lab Filtered Metals:

Test Strip Lot #s: pH 0-3: _____ pH 10-12: _____ Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot # _____

Comments

SM001
Rev. Date 05/04/17

Technician: SHAYLAP Date: 9/23/2023 11:18:27 AM Reviewer: _____ Date: _____

FC9830: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-MB	6Q26337.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-1, FC9830-2

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-MB	6Q26337.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-1, FC9830-2

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	92%	20-150%
	13C5-PFPeA	94%	20-150%
	13C5-PFHxA	95%	20-150%
	13C4-PFHpA	93%	20-150%
	13C8-PFOA	94%	20-150%
	13C9-PFNA	96%	20-150%
	13C6-PFDA	96%	20-150%
	13C7-PFUnDA	96%	20-150%
	13C2-PFDoDA	78%	20-150%
	13C2-PFTeDA	53%	20-150%
	13C3-PFBS	91%	20-150%
	13C3-PFHxS	95%	20-150%
	13C8-PFOS	89%	20-150%
	13C8-FOSA	61%	20-150%
	d3-MeFOSA	35%	20-150%
	d5-EtFOSA	40%	20-150%
	d3-MeFOSAA	88%	20-150%
	d5-EtFOSAA	82%	20-150%
	d7-MeFOSE	49%	20-150%
	d9-EtFOSE	47%	20-150%
	13C2-4:2FTS	116%	20-180%
	13C2-6:2FTS	98%	20-180%
	13C2-8:2FTS	97%	20-180%
	13C3-HFPO-DA	94%	20-150%

Method Blank Summary

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99586-MB	4Q52277.D	1	10/19/23	AL	10/18/23	OP99586	S4Q766

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-2

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	105%	20-150%
	13C5-PFPeA	112%	20-150%
	13C5-PFHxA	105%	20-150%
	13C4-PFHpA	107%	20-150%
	13C8-PFOA	106%	20-150%
	13C9-PFNA	92%	20-150%
	13C6-PFDA	101%	20-150%
	13C7-PFUnDA	106%	20-150%
	13C2-PFDoDA	94%	20-150%
	13C2-PFTeDA	84%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	97%	20-150%
	13C8-PFOS	96%	20-150%
	13C8-FOSA	93%	20-150%
	d3-MeFOSA	72%	20-150%
	d5-EtFOSA	76%	20-150%
	d3-MeFOSAA	96%	20-150%

Method Blank Summary

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99586-MB	4Q52277.D	1	10/19/23	AL	10/18/23	OP99586	S4Q766

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-2

CAS No.	ID Standard Recoveries		Limits
	d5-EtFOSAA	93%	20-150%
	d7-MeFOSE	87%	20-150%
	d9-EtFOSE	86%	20-150%
	13C2-4:2FTS	131%	20-180%
	13C2-6:2FTS	134%	20-180%
	13C2-8:2FTS	102%	20-180%
	13C3-HFPO-DA	105%	20-150%

Instrument Blank

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-IBLK	6Q26258.D	1	10/12/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-IBLK	6Q26258.D	1	10/12/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	99%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	107%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	107%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSAA	95%	20-150%
	d5-EtFOSAA	97%	20-150%
	13C2-4:2FTS	125%	20-180%
	13C2-6:2FTS	110%	20-180%
	13C2-8:2FTS	116%	20-180%

Instrument Blank

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-IBLK	6Q26350.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-IBLK	6Q26350.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	98%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	107%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	103%	20-150%
	13C6-PFDA	100%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	99%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	105%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	100%	20-150%
	13C2-4:2FTS	120%	20-180%
	13C2-6:2FTS	114%	20-180%
	13C2-8:2FTS	105%	20-180%

Instrument Blank

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q372-IBLK	6Q26481.D	1	10/16/23	MV	n/a	n/a	S6Q372

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-2

CAS No.	Compound	Result	RL	MDL	Units	Q
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	105%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	103%	20-150%
	13C9-PFNA	93%	20-150%
	13C6-PFDA	112%	20-150%

Instrument Blank

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q372-IBLK	6Q26481.D	1	10/16/23	MV	n/a	n/a	S6Q372

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-2

CAS No.	ID Standard Recoveries		Limits
	13C7-PFUnDA	110%	20-150%
	13C2-PFDoDA	106%	20-150%
	13C2-PFTeDA	109%	20-150%
	13C3-PFBS	103%	20-150%
	13C3-PFHxS	103%	20-150%
	13C8-PFOS	107%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSAA	97%	20-150%
	d5-EtFOSAA	100%	20-150%
	13C2-4:2FTS	104%	20-180%
	13C2-6:2FTS	112%	20-180%
	13C2-8:2FTS	106%	20-180%

Instrument Blank

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q766-IBLK	4Q52269.D	1	10/19/23	AL	n/a	n/a	S4Q766

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-2

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	104%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	107%	20-150%
	13C7-PFUnDA	111%	20-150%
	13C2-PFDoDA	106%	20-150%
	13C2-PFTeDA	107%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	98%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	101%	20-150%
	d3-MeFOSAA	102%	20-150%
	d5-EtFOSAA	103%	20-150%
	13C2-4:2FTS	130%	20-180%

Instrument Blank

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q766-IBLK	4Q52269.D	1	10/19/23	AL	n/a	n/a	S4Q766

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-2

CAS No.	ID Standard Recoveries		Limits
	13C2-6:2FTS	117%	20-180%
	13C2-8:2FTS	105%	20-180%

Continuing Calibration Blank

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-ICCB	6Q26334.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-ICCB	6Q26334.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	98%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	96%	20-150%
	13C9-PFNA	96%	20-150%
	13C6-PFDA	106%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	103%	20-150%
	13C2-PFTeDA	104%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	95%	20-150%
	13C8-FOSA	97%	20-150%
	d3-MeFOSAA	97%	20-150%
	d5-EtFOSAA	96%	20-150%
	13C2-4:2FTS	113%	20-180%
	13C2-6:2FTS	113%	20-180%
	13C2-8:2FTS	115%	20-180%

Continuing Calibration Blank

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q372-ICCB	6Q26509.D	1	10/17/23	MV	n/a	n/a	S6Q372

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-2

CAS No.	Compound	Result	RL	MDL	Units	Q
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	98%	20-150%

Continuing Calibration Blank

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q372-ICCB	6Q26509.D	1	10/17/23	MV	n/a	n/a	S6Q372

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-2

CAS No.	ID Standard Recoveries		Limits
	13C7-PFUnDA	94%	20-150%
	13C2-PFDoDA	92%	20-150%
	13C2-PFTeDA	94%	20-150%
	13C3-PFBS	95%	20-150%
	13C3-PFHxS	94%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	102%	20-150%
	13C2-4:2FTS	105%	20-180%
	13C2-6:2FTS	97%	20-180%
	13C2-8:2FTS	106%	20-180%

Continuing Calibration Blank

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-ICCB	6Q26346.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q370-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q370-ICCB	6Q26346.D	1	10/13/23	MV	n/a	n/a	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q370-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	98%	20-150%
	13C5-PFPeA	97%	20-150%
	13C5-PFHxA	94%	20-150%
	13C4-PFHpA	96%	20-150%
	13C8-PFOA	106%	20-150%
	13C9-PFNA	102%	20-150%
	13C6-PFDA	107%	20-150%
	13C7-PFUnDA	102%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	105%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	100%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	96%	20-150%
	13C2-4:2FTS	113%	20-180%
	13C2-6:2FTS	112%	20-180%
	13C2-8:2FTS	109%	20-180%

Blank Spike Summary

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-LLBS	6Q26336.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-1, FC9830-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0153	96	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0074	93	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0040	100	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0037	93	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0038	95	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0038	95	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0041	103	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0035	88	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0039	98	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0032	80	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0037	93	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0037	104	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0041	109	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0036	98	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0037	97	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0038	102	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0036	94	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0036	93	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0031	80	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0152	101	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0151	99	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0134	87	40-150
754-91-6	PFOSA	0.004	0.0041	103	40-150
31506-32-8	MeFOSA	0.008	0.0080	100	40-150
4151-50-2	EtFOSA	0.008	0.0083	104	40-150
2355-31-9	MeFOSAA	0.004	0.0043	108	40-150
2991-50-6	EtFOSAA	0.004	0.0040	100	40-150
24448-09-7	MeFOSE	0.02	0.0205	103	40-150
1691-99-2	EtFOSE	0.02	0.0192	96	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0081	101	40-150
919005-14-4	ADONA	0.00756	0.0079	104	40-150
377-73-1	PFMPA	0.008	0.0075	94	40-150
863090-89-5	PFMBA	0.008	0.0075	94	40-150
151772-58-6	NFDHA	0.008	0.0085	106	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0072	96	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0061	81	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-LLBS	6Q26336.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-1, FC9830-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0066	93	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0191	96	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.0999	100	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.105	105	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	95%	20-150%
	13C5-PFPeA	98%	20-150%
	13C5-PFHxA	93%	20-150%
	13C4-PFHpA	94%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	92%	20-150%
	13C7-PFUnDA	92%	20-150%
	13C2-PFDoDA	87%	20-150%
	13C2-PFTeDA	67%	20-150%
	13C3-PFBS	94%	20-150%
	13C3-PFHxS	93%	20-150%
	13C8-PFOS	93%	20-150%
	13C8-FOSA	86%	20-150%
	d3-MeFOSA	53%	20-150%
	d5-EtFOSA	53%	20-150%
	d3-MeFOSAA	88%	20-150%
	d5-EtFOSAA	85%	20-150%
	d7-MeFOSE	66%	20-150%
	d9-EtFOSE	65%	20-150%
	13C2-4:2FTS	107%	20-180%
	13C2-6:2FTS	106%	20-180%
	13C2-8:2FTS	113%	20-180%
	13C3-HFPO-DA	95%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99586-LLBS	4Q52276.D	1	10/19/23	AL	10/18/23	OP99586	S4Q766

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.03	0.0290	97	40-150
2706-90-3	Perfluoropentanoic acid	0.015	0.0140	93	40-150
307-24-4	Perfluorohexanoic acid	0.0075	0.0074	99	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00665	0.0063	95	40-150
13252-13-6	HFPO-DA (GenX)	0.015	0.0137	91	40-150
919005-14-4	ADONA	0.0142	0.0161	114	40-150
377-73-1	PFMPA	0.015	0.0148	99	40-150
863090-89-5	PFMBA	0.015	0.0140	93	40-150
151772-58-6	NFDHA	0.015	0.0167	111	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.014	0.0141	101	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0142	0.0132	93	40-150
113507-82-7	PFEESA	0.0134	0.0128	96	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.0375	0.0361	96	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.188	0.172	92	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.188	0.181	97	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	107%	20-150%
	13C5-PFPeA	111%	20-150%
	13C5-PFHxA	108%	20-150%
	13C4-PFHpA	109%	20-150%
	13C8-PFOA	108%	20-150%
	13C9-PFNA	105%	20-150%
	13C6-PFDA	108%	20-150%
	13C7-PFUnDA	107%	20-150%
	13C2-PFDoDA	105%	20-150%
	13C2-PFTeDA	95%	20-150%
	13C3-PFBS	111%	20-150%
	13C3-PFHxS	108%	20-150%
	13C8-PFOS	108%	20-150%
	13C8-FOSA	98%	20-150%
	d3-MeFOSA	82%	20-150%
	d5-EtFOSA	87%	20-150%
	d3-MeFOSAA	109%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99586-LLBS	4Q52276.D	1	10/19/23	AL	10/18/23	OP99586	S4Q766

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-2

CAS No.	ID Standard Recoveries	BSP	Limits
	d5-EtFOSAA	105%	20-150%
	d7-MeFOSE	95%	20-150%
	d9-EtFOSE	93%	20-150%
	13C2-4:2FTS	135%	20-180%
	13C2-6:2FTS	141%	20-180%
	13C2-8:2FTS	127%	20-180%
	13C3-HFPO-DA	108%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-BS	6Q26335.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-1, FC9830-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.101	101	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0502	100	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0259	104	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0256	102	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0242	97	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0247	99	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0249	100	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0251	100	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0267	107	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0257	103	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0247	99	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0221	100	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0230	98	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0213	93	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0264	111	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0252	109	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0255	106	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0246	102	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0252	104	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.0953	102	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.103	108	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.0898	94	40-150
754-91-6	PFOSA	0.025	0.0254	102	40-150
31506-32-8	MeFOSA	0.05	0.0539	108	40-150
4151-50-2	EtFOSA	0.05	0.0541	108	40-150
2355-31-9	MeFOSAA	0.025	0.0270	108	40-150
2991-50-6	EtFOSAA	0.025	0.0273	109	40-150
24448-09-7	MeFOSE	0.125	0.128	102	40-150
1691-99-2	EtFOSE	0.125	0.131	105	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0528	106	40-150
919005-14-4	ADONA	0.0473	0.0493	104	40-150
377-73-1	PFMPA	0.05	0.0489	98	40-150
863090-89-5	PFMBA	0.05	0.0496	99	40-150
151772-58-6	NFDHA	0.05	0.0513	103	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0503	108	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0451	95	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-BS	6Q26335.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-1, FC9830-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0450	101	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.110	88	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.631	101	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.680	109	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	95%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	105%	20-150%
	13C6-PFDA	111%	20-150%
	13C7-PFUnDA	110%	20-150%
	13C2-PFDoDA	98%	20-150%
	13C2-PFTeDA	94%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	109%	20-150%
	13C8-PFOS	91%	20-150%
	13C8-FOSA	92%	20-150%
	d3-MeFOSA	78%	20-150%
	d5-EtFOSA	75%	20-150%
	d3-MeFOSAA	98%	20-150%
	d5-EtFOSAA	91%	20-150%
	d7-MeFOSE	83%	20-150%
	d9-EtFOSE	85%	20-150%
	13C2-4:2FTS	108%	20-180%
	13C2-6:2FTS	102%	20-180%
	13C2-8:2FTS	106%	20-180%
	13C3-HFPO-DA	98%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99586-BS [a]	4Q52275.D	1	10/19/23	AL	10/18/23	OP99586	S4Q766

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.0939	94	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0468	94	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0234	94	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0215	97	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0480	96	40-150
919005-14-4	ADONA	0.0473	0.0549	116	40-150
377-73-1	PFMPA	0.05	0.0465	93	40-150
863090-89-5	PFMBA	0.05	0.0456	91	40-150
151772-58-6	NFDHA	0.05	0.0542	108	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0462	99	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0427	90	40-150
113507-82-7	PFEESA	0.0445	0.0423	95	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.118	94	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.589	94	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.591	95	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	99%	20-150%
	13C5-PFPeA	110%	20-150%
	13C5-PFHxA	105%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	103%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	114%	20-150%
	13C7-PFUnDA	105%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	90%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	102%	20-150%
	13C8-FOSA	108%	20-150%
	d3-MeFOSA	85%	20-150%
	d5-EtFOSA	85%	20-150%
	d3-MeFOSAA	112%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99586-BS [a]	4Q52275.D	1	10/19/23	AL	10/18/23	OP99586	S4Q766

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-2

CAS No.	ID Standard Recoveries	BSP	Limits
	d5-EtFOSAA	108%	20-150%
	d7-MeFOSE	90%	20-150%
	d9-EtFOSE	88%	20-150%
	13C2-4:2FTS	113%	20-180%
	13C2-6:2FTS	126%	20-180%
	13C2-8:2FTS	97%	20-180%
	13C3-HFPO-DA	103%	20-150%

(a) Insufficient sample for MS/MSD.

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-MS	6Q26339.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370
FC9829-1	6Q26338.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-1, FC9830-2

CAS No.	Compound	FC9829-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	ND		0.122	0.120	98	40-150
2706-90-3	Perfluoropentanoic acid	ND		0.061	0.0566	93	40-150
307-24-4	Perfluorohexanoic acid	ND		0.0305	0.0293	96	40-150
375-85-9	Perfluoroheptanoic acid	ND		0.0305	0.0293	96	40-150
335-67-1	Perfluorooctanoic acid	ND		0.0305	0.0295	97	40-150
375-95-1	Perfluorononanoic acid	ND		0.0305	0.0293	96	40-150
335-76-2	Perfluorodecanoic acid	ND		0.0305	0.0297	97	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.0305	0.0305	100	40-150
307-55-1	Perfluorododecanoic acid	ND		0.0305	0.0357	117	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.0305	0.0311	102	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.0305	0.0348	114	40-150
375-73-5	Perfluorobutanesulfonic acid	ND		0.027	0.0273	101	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0287	0.0290	101	40-150
355-46-4	Perfluorohexanesulfonic acid	ND		0.0279	0.0268	96	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0291	0.0299	103	40-150
1763-23-1	Perfluorooctanesulfonic acid	ND		0.0283	0.0265	94	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.0293	0.0227	77	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.0294	0.0201	68	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0296	0.0170	57	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.114	0.110	96	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.116	0.120	104	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.117	0.105	90	40-150
754-91-6	PFOSA	ND		0.0305	0.0324	106	40-150
31506-32-8	MeFOSA	ND		0.061	0.0701	115	40-150
4151-50-2	EtFOSA	ND		0.061	0.0658	108	40-150
2355-31-9	MeFOSAA	ND		0.0305	0.0316	104	40-150
2991-50-6	EtFOSAA	ND		0.0305	0.0347	114	40-150
24448-09-7	MeFOSE	ND		0.152	0.161	106	40-150
1691-99-2	EtFOSE	ND		0.152	0.167	110	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.061	0.0593	97	40-150
919005-14-4	ADONA	ND		0.0576	0.0566	98	40-150
377-73-1	PFMPA	ND		0.061	0.0472	77	40-150
863090-89-5	PFMBA	ND		0.061	0.0574	94	40-150
151772-58-6	NFDHA	ND		0.061	0.0578	95	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.057	0.0523	92	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0576	0.0386	67	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-MS	6Q26339.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370
FC9829-1	6Q26338.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-1, FC9830-2

CAS No.	Compound	FC9829-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	ND		0.0543	0.0516	95	40-150
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.152	0.316	207*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.762	0.759	100	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.762	0.770	101	40-150

CAS No.	ID Standard Recoveries	MS	FC9829-1	Limits
	13C4-PFBA	44%	51%	20-150%
	13C5-PFPeA	101%	99%	20-150%
	13C5-PFHxA	99%	101%	20-150%
	13C4-PFHpA	95%	97%	20-150%
	13C8-PFOA	99%	102%	20-150%
	13C9-PFNA	108%	105%	20-150%
	13C6-PFDA	98%	101%	20-150%
	13C7-PFUnDA	81%	82%	20-150%
	13C2-PFDoDA	59%	61%	20-150%
	13C2-PFTeDA	51%	53%	20-150%
	13C3-PFBS	101%	99%	20-150%
	13C3-PFHxS	103%	99%	20-150%
	13C8-PFOS	103%	96%	20-150%
	13C8-FOSA	92%	95%	20-150%
	d3-MeFOSA	66%	63%	20-150%
	d5-EtFOSA	64%	59%	20-150%
	d3-MeFOSAA	85%	80%	20-150%
	d5-EtFOSAA	74%	75%	20-150%
	d7-MeFOSE	62%	60%	20-150%
	d9-EtFOSE	60%	57%	20-150%
	13C2-4:2FTS	117%	110%	20-180%
	13C2-6:2FTS	108%	103%	20-180%
	13C2-8:2FTS	106%	93%	20-180%
	13C3-HFPO-DA	99%	96%	20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-DUP	6Q26341.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370
FC9830-1	6Q26340.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-1, FC9830-2

CAS No.	Compound	FC9830-1 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	ND		ND		nc	30
2706-90-3	Perfluoropentanoic acid	ND		ND		nc	30
307-24-4	Perfluorohexanoic acid	ND		ND		nc	30
375-85-9	Perfluoroheptanoic acid	ND		ND		nc	30
335-67-1	Perfluorooctanoic acid	ND		ND		nc	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	ND		ND		nc	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC9830
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP99345-DUP	6Q26341.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370
FC9830-1	6Q26340.D	1	10/13/23	MV	10/04/23	OP99345	S6Q370

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC9830-1, FC9830-2

CAS No.	Compound	FC9830-1 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC9830-1	Limits
	13C4-PFBA	42%	35%	20-150%
	13C5-PFPeA	98%	94%	20-150%
	13C5-PFHxA	101%	98%	20-150%
	13C4-PFHpA	99%	99%	20-150%
	13C8-PFOA	103%	97%	20-150%
	13C9-PFNA	96%	95%	20-150%
	13C6-PFDA	105%	96%	20-150%
	13C7-PFUnDA	92%	97%	20-150%
	13C2-PFDoDA	75%	81%	20-150%
	13C2-PFTeDA	69%	73%	20-150%
	13C3-PFBS	97%	105%	20-150%
	13C3-PFHxS	102%	95%	20-150%
	13C8-PFOS	99%	88%	20-150%
	13C8-FOSA	87%	87%	20-150%
	d3-MeFOSA	58%	74%	20-150%
	d5-EtFOSA	57%	75%	20-150%
	d3-MeFOSAA	97%	98%	20-150%
	d5-EtFOSAA	90%	84%	20-150%
	d7-MeFOSE	59%	75%	20-150%
	d9-EtFOSE	62%	77%	20-150%
	13C2-4:2FTS	110%	121%	20-180%
	13C2-6:2FTS	97%	101%	20-180%
	13C2-8:2FTS	101%	102%	20-180%
	13C3-HFPO-DA	98%	100%	20-150%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC10719

Sampling Date: 10/24/23



Report to:

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Bismark, ND 58503
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ATTN: Shannon Suggs

Total number of pages in report: 24

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC10719

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FC10719-1	10/24/23	12:15	IS	10/26/23	AQ	Water	OML LW2

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

Summary of Hits

Job Number: FC10719
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 10/24/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC10719-1	**OML LW2**					
Perfluorobutanoic acid [a]		15100	310	150	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		418	15	3.8	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		125	15	3.8	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		138	15	3.8	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		89.7	15	7.7	ng/l	EPA DRAFT 1633
Perfluoropentanesulfonic acid		74.1	15	8.6	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		93.2	15	7.7	ng/l	EPA DRAFT 1633
Perfluoroheptanesulfonic acid		9.9 J	15	7.7	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		84.2	15	7.7	ng/l	EPA DRAFT 1633
4:2 Fluorotelomer sulfonate		66.5	62	31	ng/l	EPA DRAFT 1633

(a) Dilution required (ID recovery standard failure).

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	OML LW2		
Lab Sample ID:	FC10719-1	**Date Sampled:**	10/24/23
Matrix:	AQ - Water	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q53949.D	1	11/16/23 12:32	AL	11/13/23 11:00	OP59	S4Q787
Run #2 [a]	4Q54032.D	5	11/17/23 18:17	AL	11/13/23 11:00	OP59	S4Q788

	Initial Volume	Final Volume
Run #1	65.0 ml	5.0 ml
Run #2	65.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	15100 [b]	310	150	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	31	7.7	ng/l	
307-24-4	Perfluorohexanoic acid	418	15	3.8	ng/l	
375-85-9	Perfluoroheptanoic acid	125	15	3.8	ng/l	
335-67-1	Perfluorooctanoic acid	138	15	3.8	ng/l	
375-95-1	Perfluorononanoic acid	ND	15	4.7	ng/l	
335-76-2	Perfluorodecanoic acid	ND	15	3.8	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	15	4.6	ng/l	
307-55-1	Perfluorododecanoic acid	ND	15	4.6	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	15	6.5	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	15	3.8	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	89.7	15	7.7	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	74.1	15	8.6	ng/l	
355-46-4	Perfluorohexanesulfonic acid	93.2	15	7.7	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	9.9	15	7.7	ng/l	J
1763-23-1	Perfluorooctanesulfonic acid	84.2	15	7.7	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	15	7.7	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	15	7.7	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	15	8.8	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	66.5	62	31	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND [b]	310	150	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	62	32	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	15	7.7	ng/l	
31506-32-8	MeFOSA	ND	15	7.7	ng/l	
4151-50-2	EtFOSA	ND	15	7.7	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OML LW2		
Lab Sample ID:	FC10719-1	**Date Sampled:**	10/24/23
Matrix:	AQ - Water	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	15	7.7	ng/l	
2991-50-6	EtFOSAA	ND	15	10	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	150	77	ng/l	
1691-99-2	EtFOSE	ND	150	77	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	62	15	ng/l	
919005-14-4	ADONA	ND	62	15	ng/l	
377-73-1	PFMPA	ND	31	7.7	ng/l	
863090-89-5	PFMBA	ND	31	8.8	ng/l	
151772-58-6	NFDHA	ND	31	9.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	62	15	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	62	15	ng/l	
113507-82-7	PFEESA	ND	31	7.7	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	77	38	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	380	77	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	380	77	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	6% [c]	6% [c]	20-150%
	13C5-PFPeA	25%	19% [c]	20-150%
	13C5-PFHxA	71%	76%	20-150%
	13C4-PFHpA	126%	110%	20-150%
	13C8-PFOA	103%	105%	20-150%
	13C9-PFNA	101%	87%	20-150%
	13C6-PFDA	97%	95%	20-150%
	13C7-PFUnDA	100%	95%	20-150%
	13C2-PFDoDA	94%	92%	20-150%
	13C2-PFTeDA	87%	86%	20-150%
	13C3-PFBS	80%	72%	20-150%
	13C3-PFHxS	107%	86%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OML LW2		
Lab Sample ID:	FC10719-1	**Date Sampled:**	10/24/23
Matrix:	AQ - Water	**Date Received:**	10/26/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%	74%	20-150%
	13C8-FOSA	95%	71%	20-150%
	d3-MeFOSA	81%	69%	20-150%
	d5-EtFOSA	92%	72%	20-150%
	d3-MeFOSAA	126%	67%	20-150%
	d5-EtFOSAA	118%	65%	20-150%
	d7-MeFOSE	84%	69%	20-150%
	d9-EtFOSE	87%	71%	20-150%
	13C2-4:2FTS	35%	38%	20-180%
	13C2-6:2FTS	270% [c]	94%	20-180%
	13C2-8:2FTS	179%	77%	20-180%
	13C3-HFPO-DA	58%	58%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Result is from Run# 2
(c) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

FC10719

SGS - ORLANDO JOB # : PAGE_____OF_____

SGS - ORLANDO Quote #	SKIFF #

Client / Reporting Information

Company Name: NDDEQ - PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58503
Project Contact: Suggs Email: Jsuggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed)
Sampler 1: Sampler 2:

Project Information

Project Name: NDDEQ PFAS
Street: 4201 - Normandy St
City: Bismarck State: ND
Project #
Fax #
Client Purchase Order #

Analytical Information

ACID633IST40 X

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION: OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NaOH+ZnAc	DI WATER	MEOH	LAB USE ONLY
1	OML LW2	10/24/23	12:15	IS	LIQ	3		X								

INITIAL ASSESSMENT SF

LABEL VERIFICATION ZD

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- ☐ COMMERCIAL "A" (RESULTS ONLY)
- ☐ COMMERCIAL "B" (RESULTS PLUS QC)
- ☐ REDT1 (EPA LEVEL 3)
- ☐ FULLT1 (EPA LEVEL 4)
- ☐ EDD'S

Comments / Remarks

landfill Leachate

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	ASchiwal	10/25/23	2 FEDEX	3 Fx		4 10/26/23 930
	Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5			6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 3.6 IR1

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

FC10719: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: fc10719 **Client:** NDDEQ- PFAS **Project:** NDDEQ PFAS

Date / Time Received: 10/26/2023 9:30:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7855 2912 3601

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6);

Cooler Temps (Corrected) °C: Cooler 1: (4.0);

Cooler Information	Y	or	N
1. Custody Seals Present:	☑		☐
2. Custody Seals Intact:	☑		☐
3. Temp criteria achieved:	☑		☐
4. Cooler temp verification:	IR Gun		
5. Cooler media:	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑

	W	or	S	N/A
3. Type of TB Received	☐		☐	☐

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles:	☑		☐	
2. Samples presented properly	☑		☐	
3. Suffiient volume/containers recv'd for analysis	☑		☐	
4. Condition of sample:	Intact			
5. Sample recv'd within HT	☑		☐	
6. Dates/Times/IDs on COC match sample label	☐		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☐
11. % Solids Jar Received?	☐		☐	☐
12. Residual Chlorine Present?	☐		☐	☐

Misc Information

Number of Encores: 25 Gram 5 Gram

Number of Lab Filtered Metals:

Test Strip Lot #s: pH 0-3: 226422 pH 10-12: Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #

Comments

SM001
Rev. Date 05/04/17

Technician: SHAYLAP Date: 10/26/2023 12:02:04 PM Reviewer: Date:

FC10719: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Instrument Blank

Job Number: FC10719
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q787-IBLK	4Q53943.D	1	11/16/23	AL	n/a	n/a	S4Q787

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10719-1

CAS No.	Compound	Result	RL	MDL	Units	Q
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	0.0022	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	

Instrument Blank

Job Number: FC10719
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q787-IBLK	4Q53943.D	1	11/16/23	AL	n/a	n/a	S4Q787

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10719-1

CAS No.	Compound	Result	RL	MDL	Units	Q
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	104%	20-150%
	13C5-PFHxA	103%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	105%	20-150%
	13C6-PFDA	101%	20-150%
	13C7-PFUnDA	114%	20-150%
	13C2-PFDoDA	103%	20-150%
	13C2-PFTeDA	96%	20-150%
	13C3-PFBS	105%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	101%	20-150%
	d3-MeFOSA	93%	20-150%
	d5-EtFOSA	100%	20-150%
	d3-MeFOSAA	127%	20-150%
	d5-EtFOSAA	104%	20-150%
	d7-MeFOSE	96%	20-150%
	d9-EtFOSE	99%	20-150%
	13C2-4:2FTS	141%	20-180%
	13C2-6:2FTS	121%	20-180%
	13C2-8:2FTS	127%	20-180%
	13C3-HFPO-DA	104%	20-150%

Instrument Blank

Job Number: FC10719
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q788-IBLK	4Q54014.D	1	11/17/23	AL	n/a	n/a	S4Q788

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10719-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	107%	20-150%
	13C2-PFDoDA	101%	20-150%
	13C2-PFTeDA	96%	20-150%
	13C3-PFBS	95%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	104%	20-150%
	d3-MeFOSA	95%	20-150%
	d5-EtFOSA	102%	20-150%
	d3-MeFOSAA	115%	20-150%
	d5-EtFOSAA	111%	20-150%
	d7-MeFOSE	104%	20-150%
	d9-EtFOSE	104%	20-150%
	13C2-4:2FTS	110%	20-180%
	13C2-6:2FTS	104%	20-180%
	13C2-8:2FTS	107%	20-180%
	13C3-HFPO-DA	99%	20-150%

Continuing Calibration Blank

Job Number: FC10719
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q788-ICCB	4Q54029.D	1	11/17/23	AL	n/a	n/a	S4Q788

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10719-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	94%	20-150%
	13C5-PFHxA	95%	20-150%
	13C4-PFHpA	97%	20-150%
	13C8-PFOA	96%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	94%	20-150%
	13C7-PFUnDA	108%	20-150%
	13C2-PFDoDA	94%	20-150%
	13C2-PFTeDA	96%	20-150%
	13C3-PFBS	96%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	92%	20-150%
	13C8-FOSA	94%	20-150%
	d3-MeFOSA	86%	20-150%
	d5-EtFOSA	89%	20-150%
	d3-MeFOSAA	92%	20-150%
	d5-EtFOSAA	95%	20-150%
	d7-MeFOSE	90%	20-150%
	d9-EtFOSE	88%	20-150%
	13C2-4:2FTS	120%	20-180%
	13C2-6:2FTS	101%	20-180%
	13C2-8:2FTS	91%	20-180%
	13C3-HFPO-DA	93%	20-150%

Method Blank Summary

Job Number: FC10719
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP59-MB	4Q53948.D	1	11/16/23	AL	11/13/23	OP59	S4Q787

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10719-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.067	0.033	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.033	0.0083	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.017	0.0042	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.017	0.0042	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.017	0.0042	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.017	0.0051	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.017	0.0042	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.017	0.0050	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.017	0.0050	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.017	0.0070	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.017	0.0042	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.017	0.0083	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.017	0.0093	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.017	0.0083	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.017	0.0083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.017	0.0083	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.017	0.0083	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.017	0.0083	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.017	0.0095	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.067	0.033	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.067	0.033	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.067	0.034	ug/l	
754-91-6	PFOSA	ND	0.017	0.0083	ug/l	
31506-32-8	MeFOSA	ND	0.017	0.0083	ug/l	
4151-50-2	EtFOSA	ND	0.017	0.0083	ug/l	
2355-31-9	MeFOSAA	ND	0.017	0.0083	ug/l	
2991-50-6	EtFOSAA	ND	0.017	0.011	ug/l	
24448-09-7	MeFOSE	ND	0.17	0.083	ug/l	
1691-99-2	EtFOSE	ND	0.17	0.083	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.067	0.017	ug/l	
919005-14-4	ADONA	ND	0.067	0.017	ug/l	
377-73-1	PFMPA	ND	0.033	0.0083	ug/l	
863090-89-5	PFMBA	ND	0.033	0.0095	ug/l	
151772-58-6	NFDHA	ND	0.033	0.010	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.067	0.017	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.067	0.017	ug/l	

Method Blank Summary

Job Number: FC10719
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP59-MB	4Q53948.D	1	11/16/23	AL	11/13/23	OP59	S4Q787

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10719-1

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.033	0.0083	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.083	0.042	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.42	0.083	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.42	0.083	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	116%	20-150%
	13C5-PFPeA	123%	20-150%
	13C5-PFHxA	116%	20-150%
	13C4-PFHpA	119%	20-150%
	13C8-PFOA	121%	20-150%
	13C9-PFNA	115%	20-150%
	13C6-PFDA	121%	20-150%
	13C7-PFUnDA	120%	20-150%
	13C2-PFDoDA	106%	20-150%
	13C2-PFTeDA	92%	20-150%
	13C3-PFBS	118%	20-150%
	13C3-PFHxS	114%	20-150%
	13C8-PFOS	115%	20-150%
	13C8-FOSA	113%	20-150%
	d3-MeFOSA	95%	20-150%
	d5-EtFOSA	112%	20-150%
	d3-MeFOSAA	139%	20-150%
	d5-EtFOSAA	125%	20-150%
	d7-MeFOSE	103%	20-150%
	d9-EtFOSE	110%	20-150%
	13C2-4:2FTS	141%	20-180%
	13C2-6:2FTS	152%	20-180%
	13C2-8:2FTS	138%	20-180%
	13C3-HFPO-DA	118%	20-150%

Blank Spike Summary

Job Number: FC10719
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP59-LLBS	4Q53947.D	1	11/16/23	AL	11/13/23	OP59	S4Q787

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10719-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.133	0.118	89	40-150
2706-90-3	Perfluoropentanoic acid	0.0667	0.0581	87	40-150
307-24-4	Perfluorohexanoic acid	0.0333	0.0317	95	40-150
375-85-9	Perfluoroheptanoic acid	0.0333	0.0301	90	40-150
335-67-1	Perfluorooctanoic acid	0.0333	0.0271	81	40-150
375-95-1	Perfluorononanoic acid	0.0333	0.0319	96	40-150
335-76-2	Perfluorodecanoic acid	0.0333	0.0312	94	40-150
2058-94-8	Perfluoroundecanoic acid	0.0333	0.0300	90	40-150
307-55-1	Perfluorododecanoic acid	0.0333	0.0304	91	40-150
72629-94-8	Perfluorotridecanoic acid	0.0333	0.0269	81	40-150
376-06-7	Perfluorotetradecanoic acid	0.0333	0.0257	77	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0296	0.0254	86	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0314	0.0271	86	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0305	0.0301	99	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0318	0.0296	93	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0309	0.0275	89	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0321	0.0294	92	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0322	0.0286	89	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0323	0.0231	71	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.125	0.112	90	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.127	0.118	93	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.128	0.111	87	40-150
754-91-6	PFOSA	0.0333	0.0298	89	40-150
31506-32-8	MeFOSA	0.0667	0.0576	86	40-150
4151-50-2	EtFOSA	0.0667	0.0558	84	40-150
2355-31-9	MeFOSAA	0.0333	0.0322	97	40-150
2991-50-6	EtFOSAA	0.0333	0.0335	101	40-150
24448-09-7	MeFOSE	0.167	0.146	88	40-150
1691-99-2	EtFOSE	0.167	0.163	98	40-150
13252-13-6	HFPO-DA (GenX)	0.0667	0.0637	96	40-150
919005-14-4	ADONA	0.063	0.0678	108	40-150
377-73-1	PFMPA	0.0667	0.0681	102	40-150
863090-89-5	PFMBA	0.0667	0.0667	100	40-150
151772-58-6	NFDHA	0.0667	0.0872	131	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0623	0.0584	94	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.063	0.0510	81	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC10719
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP59-LLBS	4Q53947.D	1	11/16/23	AL	11/13/23	OP59	S4Q787

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10719-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0593	0.0654	110	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.167	0.144	86	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.833	0.752	90	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.833	0.771	93	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	104%	20-150%
	13C5-PFPeA	109%	20-150%
	13C5-PFHxA	105%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	111%	20-150%
	13C9-PFNA	102%	20-150%
	13C6-PFDA	108%	20-150%
	13C7-PFUnDA	107%	20-150%
	13C2-PFDoDA	94%	20-150%
	13C2-PFTeDA	77%	20-150%
	13C3-PFBS	106%	20-150%
	13C3-PFHxS	104%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	103%	20-150%
	d3-MeFOSA	85%	20-150%
	d5-EtFOSA	90%	20-150%
	d3-MeFOSAA	118%	20-150%
	d5-EtFOSAA	111%	20-150%
	d7-MeFOSE	87%	20-150%
	d9-EtFOSE	93%	20-150%
	13C2-4:2FTS	138%	20-180%
	13C2-6:2FTS	139%	20-180%
	13C2-8:2FTS	144%	20-180%
	13C3-HFPO-DA	109%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC10719
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP59-BS	4Q53946.D	1	11/16/23	AL	11/13/23	OP59	S4Q787

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10719-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.833	0.776	93	40-150
2706-90-3	Perfluoropentanoic acid	0.417	0.377	90	40-150
307-24-4	Perfluorohexanoic acid	0.208	0.201	96	40-150
375-85-9	Perfluoroheptanoic acid	0.208	0.197	95	40-150
335-67-1	Perfluorooctanoic acid	0.208	0.181	87	40-150
375-95-1	Perfluorononanoic acid	0.208	0.208	100	40-150
335-76-2	Perfluorodecanoic acid	0.208	0.190	91	40-150
2058-94-8	Perfluoroundecanoic acid	0.208	0.209	100	40-150
307-55-1	Perfluorododecanoic acid	0.208	0.208	100	40-150
72629-94-8	Perfluorotridecanoic acid	0.208	0.184	88	40-150
376-06-7	Perfluorotetradecanoic acid	0.208	0.191	92	40-150
375-73-5	Perfluorobutanesulfonic acid	0.185	0.174	94	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.196	0.180	92	40-150
355-46-4	Perfluorohexanesulfonic acid	0.19	0.203	107	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.199	0.192	97	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.193	0.180	93	40-150
68259-12-1	Perfluorononanesulfonic acid	0.2	0.199	99	40-150
335-77-3	Perfluorodecanesulfonic acid	0.201	0.181	90	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.202	0.161	80	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.781	0.787	101	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.792	0.791	100	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.8	0.830	104	40-150
754-91-6	PFOSA	0.208	0.191	92	40-150
31506-32-8	MeFOSA	0.417	0.412	99	40-150
4151-50-2	EtFOSA	0.417	0.393	94	40-150
2355-31-9	MeFOSAA	0.208	0.188	90	40-150
2991-50-6	EtFOSAA	0.208	0.225	108	40-150
24448-09-7	MeFOSE	1.04	0.950	91	40-150
1691-99-2	EtFOSE	1.04	0.983	94	40-150
13252-13-6	HFPO-DA (GenX)	0.417	0.384	92	40-150
919005-14-4	ADONA	0.394	0.464	118	40-150
377-73-1	PFMPA	0.417	0.442	106	40-150
863090-89-5	PFMBA	0.417	0.436	105	40-150
151772-58-6	NFDHA	0.417	0.567	136	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.39	0.380	98	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.394	0.322	82	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC10719
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP59-BS	4Q53946.D	1	11/16/23	AL	11/13/23	OP59	S4Q787

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10719-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.371	0.442	119	40-150
356-02-5	3:3 Fluorotelomer carboxylate	1.04	0.936	90	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	5.21	5.26	101	40-150
812-70-4	7:3 Fluorotelomer carboxylate	5.21	5.64	108	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	107%	20-150%
	13C5-PFHxA	97%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	109%	20-150%
	13C9-PFNA	102%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	96%	20-150%
	13C2-PFDoDA	87%	20-150%
	13C2-PFTeDA	77%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	97%	20-150%
	13C8-FOSA	101%	20-150%
	d3-MeFOSA	84%	20-150%
	d5-EtFOSA	85%	20-150%
	d3-MeFOSAA	112%	20-150%
	d5-EtFOSAA	100%	20-150%
	d7-MeFOSE	79%	20-150%
	d9-EtFOSE	84%	20-150%
	13C2-4:2FTS	119%	20-180%
	13C2-6:2FTS	131%	20-180%
	13C2-8:2FTS	123%	20-180%
	13C3-HFPO-DA	104%	20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC10719
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP59-DUP	4Q54033.D	5	11/17/23	AL	11/13/23	OP59	S4Q788
FC10719-1	4Q53949.D	1	11/16/23	AL	11/13/23	OP59	S4Q787
FC10719-1 [a]	4Q54032.D	5	11/17/23	AL	11/13/23	OP59	S4Q788

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10719-1

CAS No.	Compound	FC10719-1 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	15.1 [b]		2.91		135*	30
2706-90-3	Perfluoropentanoic acid	ND		ND		nc	30
307-24-4	Perfluorohexanoic acid	0.418		0.367		13	30
375-85-9	Perfluoroheptanoic acid	0.125		0.0740	J	51*	30
335-67-1	Perfluorooctanoic acid	0.138		0.0865		46*	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	ND		ND		nc	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	0.0897		0.0813	J	10	30
2706-91-4	Perfluoropentanesulfonic acid	0.0741		0.0617	J	18	30
355-46-4	Perfluorohexanesulfonic acid	0.0932		0.0953		2	30
375-92-8	Perfluoroheptanesulfonic acid	0.0099	J	ND		200*	30
1763-23-1	Perfluorooctanesulfonic acid	0.0842		ND		200*	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	0.0665		ND		200*	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND [b]		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC10719
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP59-DUP	4Q54033.D	5	11/17/23	AL	11/13/23	OP59	S4Q788
FC10719-1	4Q53949.D	1	11/16/23	AL	11/13/23	OP59	S4Q787
FC10719-1 [a]	4Q54032.D	5	11/17/23	AL	11/13/23	OP59	S4Q788

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC10719-1

CAS No.	Compound	FC10719-1 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC10719-1	FC10719-1	Limits
	13C4-PFBA	9%* [c]	6%* [c]	6%* [c]	20-150%
	13C5-PFPeA	31%	25%	19%* [c]	20-150%
	13C5-PFHxA	88%	71%	76%	20-150%
	13C4-PFHpA	97%	126%	110%	20-150%
	13C8-PFOA	78%	103%	105%	20-150%
	13C9-PFNA	62%	101%	87%	20-150%
	13C6-PFDA	43%	97%	95%	20-150%
	13C7-PFUnDA	46%	100%	95%	20-150%
	13C2-PFDoDA	40%	94%	92%	20-150%
	13C2-PFTeDA	40%	87%	86%	20-150%
	13C3-PFBS	93%	80%	72%	20-150%
	13C3-PFHxS	95%	107%	86%	20-150%
	13C8-PFOS	61%	97%	74%	20-150%
	13C8-FOSA	33%	95%	71%	20-150%
	d3-MeFOSA	43%	81%	69%	20-150%
	d5-EtFOSA	38%	92%	72%	20-150%
	d3-MeFOSAA	18%* [c]	126%	67%	20-150%
	d5-EtFOSAA	12%* [c]	118%	65%	20-150%
	d7-MeFOSE	31%	84%	69%	20-150%
	d9-EtFOSE	35%	87%	71%	20-150%
	13C2-4:2FTS	27%	35%	38%	20-180%
	13C2-6:2FTS	75%	270%* [c]	94%	20-180%
	13C2-8:2FTS	34%	179%	77%	20-180%
	13C3-HFPO-DA	80%	58%	58%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Result is from Run #2.
(c) Outside control limits.

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC11206

Sampling Dates: 11/02/23 - 11/09/23



Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
ssuggs@nd.gov

ATTN: Shannon Suggs

Total number of pages in report: **60**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC11206

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
FC11206-1	11/02/23	10:09	SS	11/14/23	AQ	Ground Water	FLYING JL
FC11206-2	11/02/23	10:28	SS	11/14/23	AQ	Ground Water	FLYING JB
FC11206-3	11/02/23	11:57	SS	11/14/23	AQ	Ground Water	FLYING JU
FC11206-4	11/02/23	14:45	SS	11/14/23	SO	Soil	RED RIVER SUPPLY
FC11206-5	11/03/23	13:55	SS	11/14/23	AQ	Ground Water	MARATHON
FC11206-6	11/09/23	12:12	SS	11/14/23	SO	Soil	INDUSTRIAL PLATING

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: FC11206
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 11/02/23 thru 11/09/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC11206-1	**FLYING JL**					
No hits reported in this sample.						
FC11206-2	**FLYING JB**					
No hits reported in this sample.						
FC11206-3	**FLYING JU**					
Perfluorohexanoic acid		24.3	2.2	0.56	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		8.7	2.2	0.56	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		15.0	2.2	0.56	ng/l	EPA DRAFT 1633
FC11206-4	**RED RIVER SUPPLY**					
Perfluorooctanesulfonic acid		0.42	0.21	0.11	ug/kg	EPA DRAFT 1633
FC11206-5	**MARATHON**					
Perfluorobutanoic acid		54.6	8.6	4.3	ng/l	EPA DRAFT 1633
Perfluoropentanoic acid		177	4.3	1.1	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		213	2.2	0.54	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		129	2.2	0.54	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		279	2.2	0.54	ng/l	EPA DRAFT 1633
Perfluorononanoic acid		3.4	2.2	0.66	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		61.0	2.2	1.1	ng/l	EPA DRAFT 1633
Perfluoropentanesulfonic acid		78.0	2.2	1.2	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		269	2.2	1.1	ng/l	EPA DRAFT 1633
Perfluoroheptanesulfonic acid		3.4	2.2	1.1	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		3.7	2.2	1.1	ng/l	EPA DRAFT 1633
6:2 Fluorotelomer sulfonate		10.7	8.6	4.3	ng/l	EPA DRAFT 1633
FC11206-6	**INDUSTRIAL PLATING**					
Perfluorododecanoic acid		0.15 J	0.24	0.12	ug/kg	EPA DRAFT 1633
Perfluorooctanesulfonic acid		0.30	0.24	0.12	ug/kg	EPA DRAFT 1633

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	FLYING JL		
Lab Sample ID:	FC11206-1	**Date Sampled:**	11/02/23
Matrix:	AQ - Ground Water	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q28857.D	1	11/23/23 08:20	AL	11/20/23 09:30	OP204	S6Q398
Run #2	6Q29177.D	1	11/30/23 16:44	MV	11/30/23 10:50	OP358	S6Q403
Run #3 [a]	6Q29176.D	1	11/30/23 16:30	MV	11/30/23 10:50	OP358	S6Q403

	Initial Volume	Final Volume
Run #1	435 ml	5.0 ml
Run #2	25.0 ml	5.0 ml
Run #3	390 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND [b]	160	80	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.6	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.3	0.57	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.3	0.57	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.3	0.57	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.3	0.70	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.3	0.57	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.3	0.69	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.3	0.69	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.3	0.97	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.3	0.57	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.3	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.3	1.3	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.3	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.3	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.3	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.3	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.3	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.3	1.3	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	9.2	4.6	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	9.2	4.6	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	9.2	4.7	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.3	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FLYING JL		
Lab Sample ID:	FC11206-1	**Date Sampled:**	11/02/23
Matrix:	AQ - Ground Water	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
31506-32-8	MeFOSA	ND	2.3	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.3	1.1	ng/l	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.3	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.3	1.5	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	23	11	ng/l	
1691-99-2	EtFOSE	ND	23	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	9.2	2.3	ng/l	
919005-14-4	ADONA	ND	9.2	2.3	ng/l	
377-73-1	PFMPA	ND	4.6	1.1	ng/l	
863090-89-5	PFMBA	ND	4.6	1.3	ng/l	
151772-58-6	NFDHA	ND	4.6	1.4	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	9.2	2.3	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	9.2	2.3	ng/l	
113507-82-7	PFEESA	ND	4.6	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [c]	ND	11	5.7	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	57	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	57	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C4-PFBA	19% [d]	24%	15%	20-150%
	13C5-PFPeA	85%	25%	78%	20-150%
	13C5-PFHxA	98%	26%	98%	20-150%
	13C4-PFHpA	92%	26%	109%	20-150%
	13C8-PFOA	87%	26%	101%	20-150%
	13C9-PFNA	92%	26%	105%	20-150%
	13C6-PFDA	80%	28%	96%	20-150%
	13C7-PFUnDA	84%	28%	90%	20-150%
	13C2-PFDoDA	65%	25%	69%	20-150%
	13C2-PFTeDA	55%	25%	66%	20-150%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FLYING JL		
Lab Sample ID:	FC11206-1	**Date Sampled:**	11/02/23
Matrix:	AQ - Ground Water	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C3-PFBS	114%	27%	109%	20-150%
	13C3-PFHxS	94%	27%	106%	20-150%
	13C8-PFOS	98%	25%	106%	20-150%
	13C8-FOSA	98%	27%	115%	20-150%
	d3-MeFOSA	81%	27%	81%	20-150%
	d5-EtFOSA	80%	31%	80%	20-150%
	d3-MeFOSAA	90%	25%	109%	20-150%
	d5-EtFOSAA	92%	27%	101%	20-150%
	d7-MeFOSE	74%	25%	70%	20-150%
	d9-EtFOSE	76%	27%	74%	20-150%
	13C2-4:2FTS	91%	27%	90%	20-180%
	13C2-6:2FTS	88%	30%	102%	20-180%
	13C2-8:2FTS	86%	27%	97%	20-180%
	13C3-HFPO-DA	91%	28%	104%	20-150%

(a) Confirmation run.
(b) Result is from Run# 2
(c) Associated BS outside control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FLYING JB		
Lab Sample ID:	FC11206-2	**Date Sampled:**	11/02/23
Matrix:	AQ - Ground Water	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q28860.D	1	11/23/23 09:03	AL	11/20/23 09:30	OP204	S6Q398
Run #2							

	Initial Volume	Final Volume
Run #1	505 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.9	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	0.99	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.60	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.59	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.59	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.83	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	0.99	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	0.99	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	0.99	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	0.99	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	0.99	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	0.99	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.9	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.9	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.9	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	0.99	ng/l	
31506-32-8	MeFOSA	ND	2.0	0.99	ng/l	
4151-50-2	EtFOSA	ND	2.0	0.99	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FLYING JB		
Lab Sample ID:	FC11206-2	**Date Sampled:**	11/02/23
Matrix:	AQ - Ground Water	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	0.99	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	9.9	ng/l	
1691-99-2	EtFOSE	ND	20	9.9	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.9	2.0	ng/l	
919005-14-4	ADONA	ND	7.9	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	0.99	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.9	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.9	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	0.99	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.9	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	50	9.9	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	9.9	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	89%		20-150%
	13C5-PFPeA	90%		20-150%
	13C5-PFHxA	88%		20-150%
	13C4-PFHpA	91%		20-150%
	13C8-PFOA	88%		20-150%
	13C9-PFNA	81%		20-150%
	13C6-PFDA	85%		20-150%
	13C7-PFUnDA	79%		20-150%
	13C2-PFDoDA	74%		20-150%
	13C2-PFTeDA	66%		20-150%
	13C3-PFBS	84%		20-150%
	13C3-PFHxS	86%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FLYING JB		
Lab Sample ID:	FC11206-2	**Date Sampled:**	11/02/23
Matrix:	AQ - Ground Water	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	91%		20-150%
	13C8-FOSA	75%		20-150%
	d3-MeFOSA	72%		20-150%
	d5-EtFOSA	76%		20-150%
	d3-MeFOSAA	81%		20-150%
	d5-EtFOSAA	88%		20-150%
	d7-MeFOSE	72%		20-150%
	d9-EtFOSE	80%		20-150%
	13C2-4:2FTS	94%		20-180%
	13C2-6:2FTS	94%		20-180%
	13C2-8:2FTS	97%		20-180%
	13C3-HFPO-DA	90%		20-150%

(a) Associated BS outside control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FLYING JU		
Lab Sample ID:	FC11206-3	**Date Sampled:**	11/02/23
Matrix:	AQ - Ground Water	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q28861.D	1	11/23/23 09:17	AL	11/20/23 09:30	OP204	S6Q398
Run #2	6Q29179.D	1	11/30/23 17:13	MV	11/30/23 10:50	OP358	S6Q403
Run #3 [a]	6Q29178.D	1	11/30/23 16:58	MV	11/30/23 10:50	OP358	S6Q403

	Initial Volume	Final Volume
Run #1	450 ml	5.0 ml
Run #2	60.0 ml	5.0 ml
Run #3	430 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND [b]	67	33	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.4	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	24.3	2.2	0.56	ng/l	
375-85-9	Perfluoroheptanoic acid	8.7	2.2	0.56	ng/l	
335-67-1	Perfluorooctanoic acid	15.0	2.2	0.56	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.2	0.68	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.56	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.67	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.67	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.93	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.56	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.3	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.9	4.4	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.9	4.4	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.9	4.6	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FLYING JU		
Lab Sample ID:	FC11206-3	**Date Sampled:**	11/02/23
Matrix:	AQ - Ground Water	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.5	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.9	2.2	ng/l	
919005-14-4	ADONA	ND	8.9	2.2	ng/l	
377-73-1	PFMPA	ND	4.4	1.1	ng/l	
863090-89-5	PFMBA	ND	4.4	1.3	ng/l	
151772-58-6	NFDHA	ND	4.4	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.9	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.9	2.2	ng/l	
113507-82-7	PFEESA	ND	4.4	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [c]	ND	11	5.6	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	56	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	56	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C4-PFBA	7% [d]	88%	7%	20-150%
	13C5-PFPeA	25%	109%	34%	20-150%
	13C5-PFHxA	70%	96%	84%	20-150%
	13C4-PFHpA	92%	99%	103%	20-150%
	13C8-PFOA	82%	100%	95%	20-150%
	13C9-PFNA	98%	107%	102%	20-150%
	13C6-PFDA	89%	93%	86%	20-150%
	13C7-PFUnDA	89%	87%	77%	20-150%
	13C2-PFDoDA	82%	81%	65%	20-150%
	13C2-PFTeDA	79%	90%	61%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FLYING JU		
Lab Sample ID:	FC11206-3	**Date Sampled:**	11/02/23
Matrix:	AQ - Ground Water	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C3-PFBS	124%	108%	104%	20-150%
	13C3-PFHxS	100%	110%	98%	20-150%
	13C8-PFOS	100%	100%	100%	20-150%
	13C8-FOSA	120%	107%	120%	20-150%
	d3-MeFOSA	91%	100%	84%	20-150%
	d5-EtFOSA	97%	105%	84%	20-150%
	d3-MeFOSAA	127%	110%	120%	20-150%
	d5-EtFOSAA	133%	94%	132%	20-150%
	d7-MeFOSE	93%	92%	79%	20-150%
	d9-EtFOSE	96%	98%	78%	20-150%
	13C2-4:2FTS	57%	115%	67%	20-180%
	13C2-6:2FTS	138%	113%	127%	20-180%
	13C2-8:2FTS	140%	114%	131%	20-180%
	13C3-HFPO-DA	52%	100%	65%	20-150%

(a) Confirmation run.
(b) Result is from Run# 2
(c) Associated BS outside control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RED RIVER SUPPLY		
Lab Sample ID:	FC11206-4	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.3
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q29126.D	1	11/30/23 02:06	MV	11/27/23 10:00	OP299	S6Q402
Run #2							

	Initial Weight	Final Volume
Run #1	5.02 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.85	0.53	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.43	0.11	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.21	0.11	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.21	0.11	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.21	0.11	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.21	0.12	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.21	0.11	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.21	0.14	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.21	0.11	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.21	0.11	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.21	0.11	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.21	0.11	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.21	0.17	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.21	0.17	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.21	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.42	0.21	0.11	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.21	0.19	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.21	0.15	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.21	0.16	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.85	0.43	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.85	0.43	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.85	0.64	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.21	0.11	ug/kg	
31506-32-8	MeFOSA	ND	0.21	0.15	ug/kg	
4151-50-2	EtFOSA	ND	0.21	0.11	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RED RIVER SUPPLY		
Lab Sample ID:	FC11206-4	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.3
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.21	0.17	ug/kg	
2991-50-6	EtFOSAA	ND	0.21	0.21	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.1	1.1	ug/kg	
1691-99-2	EtFOSE	ND	2.1	1.1	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.85	0.31	ug/kg	
919005-14-4	ADONA	ND	0.85	0.36	ug/kg	
377-73-1	PFMPA	ND	0.43	0.21	ug/kg	
863090-89-5	PFMBA	ND	0.43	0.21	ug/kg	
151772-58-6	NFDHA	ND	0.43	0.26	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.85	0.47	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.85	0.43	ug/kg	
113507-82-7	PFEESA	ND	0.43	0.21	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.54	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.3	1.2	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.3	1.4	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	72%		20-150%
	13C5-PFPeA	74%		20-150%
	13C5-PFHxA	74%		20-150%
	13C4-PFHpA	74%		20-150%
	13C8-PFOA	71%		20-150%
	13C9-PFNA	72%		20-150%
	13C6-PFDA	74%		20-150%
	13C7-PFUnDA	63%		20-150%
	13C2-PFDoDA	63%		20-150%
	13C2-PFTeDA	52%		20-150%
	13C3-PFBS	70%		20-150%
	13C3-PFHxS	74%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RED RIVER SUPPLY		
Lab Sample ID:	FC11206-4	**Date Sampled:**	11/02/23
Matrix:	SO - Soil	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	93.3
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	78%		20-150%
	13C8-FOSA	71%		20-150%
	d3-MeFOSA	65%		20-150%
	d5-EtFOSA	64%		20-150%
	d3-MeFOSAA	70%		20-150%
	d5-EtFOSAA	69%		20-150%
	d7-MeFOSE	53%		20-150%
	d9-EtFOSE	58%		20-150%
	13C2-4:2FTS	74%		20-180%
	13C2-6:2FTS	81%		20-180%
	13C2-8:2FTS	82%		20-180%
	13C3-HFPO-DA	80%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MARATHON		
Lab Sample ID:	FC11206-5	**Date Sampled:**	11/03/23
Matrix:	AQ - Ground Water	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q28862.D	1	11/23/23 09:32	AL	11/20/23 09:30	OP204	S6Q398
Run #2							

	Initial Volume	Final Volume
Run #1	465 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	54.6	8.6	4.3	ng/l	
2706-90-3	Perfluoropentanoic acid	177	4.3	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	213	2.2	0.54	ng/l	
375-85-9	Perfluoroheptanoic acid	129	2.2	0.54	ng/l	
335-67-1	Perfluorooctanoic acid	279	2.2	0.54	ng/l	
375-95-1	Perfluorononanoic acid	3.4	2.2	0.66	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.54	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.65	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.65	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.90	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.54	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	61.0	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	78.0	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	269	2.2	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	3.4	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	3.7	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.6	4.3	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	10.7	8.6	4.3	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.6	4.4	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MARATHON		
Lab Sample ID:	FC11206-5	**Date Sampled:**	11/03/23
Matrix:	AQ - Ground Water	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.6	2.2	ng/l	
919005-14-4	ADONA	ND	8.6	2.2	ng/l	
377-73-1	PFMPA	ND	4.3	1.1	ng/l	
863090-89-5	PFMBA	ND	4.3	1.2	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.6	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.6	2.2	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	11	5.4	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	54	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	54	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	29%		20-150%
	13C5-PFPeA	88%		20-150%
	13C5-PFHxA	86%		20-150%
	13C4-PFHpA	90%		20-150%
	13C8-PFOA	87%		20-150%
	13C9-PFNA	95%		20-150%
	13C6-PFDA	79%		20-150%
	13C7-PFUnDA	73%		20-150%
	13C2-PFDoDA	67%		20-150%
	13C2-PFTeDA	70%		20-150%
	13C3-PFBS	97%		20-150%
	13C3-PFHxS	96%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MARATHON		
Lab Sample ID:	FC11206-5	**Date Sampled:**	11/03/23
Matrix:	AQ - Ground Water	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		20-150%
	13C8-FOSA	104%		20-150%
	d3-MeFOSA	92%		20-150%
	d5-EtFOSA	92%		20-150%
	d3-MeFOSAA	97%		20-150%
	d5-EtFOSAA	100%		20-150%
	d7-MeFOSE	92%		20-150%
	d9-EtFOSE	93%		20-150%
	13C2-4:2FTS	84%		20-180%
	13C2-6:2FTS	95%		20-180%
	13C2-8:2FTS	89%		20-180%
	13C3-HFPO-DA	78%		20-150%

(a) Associated BS outside control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INDUSTRIAL PLATING		
Lab Sample ID:	FC11206-6	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.4
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q29129.D	1	11/30/23 02:49	MV	11/27/23 10:00	OP299	S6Q402
Run #2							

	Initial Weight	Final Volume
Run #1	4.98 g	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.96	0.60	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.48	0.12	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.24	0.12	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.24	0.12	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.24	0.12	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.24	0.14	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.24	0.12	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.24	0.16	ug/kg	
307-55-1	Perfluorododecanoic acid	0.15	0.24	0.12	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	ND	0.24	0.12	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.24	0.12	ug/kg	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.24	0.12	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.24	0.19	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.24	0.19	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.24	0.17	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	0.30	0.24	0.12	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.24	0.22	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.24	0.17	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.24	0.18	ug/kg	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.96	0.48	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.96	0.48	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.96	0.72	ug/kg	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	0.24	0.12	ug/kg	
31506-32-8	MeFOSA	ND	0.24	0.16	ug/kg	
4151-50-2	EtFOSA	ND	0.24	0.12	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INDUSTRIAL PLATING		
Lab Sample ID:	FC11206-6	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.4
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.24	0.19	ug/kg	
2991-50-6	EtFOSAA	ND	0.24	0.24	ug/kg	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	2.4	1.2	ug/kg	
1691-99-2	EtFOSE	ND	2.4	1.2	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	0.96	0.35	ug/kg	
919005-14-4	ADONA	ND	0.96	0.40	ug/kg	
377-73-1	PFMPA	ND	0.48	0.24	ug/kg	
863090-89-5	PFMBA	ND	0.48	0.24	ug/kg	
151772-58-6	NFDHA	ND	0.48	0.29	ug/kg	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.96	0.53	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.96	0.48	ug/kg	
113507-82-7	PFEESA	ND	0.48	0.24	ug/kg	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.61	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	6.0	1.4	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	6.0	1.5	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	77%		20-150%
	13C5-PFPeA	78%		20-150%
	13C5-PFHxA	77%		20-150%
	13C4-PFHpA	79%		20-150%
	13C8-PFOA	73%		20-150%
	13C9-PFNA	86%		20-150%
	13C6-PFDA	76%		20-150%
	13C7-PFUnDA	77%		20-150%
	13C2-PFDoDA	69%		20-150%
	13C2-PFTeDA	65%		20-150%
	13C3-PFBS	73%		20-150%
	13C3-PFHxS	76%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INDUSTRIAL PLATING		
Lab Sample ID:	FC11206-6	**Date Sampled:**	11/09/23
Matrix:	SO - Soil	**Date Received:**	11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	83.4
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	78%		20-150%
	13C8-FOSA	75%		20-150%
	d3-MeFOSA	70%		20-150%
	d5-EtFOSA	71%		20-150%
	d3-MeFOSAA	77%		20-150%
	d5-EtFOSAA	82%		20-150%
	d7-MeFOSE	60%		20-150%
	d9-EtFOSE	62%		20-150%
	13C2-4:2FTS	86%		20-180%
	13C2-6:2FTS	87%		20-180%
	13C2-8:2FTS	80%		20-180%
	13C3-HFPO-DA	83%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # SKIFF# FC11206

Client / Reporting Information

Company Name: NDDEQ PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58503
Project Contact: S Suggs Email: ssuggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed)
Sampler 1: Sampler 2:

Project Information

Project Name: NDDEQ PFAS
Street 4201 Normandy St
City Bismarck State ND
Project #
Fax #
Client Purchase Order #

Analytical Information

UCFD 1633 LIST 40

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LAB USE ONLY
1	Flying J L	11/2/23	10:09am	1S	GW											
2	Flying J B	11/2/23	10:28am	1S	Liq											
3	Flying J U	11/2/23	11:57am	1S	GW											
4	Red River Supply	11/2/23	2:45pm	1S	SO											
5	Marathon	11/3/23	1:55pm	1S	GW											
6	Industrial Plating	11/9/23	12:12	1S	SO											

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- ☐ COMMERCIAL "A" (RESULTS ONLY)
- ☐ COMMERCIAL "B" (RESULTS PLUS QC)
- ☐ REDT1 (EPA LEVEL 3)
- ☐ FULLT1 (EPA LEVEL 4)
- ☐ EDD'S

Comments / Remarks

INITIAL ASSESSMENT ZD
LABEL VERIFICATION ZB

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 S Suggs	11/13/23	2 FedEx	3 11/13/23 Fx		4 11/14/23 9/5
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 2.4 IR #1

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

4.1

4

FC11206: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: fc11206 **Client:** NDDEQ PFAS **Project:** NDDEQ PFAS

Date / Time Received: 11/14/2023 9:15:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7863 1369 4540

Cooler Temps (Raw Measured) °C: Cooler 1: (2.4);

Cooler Temps (Corrected) °C: Cooler 1: (2.8);

Cooler Information	Y	or	N
1. Custody Seals Present:	☑		☐
2. Custody Seals Intact:	☑		☐
3. Temp criteria achieved:	☑		☐
4. Cooler temp verification:	IR Gun		
5. Cooler media:	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑

	W	or	S	N/A
3. Type of TB Received	☐		☐	☐

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles:	☑		☐	
2. Samples presented properly	☑		☐	
3. Suffiient volume/containers recv'd for analysis	☑		☐	
4. Condition of sample:	Intact			
5. Sample recv'd within HT	☑		☐	
6. Dates/Times/IDs on COC match sample label	☐		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☐
11. % Solids Jar Received?	☐		☐	☐
12. Residual Chlorine Present?	☐		☐	☐

Misc Information

Number of Encores: 25 Gram 5 Gram

Number of Lab Filtered Metals:

Test Strip Lot #s: pH 0-3: 226422 pH 10-12: Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #

Comments

SM001
Rev. Date 05/04/17

Technician: SHAYLAP Date: 11/14/2023 12:12:05 PM Reviewer: Date:

FC11206: Chain of Custody
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MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP204-MB	6Q28850.D	1	11/23/23	AL	11/20/23	OP204	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-1, FC11206-2, FC11206-3, FC11206-5

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP204-MB	6Q28850.D	1	11/23/23	AL	11/20/23	OP204	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-1, FC11206-2, FC11206-3, FC11206-5

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	106%	20-150%
	13C5-PFHxA	103%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	92%	20-150%
	13C6-PFDA	93%	20-150%
	13C7-PFUnDA	97%	20-150%
	13C2-PFDoDA	85%	20-150%
	13C2-PFTeDA	87%	20-150%
	13C3-PFBS	98%	20-150%
	13C3-PFHxS	104%	20-150%
	13C8-PFOS	91%	20-150%
	13C8-FOSA	89%	20-150%
	d3-MeFOSA	82%	20-150%
	d5-EtFOSA	87%	20-150%
	d3-MeFOSAA	101%	20-150%
	d5-EtFOSAA	95%	20-150%
	d7-MeFOSE	87%	20-150%
	d9-EtFOSE	92%	20-150%
	13C2-4:2FTS	114%	20-180%
	13C2-6:2FTS	115%	20-180%
	13C2-8:2FTS	110%	20-180%
	13C3-HFPO-DA	110%	20-150%

Method Blank Summary

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP299-MB	6Q29119.D	1	11/30/23	MV	11/27/23	OP299	S6Q402

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-4, FC11206-6

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.80	0.50	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.40	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.20	0.10	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.20	0.10	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.20	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.20	0.12	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.20	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.20	0.13	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.20	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.20	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.20	0.10	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	0.20	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.20	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.20	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.20	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.20	0.10	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.20	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.20	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.20	0.15	ug/kg	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.80	0.40	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.80	0.40	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.80	0.60	ug/kg	
754-91-6	PFOSA	ND	0.20	0.10	ug/kg	
31506-32-8	MeFOSA	ND	0.20	0.14	ug/kg	
4151-50-2	EtFOSA	ND	0.20	0.10	ug/kg	
2355-31-9	MeFOSAA	ND	0.20	0.16	ug/kg	
2991-50-6	EtFOSAA	ND	0.20	0.20	ug/kg	
24448-09-7	MeFOSE	ND	2.0	1.0	ug/kg	
1691-99-2	EtFOSE	ND	2.0	1.0	ug/kg	
13252-13-6	HFPO-DA (GenX)	ND	0.80	0.29	ug/kg	
919005-14-4	ADONA	ND	0.80	0.34	ug/kg	
377-73-1	PFMPA	ND	0.40	0.20	ug/kg	
863090-89-5	PFMBA	ND	0.40	0.20	ug/kg	
151772-58-6	NFDHA	ND	0.40	0.24	ug/kg	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.80	0.44	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.80	0.40	ug/kg	

Method Blank Summary

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP299-MB	6Q29119.D	1	11/30/23	MV	11/27/23	OP299	S6Q402

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-4, FC11206-6

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.40	0.20	ug/kg	
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.0	0.51	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	5.0	1.2	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	5.0	1.3	ug/kg	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	84%	20-150%
	13C5-PFPeA	84%	20-150%
	13C5-PFHxA	86%	20-150%
	13C4-PFHpA	82%	20-150%
	13C8-PFOA	76%	20-150%
	13C9-PFNA	88%	20-150%
	13C6-PFDA	87%	20-150%
	13C7-PFUnDA	83%	20-150%
	13C2-PFDoDA	71%	20-150%
	13C2-PFTeDA	60%	20-150%
	13C3-PFBS	74%	20-150%
	13C3-PFHxS	78%	20-150%
	13C8-PFOS	88%	20-150%
	13C8-FOSA	78%	20-150%
	d3-MeFOSA	72%	20-150%
	d5-EtFOSA	74%	20-150%
	d3-MeFOSAA	81%	20-150%
	d5-EtFOSAA	88%	20-150%
	d7-MeFOSE	55%	20-150%
	d9-EtFOSE	60%	20-150%
	13C2-4:2FTS	87%	20-180%
	13C2-6:2FTS	84%	20-180%
	13C2-8:2FTS	94%	20-180%
	13C3-HFPO-DA	89%	20-150%

Instrument Blank

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q398-IBLK	6Q28786.D	1	11/22/23	AL	n/a	n/a	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-1, FC11206-2, FC11206-3, FC11206-5

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q398-IBLK	6Q28786.D	1	11/22/23	AL	n/a	n/a	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-1, FC11206-2, FC11206-3, FC11206-5

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	105%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	97%	20-150%
	13C4-PFHpA	100%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	108%	20-150%
	13C7-PFUnDA	115%	20-150%
	13C2-PFDoDA	110%	20-150%
	13C2-PFTeDA	107%	20-150%
	13C3-PFBS	93%	20-150%
	13C3-PFHxS	94%	20-150%
	13C8-PFOS	96%	20-150%
	13C8-FOSA	103%	20-150%
	d3-MeFOSA	93%	20-150%
	d5-EtFOSA	98%	20-150%
	d3-MeFOSAA	98%	20-150%
	d5-EtFOSAA	100%	20-150%
	d7-MeFOSE	101%	20-150%
	d9-EtFOSE	94%	20-150%
	13C2-4:2FTS	112%	20-180%
	13C2-6:2FTS	100%	20-180%
	13C2-8:2FTS	100%	20-180%
	13C3-HFPO-DA	104%	20-150%

Instrument Blank

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q398-IBLK	6Q28875.D	1	11/23/23	AL	n/a	n/a	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-1, FC11206-2, FC11206-3, FC11206-5

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q398-IBLK	6Q28875.D	1	11/23/23	AL	n/a	n/a	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-1, FC11206-2, FC11206-3, FC11206-5

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	101%	20-150%
	13C8-PFOA	94%	20-150%
	13C9-PFNA	106%	20-150%
	13C6-PFDA	103%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	93%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	104%	20-150%
	13C8-FOSA	106%	20-150%
	d3-MeFOSA	101%	20-150%
	d5-EtFOSA	101%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	113%	20-150%
	d7-MeFOSE	104%	20-150%
	d9-EtFOSE	103%	20-150%
	13C2-4:2FTS	110%	20-180%
	13C2-6:2FTS	105%	20-180%
	13C2-8:2FTS	108%	20-180%
	13C3-HFPO-DA	103%	20-150%

Instrument Blank

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q402-IBLK	6Q29080.D	1	11/29/23	MV	n/a	n/a	S6Q402

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-4, FC11206-6

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	2.0	0.31	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.0	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.0	0.10	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	1.0	0.10	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	1.0	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	ND	1.0	0.12	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.0	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.0	0.13	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.0	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.0	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.0	0.10	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.0	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.0	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.0	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.0	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.0	0.10	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	1.0	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.0	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.0	0.15	ug/kg	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	2.0	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	2.0	0.35	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	2.0	0.61	ug/kg	
754-91-6	PFOSA	ND	1.0	0.10	ug/kg	
31506-32-8	MeFOSA	ND	1.0	0.14	ug/kg	
4151-50-2	EtFOSA	ND	1.0	0.10	ug/kg	
2355-31-9	MeFOSAA	ND	1.0	0.16	ug/kg	
2991-50-6	EtFOSAA	ND	1.0	0.20	ug/kg	
24448-09-7	MeFOSE	ND	5.0	0.64	ug/kg	
1691-99-2	EtFOSE	ND	5.0	0.83	ug/kg	
13252-13-6	HFPO-DA (GenX)	ND	2.0	0.29	ug/kg	
919005-14-4	ADONA	ND	2.0	0.34	ug/kg	
377-73-1	PFMPA	ND	1.0	0.11	ug/kg	
863090-89-5	PFMBA	ND	1.0	0.10	ug/kg	
151772-58-6	NFDHA	ND	2.0	0.24	ug/kg	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	2.0	0.44	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	2.0	0.36	ug/kg	

Instrument Blank

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q402-IBLK	6Q29080.D	1	11/29/23	MV	n/a	n/a	S6Q402

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-4, FC11206-6

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	1.0	0.10	ug/kg	
356-02-5	3:3 Fluorotelomer carboxylate	ND	2.5	0.51	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	13	1.2	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	13	1.3	ug/kg	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	104%	20-150%
	13C5-PFHxA	99%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	100%	20-150%
	13C6-PFDA	106%	20-150%
	13C7-PFUnDA	98%	20-150%
	13C2-PFDoDA	100%	20-150%
	13C2-PFTeDA	105%	20-150%
	13C3-PFBS	95%	20-150%
	13C3-PFHxS	93%	20-150%
	13C8-PFOS	102%	20-150%
	13C8-FOSA	109%	20-150%
	d3-MeFOSA	103%	20-150%
	d5-EtFOSA	112%	20-150%
	d3-MeFOSAA	108%	20-150%
	d5-EtFOSAA	108%	20-150%
	d7-MeFOSE	100%	20-150%
	d9-EtFOSE	101%	20-150%
	13C2-4:2FTS	111%	20-180%
	13C2-6:2FTS	108%	20-180%
	13C2-8:2FTS	103%	20-180%
	13C3-HFPO-DA	113%	20-150%

Continuing Calibration Blank

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q398-ICCB	6Q28847.D	1	11/23/23	AL	n/a	n/a	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-1

CAS No.	Compound	Result	RL	MDL	Units	Q
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	

Continuing Calibration Blank

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q398-ICCB	6Q28847.D	1	11/23/23	AL	n/a	n/a	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-1

CAS No.	Compound	Result	RL	MDL	Units	Q
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	105%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	112%	20-150%
	13C6-PFDA	95%	20-150%
	13C7-PFUnDA	104%	20-150%
	13C2-PFDoDA	96%	20-150%
	13C2-PFTeDA	100%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	100%	20-150%
	13C8-PFOS	101%	20-150%
	13C8-FOSA	98%	20-150%
	d3-MeFOSA	89%	20-150%
	d5-EtFOSA	101%	20-150%
	d3-MeFOSAA	102%	20-150%
	d5-EtFOSAA	105%	20-150%
	d7-MeFOSE	95%	20-150%
	d9-EtFOSE	96%	20-150%
	13C2-4:2FTS	112%	20-180%
	13C2-6:2FTS	111%	20-180%
	13C2-8:2FTS	105%	20-180%
	13C3-HFPO-DA	104%	20-150%

Continuing Calibration Blank

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q398-ICCB	6Q28859.D	1	11/23/23	AL	n/a	n/a	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-2, FC11206-3, FC11206-5

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q398-ICCB	6Q28859.D	1	11/23/23	AL	n/a	n/a	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-2, FC11206-3, FC11206-5

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	102%	20-150%
	13C7-PFUnDA	105%	20-150%
	13C2-PFDoDA	98%	20-150%
	13C2-PFTeDA	101%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	98%	20-150%
	13C8-PFOS	109%	20-150%
	13C8-FOSA	104%	20-150%
	d3-MeFOSA	94%	20-150%
	d5-EtFOSA	103%	20-150%
	d3-MeFOSAA	105%	20-150%
	d5-EtFOSAA	111%	20-150%
	d7-MeFOSE	101%	20-150%
	d9-EtFOSE	101%	20-150%
	13C2-4:2FTS	113%	20-180%
	13C2-6:2FTS	114%	20-180%
	13C2-8:2FTS	105%	20-180%
	13C3-HFPO-DA	102%	20-150%

Continuing Calibration Blank

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q402-ICCB	6Q29123.D	1	11/30/23	MV	n/a	n/a	S6Q402

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-4, FC11206-6

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	2.0	0.31	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.0	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.0	0.10	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	1.0	0.10	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	1.0	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	ND	1.0	0.12	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.0	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.0	0.13	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.0	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.0	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.0	0.10	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.0	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.0	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.0	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.0	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.0	0.10	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	1.0	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.0	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.0	0.15	ug/kg	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	2.0	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	2.0	0.35	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	2.0	0.61	ug/kg	
754-91-6	PFOSA	ND	1.0	0.10	ug/kg	
31506-32-8	MeFOSA	ND	1.0	0.14	ug/kg	
4151-50-2	EtFOSA	ND	1.0	0.10	ug/kg	
2355-31-9	MeFOSAA	ND	1.0	0.16	ug/kg	
2991-50-6	EtFOSAA	ND	1.0	0.20	ug/kg	
24448-09-7	MeFOSE	ND	5.0	0.64	ug/kg	
1691-99-2	EtFOSE	ND	5.0	0.83	ug/kg	
13252-13-6	HFPO-DA (GenX)	ND	2.0	0.29	ug/kg	
919005-14-4	ADONA	ND	2.0	0.34	ug/kg	
377-73-1	PFMPA	ND	1.0	0.11	ug/kg	
863090-89-5	PFMBA	ND	1.0	0.10	ug/kg	
151772-58-6	NFDHA	ND	2.0	0.24	ug/kg	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	2.0	0.44	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	2.0	0.36	ug/kg	

Continuing Calibration Blank

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q402-ICCB	6Q29123.D	1	11/30/23	MV	n/a	n/a	S6Q402

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-4, FC11206-6

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	1.0	0.10	ug/kg	
356-02-5	3:3 Fluorotelomer carboxylate	ND	2.5	0.51	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	13	1.2	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	13	1.3	ug/kg	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	96%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	94%	20-150%
	13C7-PFUnDA	96%	20-150%
	13C2-PFDoDA	96%	20-150%
	13C2-PFTeDA	93%	20-150%
	13C3-PFBS	96%	20-150%
	13C3-PFHxS	98%	20-150%
	13C8-PFOS	97%	20-150%
	13C8-FOSA	105%	20-150%
	d3-MeFOSA	98%	20-150%
	d5-EtFOSA	101%	20-150%
	d3-MeFOSAA	109%	20-150%
	d5-EtFOSAA	107%	20-150%
	d7-MeFOSE	90%	20-150%
	d9-EtFOSE	96%	20-150%
	13C2-4:2FTS	111%	20-180%
	13C2-6:2FTS	116%	20-180%
	13C2-8:2FTS	125%	20-180%
	13C3-HFPO-DA	116%	20-150%

Continuing Calibration Blank

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q403-ICCB	6Q29172.D	1	11/30/23	MV	n/a	n/a	S6Q403

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-1, FC11206-3

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	96%	20-150%
	13C8-PFOA	104%	20-150%
	13C9-PFNA	105%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	100%	20-150%
	13C3-PFBS	93%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	109%	20-150%
	13C8-FOSA	111%	20-150%
	d3-MeFOSA	99%	20-150%
	d5-EtFOSA	107%	20-150%
	d3-MeFOSAA	110%	20-150%
	d5-EtFOSAA	110%	20-150%
	d7-MeFOSE	101%	20-150%
	d9-EtFOSE	101%	20-150%
	13C2-4:2FTS	106%	20-180%
	13C2-6:2FTS	115%	20-180%
	13C2-8:2FTS	110%	20-180%
	13C3-HFPO-DA	112%	20-150%

Continuing Calibration Blank

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q398-ICCB	6Q28871.D	1	11/23/23	AL	n/a	n/a	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q398-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q398-ICCB	6Q28871.D	1	11/23/23	AL	n/a	n/a	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q398-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	104%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	107%	20-150%
	13C6-PFDA	101%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	99%	20-150%
	13C2-PFTeDA	100%	20-150%
	13C3-PFBS	98%	20-150%
	13C3-PFHxS	98%	20-150%
	13C8-PFOS	117%	20-150%
	13C8-FOSA	107%	20-150%
	d3-MeFOSA	105%	20-150%
	d5-EtFOSA	113%	20-150%
	d3-MeFOSAA	108%	20-150%
	d5-EtFOSAA	110%	20-150%
	d7-MeFOSE	110%	20-150%
	d9-EtFOSE	107%	20-150%
	13C2-4:2FTS	106%	20-180%
	13C2-6:2FTS	105%	20-180%
	13C2-8:2FTS	99%	20-180%
	13C3-HFPO-DA	109%	20-150%

Continuing Calibration Blank

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q402-ICCB	6Q29111.D	1	11/29/23	MV	n/a	n/a	S6Q402

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP299-BS, OP299-LLBS, OP299-MB

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	2.0	0.31	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	1.0	0.10	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	1.0	0.10	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	1.0	0.10	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	1.0	0.10	ug/kg	
375-95-1	Perfluorononanoic acid	ND	1.0	0.12	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	1.0	0.10	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	1.0	0.13	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	1.0	0.10	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	1.0	0.10	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	1.0	0.10	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	1.0	0.10	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.0	0.16	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	1.0	0.16	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.0	0.15	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.0	0.10	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	1.0	0.18	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	1.0	0.14	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.0	0.15	ug/kg	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	2.0	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	2.0	0.35	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	2.0	0.61	ug/kg	
754-91-6	PFOSA	ND	1.0	0.10	ug/kg	
31506-32-8	MeFOSA	ND	1.0	0.14	ug/kg	
4151-50-2	EtFOSA	ND	1.0	0.10	ug/kg	
2355-31-9	MeFOSAA	ND	1.0	0.16	ug/kg	
2991-50-6	EtFOSAA	ND	1.0	0.20	ug/kg	
24448-09-7	MeFOSE	ND	5.0	0.64	ug/kg	
1691-99-2	EtFOSE	ND	5.0	0.83	ug/kg	
13252-13-6	HFPO-DA (GenX)	ND	2.0	0.29	ug/kg	
919005-14-4	ADONA	ND	2.0	0.34	ug/kg	
377-73-1	PFMPA	ND	1.0	0.11	ug/kg	
863090-89-5	PFMBA	ND	1.0	0.10	ug/kg	
151772-58-6	NFDHA	ND	2.0	0.24	ug/kg	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	2.0	0.44	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	2.0	0.36	ug/kg	

Continuing Calibration Blank

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q402-ICCB	6Q29111.D	1	11/29/23	MV	n/a	n/a	S6Q402

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP299-BS, OP299-LLBS, OP299-MB

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	1.0	0.10	ug/kg	
356-02-5	3:3 Fluorotelomer carboxylate	ND	2.5	0.51	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	13	1.2	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	13	1.3	ug/kg	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	97%	20-150%
	13C9-PFNA	100%	20-150%
	13C6-PFDA	109%	20-150%
	13C7-PFUnDA	102%	20-150%
	13C2-PFDoDA	105%	20-150%
	13C2-PFTeDA	105%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	104%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	110%	20-150%
	d3-MeFOSA	101%	20-150%
	d5-EtFOSA	118%	20-150%
	d3-MeFOSAA	123%	20-150%
	d5-EtFOSAA	115%	20-150%
	d7-MeFOSE	102%	20-150%
	d9-EtFOSE	101%	20-150%
	13C2-4:2FTS	109%	20-180%
	13C2-6:2FTS	114%	20-180%
	13C2-8:2FTS	112%	20-180%
	13C3-HFPO-DA	108%	20-150%

Blank Spike Summary

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP204-LLBS	6Q28849.D	1	11/23/23	AL	11/20/23	OP204	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-1, FC11206-2, FC11206-3, FC11206-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0157	98	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0081	101	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0040	100	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0043	108	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0041	103	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0040	100	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0039	98	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0041	103	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0040	100	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0040	100	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0039	98	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0041	116	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0039	104	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0040	109	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0045	118	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0037	100	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0036	94	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0036	93	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0035	90	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0152	101	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0155	102	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0181	118	40-150
754-91-6	PFOSA	0.004	0.0045	113	40-150
31506-32-8	MeFOSA	0.008	0.0077	96	40-150
4151-50-2	EtFOSA	0.008	0.0087	109	40-150
2355-31-9	MeFOSAA	0.004	0.0044	110	40-150
2991-50-6	EtFOSAA	0.004	0.0034	85	40-150
24448-09-7	MeFOSE	0.02	0.0199	100	40-150
1691-99-2	EtFOSE	0.02	0.0220	110	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0077	96	40-150
919005-14-4	ADONA	0.00756	0.0074	98	40-150
377-73-1	PFMPA	0.008	0.0086	108	40-150
863090-89-5	PFMBA	0.008	0.0082	103	40-150
151772-58-6	NFDHA	0.008	0.0075	94	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0056	75	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0052	69	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP204-LLBS	6Q28849.D	1	11/23/23	AL	11/20/23	OP204	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-1, FC11206-2, FC11206-3, FC11206-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0077	108	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0198	99	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.101	101	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.0975	98	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	99%	20-150%
	13C4-PFHpA	95%	20-150%
	13C8-PFOA	92%	20-150%
	13C9-PFNA	81%	20-150%
	13C6-PFDA	83%	20-150%
	13C7-PFUnDA	73%	20-150%
	13C2-PFDoDA	72%	20-150%
	13C2-PFTeDA	72%	20-150%
	13C3-PFBS	92%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	79%	20-150%
	13C8-FOSA	75%	20-150%
	d3-MeFOSA	66%	20-150%
	d5-EtFOSA	67%	20-150%
	d3-MeFOSAA	82%	20-150%
	d5-EtFOSAA	82%	20-150%
	d7-MeFOSE	66%	20-150%
	d9-EtFOSE	69%	20-150%
	13C2-4:2FTS	109%	20-180%
	13C2-6:2FTS	105%	20-180%
	13C2-8:2FTS	90%	20-180%
	13C3-HFPO-DA	106%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP299-LLBS	6Q29118.D	1	11/30/23	MV	11/27/23	OP299	S6Q402

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-4, FC11206-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
375-22-4	Perfluorobutanoic acid	1.6	2.0	125	40-150
2706-90-3	Perfluoropentanoic acid	0.8	0.99	124	40-150
307-24-4	Perfluorohexanoic acid	0.4	0.55	138	40-150
375-85-9	Perfluoroheptanoic acid	0.4	0.48	120	40-150
335-67-1	Perfluorooctanoic acid	0.4	0.47	118	40-150
375-95-1	Perfluorononanoic acid	0.4	0.45	113	40-150
335-76-2	Perfluorodecanoic acid	0.4	0.47	118	40-150
2058-94-8	Perfluoroundecanoic acid	0.4	0.50	125	40-150
307-55-1	Perfluorododecanoic acid	0.4	0.51	128	40-150
72629-94-8	Perfluorotridecanoic acid	0.4	0.45	113	40-150
376-06-7	Perfluorotetradecanoic acid	0.4	0.48	120	40-150
375-73-5	Perfluorobutanesulfonic acid	0.355	0.49	138	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.376	0.46	122	40-150
355-46-4	Perfluorohexanesulfonic acid	0.366	0.46	126	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.381	0.50	131	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.371	0.49	132	40-150
68259-12-1	Perfluorononanesulfonic acid	0.385	0.51	133	40-150
335-77-3	Perfluorodecanesulfonic acid	0.386	0.50	130	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.388	0.37	95	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	1.5	1.8	120	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	1.52	1.9	125	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	1.54	1.9	124	40-150
754-91-6	PFOSA	0.4	0.48	120	40-150
31506-32-8	MeFOSA	0.8	0.78	98	40-150
4151-50-2	EtFOSA	0.8	0.77	96	40-150
2355-31-9	MeFOSAA	0.4	0.52	130	40-150
2991-50-6	EtFOSAA	0.4	0.49	123	40-150
24448-09-7	MeFOSE	2	1.9	95	40-150
1691-99-2	EtFOSE	2	2.1	105	40-150
13252-13-6	HFPO-DA (GenX)	0.8	0.78	98	40-150
919005-14-4	ADONA	0.756	0.68	90	40-150
377-73-1	PFMPA	0.8	0.85	106	40-150
863090-89-5	PFMBA	0.8	0.81	101	40-150
151772-58-6	NFDHA	0.8	0.87	109	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.748	0.68	91	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.756	0.62	82	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP299-LLBS	6Q29118.D	1	11/30/23	MV	11/27/23	OP299	S6Q402

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-4, FC11206-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
113507-82-7	PFEESA	0.712	0.81	114	40-150
356-02-5	3:3 Fluorotelomer carboxylate	2	1.1	55	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	10	9.4	94	40-150
812-70-4	7:3 Fluorotelomer carboxylate	10	10.4	104	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	83%	20-150%
	13C5-PFPeA	87%	20-150%
	13C5-PFHxA	80%	20-150%
	13C4-PFHpA	89%	20-150%
	13C8-PFOA	84%	20-150%
	13C9-PFNA	87%	20-150%
	13C6-PFDA	85%	20-150%
	13C7-PFUnDA	78%	20-150%
	13C2-PFDoDA	73%	20-150%
	13C2-PFTeDA	59%	20-150%
	13C3-PFBS	80%	20-150%
	13C3-PFHxS	86%	20-150%
	13C8-PFOS	84%	20-150%
	13C8-FOSA	77%	20-150%
	d3-MeFOSA	73%	20-150%
	d5-EtFOSA	74%	20-150%
	d3-MeFOSAA	88%	20-150%
	d5-EtFOSAA	89%	20-150%
	d7-MeFOSE	58%	20-150%
	d9-EtFOSE	63%	20-150%
	13C2-4:2FTS	95%	20-180%
	13C2-6:2FTS	98%	20-180%
	13C2-8:2FTS	99%	20-180%
	13C3-HFPO-DA	93%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP204-BS	6Q28848.D	1	11/23/23	AL	11/20/23	OP204	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-1, FC11206-2, FC11206-3, FC11206-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.104	104	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0511	102	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0271	108	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0253	101	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0255	102	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0266	106	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0281	112	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0272	109	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0267	107	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0258	103	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0269	108	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0239	108	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0254	108	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0257	112	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0263	110	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0222	96	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0242	101	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0232	96	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0196	81	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.0979	104	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.107	113	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.104	108	40-150
754-91-6	PFOSA	0.025	0.0263	105	40-150
31506-32-8	MeFOSA	0.05	0.0532	106	40-150
4151-50-2	EtFOSA	0.05	0.0562	112	40-150
2355-31-9	MeFOSAA	0.025	0.0267	107	40-150
2991-50-6	EtFOSAA	0.025	0.0259	104	40-150
24448-09-7	MeFOSE	0.125	0.136	109	40-150
1691-99-2	EtFOSE	0.125	0.125	100	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0540	108	40-150
919005-14-4	ADONA	0.0473	0.0514	109	40-150
377-73-1	PFMPA	0.05	0.0420	84	40-150
863090-89-5	PFMBA	0.05	0.0530	106	40-150
151772-58-6	NFDHA	0.05	0.0587	117	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0472	101	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0476	101	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP204-BS	6Q28848.D	1	11/23/23	AL	11/20/23	OP204	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-1, FC11206-2, FC11206-3, FC11206-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0530	119	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.230	184*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.686	110	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.691	111	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	47%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	96%	20-150%
	13C4-PFHpA	100%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	93%	20-150%
	13C6-PFDA	88%	20-150%
	13C7-PFUnDA	87%	20-150%
	13C2-PFDoDA	80%	20-150%
	13C2-PFTeDA	70%	20-150%
	13C3-PFBS	93%	20-150%
	13C3-PFHxS	94%	20-150%
	13C8-PFOS	103%	20-150%
	13C8-FOSA	98%	20-150%
	d3-MeFOSA	86%	20-150%
	d5-EtFOSA	77%	20-150%
	d3-MeFOSAA	102%	20-150%
	d5-EtFOSAA	105%	20-150%
	d7-MeFOSE	67%	20-150%
	d9-EtFOSE	74%	20-150%
	13C2-4:2FTS	101%	20-180%
	13C2-6:2FTS	103%	20-180%
	13C2-8:2FTS	102%	20-180%
	13C3-HFPO-DA	101%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP299-BS	6Q29117.D	1	11/29/23	MV	11/27/23	OP299	S6Q402

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-4, FC11206-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
375-22-4	Perfluorobutanoic acid	10	12.4	124	40-150
2706-90-3	Perfluoropentanoic acid	5	6.3	126	40-150
307-24-4	Perfluorohexanoic acid	2.5	3.2	128	40-150
375-85-9	Perfluoroheptanoic acid	2.5	3.2	128	40-150
335-67-1	Perfluorooctanoic acid	2.5	3.1	124	40-150
375-95-1	Perfluorononanoic acid	2.5	3.1	124	40-150
335-76-2	Perfluorodecanoic acid	2.5	3.2	128	40-150
2058-94-8	Perfluoroundecanoic acid	2.5	3.5	140	40-150
307-55-1	Perfluorododecanoic acid	2.5	3.3	132	40-150
72629-94-8	Perfluorotridecanoic acid	2.5	3.0	120	40-150
376-06-7	Perfluorotetradecanoic acid	2.5	3.1	124	40-150
375-73-5	Perfluorobutanesulfonic acid	2.22	3.1	140	40-150
2706-91-4	Perfluoropentanesulfonic acid	2.35	2.9	123	40-150
355-46-4	Perfluorohexanesulfonic acid	2.29	2.8	123	40-150
375-92-8	Perfluoroheptanesulfonic acid	2.38	3.0	126	40-150
1763-23-1	Perfluorooctanesulfonic acid	2.32	2.9	125	40-150
68259-12-1	Perfluorononanesulfonic acid	2.41	3.2	133	40-150
335-77-3	Perfluorodecanesulfonic acid	2.41	2.8	116	40-150
79780-39-5	Perfluorododecanesulfonic aci	2.43	2.2	91	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	9.38	11.6	124	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	9.5	12.4	131	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	9.6	11.7	122	40-150
754-91-6	PFOSA	2.5	3.0	120	40-150
31506-32-8	MeFOSA	5	5.0	100	40-150
4151-50-2	EtFOSA	5	5.3	106	40-150
2355-31-9	MeFOSAA	2.5	3.2	128	40-150
2991-50-6	EtFOSAA	2.5	3.3	132	40-150
24448-09-7	MeFOSE	12.5	11.9	95	40-150
1691-99-2	EtFOSE	12.5	12.2	98	40-150
13252-13-6	HFPO-DA (GenX)	5	5.0	100	40-150
919005-14-4	ADONA	4.73	4.4	93	40-150
377-73-1	PFMPA	5	5.3	106	40-150
863090-89-5	PFMBA	5	5.3	106	40-150
151772-58-6	NFDHA	5	5.3	106	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	4.68	4.3	92	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	4.73	4.2	89	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP299-BS	6Q29117.D	1	11/29/23	MV	11/27/23	OP299	S6Q402

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-4, FC11206-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
113507-82-7	PFEESA	4.45	4.8	108	40-150
356-02-5	3:3 Fluorotelomer carboxylate	12.5	7.0	56	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	62.5	57.7	92	40-150
812-70-4	7:3 Fluorotelomer carboxylate	62.5	60.5	97	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	85%	20-150%
	13C5-PFPeA	84%	20-150%
	13C5-PFHxA	83%	20-150%
	13C4-PFHpA	82%	20-150%
	13C8-PFOA	87%	20-150%
	13C9-PFNA	81%	20-150%
	13C6-PFDA	82%	20-150%
	13C7-PFUnDA	74%	20-150%
	13C2-PFDoDA	73%	20-150%
	13C2-PFTeDA	60%	20-150%
	13C3-PFBS	72%	20-150%
	13C3-PFHxS	78%	20-150%
	13C8-PFOS	84%	20-150%
	13C8-FOSA	73%	20-150%
	d3-MeFOSA	70%	20-150%
	d5-EtFOSA	67%	20-150%
	d3-MeFOSAA	86%	20-150%
	d5-EtFOSAA	86%	20-150%
	d7-MeFOSE	55%	20-150%
	d9-EtFOSE	61%	20-150%
	13C2-4:2FTS	85%	20-180%
	13C2-6:2FTS	86%	20-180%
	13C2-8:2FTS	92%	20-180%
	13C3-HFPO-DA	92%	20-150%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP204-MS	6Q28868.D	1	11/23/23	AL	11/20/23	OP204	S6Q398
OP204-MSD	6Q28869.D	1	11/23/23	AL	11/20/23	OP204	S6Q398
FC11347-3	6Q28867.D	1	11/23/23	AL	11/20/23	OP204	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-1, FC11206-2, FC11206-3, FC11206-5

CAS No.	Compound	FC11347-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
375-22-4	Perfluorobutanoic acid	0.0250		0.1	0.128	103	0.105	0.136	105	6	40-150/30
2706-90-3	Perfluoropentanoic acid	0.0144		0.05	0.0733	118	0.0526	0.0839	132	13	40-150/30
307-24-4	Perfluorohexanoic acid	ND		0.025	0.0322	129	0.0263	0.0274	104	16	40-150/30
375-85-9	Perfluoroheptanoic acid	0.0012	J	0.025	0.0284	109	0.0263	0.0305	111	7	40-150/30
335-67-1	Perfluorooctanoic acid	0.0092		0.025	0.0356	106	0.0263	0.0411	121	14	40-150/30
375-95-1	Perfluorononanoic acid	0.00079	J	0.025	0.0267	104	0.0263	0.0270	100	1	40-150/30
335-76-2	Perfluorodecanoic acid	ND		0.025	0.0255	102	0.0263	0.0252	96	1	40-150/30
2058-94-8	Perfluoroundecanoic acid	ND		0.025	0.0275	110	0.0263	0.0312	119	13	40-150/30
307-55-1	Perfluorododecanoic acid	ND		0.025	0.0305	122	0.0263	0.0299	114	2	40-150/30
72629-94-8	Perfluorotridecanoic acid	ND		0.025	0.0274	110	0.0263	0.0270	103	1	40-150/30
376-06-7	Perfluorotetradecanoic acid	ND		0.025	0.0257	103	0.0263	0.0276	105	7	40-150/30
375-73-5	Perfluorobutanesulfonic acid	0.0020	J	0.0222	0.0222	91	0.0233	0.0224	87	1	40-150/30
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0235	0.0248	105	0.0248	0.0287	116	15	40-150/30
355-46-4	Perfluorohexanesulfonic acid	0.0032		0.0229	0.0211	78	0.0241	0.0230	82	9	40-150/30
375-92-8	Perfluoroheptanesulfonic acid	0.0013	J	0.0238	0.0251	100	0.0251	0.0285	108	13	40-150/30
1763-23-1	Perfluorooctanesulfonic acid	0.0510		0.0232	0.0629	51	0.0244	0.0902	161* [a]	36*	40-150/30
68259-12-1	Perfluorononanesulfonic acid	ND		0.0241	0.0224	93	0.0253	0.0263	104	16	40-150/30
335-77-3	Perfluorodecanesulfonic acid	ND		0.0241	0.0210	87	0.0254	0.0256	101	20	40-150/30
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0243	0.0192	79	0.0255	0.0257	101	29	40-150/30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0938	0.103	110	0.0987	0.112	113	8	40-150/30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.095	0.0991	104	0.1	0.103	103	4	40-150/30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.096	0.111	116	0.101	0.111	110	0	40-150/30
754-91-6	PFOSA	ND		0.025	0.0292	117	0.0263	0.0292	111	0	40-150/30
31506-32-8	MeFOSA	ND		0.05	0.0497	99	0.0526	0.0522	99	5	40-150/30
4151-50-2	EtFOSA	ND		0.05	0.0547	109	0.0526	0.0566	108	3	40-150/30
2355-31-9	MeFOSAA	ND		0.025	0.0256	102	0.0263	0.0281	107	9	40-150/30
2991-50-6	EtFOSAA	ND		0.025	0.0286	114	0.0263	0.0305	116	6	40-150/30
24448-09-7	MeFOSE	ND		0.125	0.129	103	0.132	0.133	101	3	40-150/30
1691-99-2	EtFOSE	ND		0.125	0.134	107	0.132	0.136	103	1	40-150/30
13252-13-6	HFPO-DA (GenX)	ND		0.05	0.0512	102	0.0526	0.0540	103	5	40-150/30
919005-14-4	ADONA	ND		0.0473	0.0547	116	0.0497	0.0569	114	4	40-150/30
377-73-1	PFMPA	ND		0.05	0.0445	89	0.0526	0.0445	85	0	40-150/30
863090-89-5	PFMBA	ND		0.05	0.0541	108	0.0526	0.0576	109	6	40-150/30
151772-58-6	NFDHA	ND		0.05	0.0529	106	0.0526	0.0545	104	3	40-150/30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0468	0.0477	102	0.0492	0.0550	112	14	40-150/30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0473	0.0446	94	0.0497	0.0544	109	20	40-150/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP204-MS	6Q28868.D	1	11/23/23	AL	11/20/23	OP204	S6Q398
OP204-MSD	6Q28869.D	1	11/23/23	AL	11/20/23	OP204	S6Q398
FC11347-3	6Q28867.D	1	11/23/23	AL	11/20/23	OP204	S6Q398

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-1, FC11206-2, FC11206-3, FC11206-5

CAS No.	Compound	FC11347-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
113507-82-7	PFEESA	ND		0.0445	0.0487	109	0.0468	0.0490	105	1	40-150/30
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.125	0.255	204*	0.132	0.275	209*	8	40-150/30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.625	0.781	125	0.658	0.828	126	6	40-150/30
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.625	0.691	111	0.658	0.701	107	1	40-150/30

CAS No.	ID Standard Recoveries	MS	MSD	FC11347-3	Limits
	13C4-PFBA	46%	40%	47%	20-150%
	13C5-PFPeA	90%	85%	86%	20-150%
	13C5-PFHxA	86%	86%	86%	20-150%
	13C4-PFHpA	87%	85%	86%	20-150%
	13C8-PFOA	88%	85%	87%	20-150%
	13C9-PFNA	93%	86%	87%	20-150%
	13C6-PFDA	80%	85%	95%	20-150%
	13C7-PFUnDA	74%	75%	80%	20-150%
	13C2-PFDoDA	60%	72%	65%	20-150%
	13C2-PFTeDA	60%	69%	57%	20-150%
	13C3-PFBS	91%	92%	90%	20-150%
	13C3-PFHxS	99%	96%	97%	20-150%
	13C8-PFOS	99%	82%	91%	20-150%
	13C8-FOSA	90%	88%	94%	20-150%
	d3-MeFOSA	81%	84%	85%	20-150%
	d5-EtFOSA	82%	83%	86%	20-150%
	d3-MeFOSAA	96%	87%	95%	20-150%
	d5-EtFOSAA	94%	91%	83%	20-150%
	d7-MeFOSE	81%	81%	78%	20-150%
	d9-EtFOSE	79%	85%	81%	20-150%
	13C2-4:2FTS	118%	115%	115%	20-180%
	13C2-6:2FTS	97%	100%	100%	20-180%
	13C2-8:2FTS	86%	88%	96%	20-180%
	13C3-HFPO-DA	81%	75%	76%	20-150%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP299-MS	6Q29127.D	1	11/30/23	MV	11/27/23	OP299	S6Q402
OP299-MSD	6Q29128.D	1	11/30/23	MV	11/27/23	OP299	S6Q402
FC11206-4	6Q29126.D	1	11/30/23	MV	11/27/23	OP299	S6Q402

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-4, FC11206-6

CAS No.	Compound	FC11206-4 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
375-22-4	Perfluorobutanoic acid	ND		10.7	13.0	122	10.7	12.8	120	2	40-150/30
2706-90-3	Perfluoropentanoic acid	ND		5.35	6.6	123	5.33	6.6	124	0	40-150/30
307-24-4	Perfluorohexanoic acid	ND		2.67	3.5	131	2.66	3.5	131	0	40-150/30
375-85-9	Perfluoroheptanoic acid	ND		2.67	3.3	123	2.66	3.3	124	0	40-150/30
335-67-1	Perfluorooctanoic acid	ND		2.67	3.3	123	2.66	3.2	120	3	40-150/30
375-95-1	Perfluorononanoic acid	ND		2.67	3.4	127	2.66	3.5	131	3	40-150/30
335-76-2	Perfluorodecanoic acid	ND		2.67	3.3	123	2.66	3.4	128	3	40-150/30
2058-94-8	Perfluoroundecanoic acid	ND		2.67	3.5	131	2.66	3.5	131	0	40-150/30
307-55-1	Perfluorododecanoic acid	ND		2.67	3.3	123	2.66	3.6	135	9	40-150/30
72629-94-8	Perfluorotridecanoic acid	ND		2.67	3.1	116	2.66	3.0	113	3	40-150/30
376-06-7	Perfluorotetradecanoic acid	ND		2.67	3.3	123	2.66	3.3	124	0	40-150/30
375-73-5	Perfluorobutanesulfonic acid	ND		2.37	3.2	135	2.36	3.0	127	6	40-150/30
2706-91-4	Perfluoropentanesulfonic acid	ND		2.52	3.2	127	2.51	3.0	120	6	40-150/30
355-46-4	Perfluorohexanesulfonic acid	ND		2.44	3.4	139	2.43	2.9	119	16	40-150/30
375-92-8	Perfluoroheptanesulfonic acid	ND		2.55	3.5	137	2.54	3.3	130	6	40-150/30
1763-23-1	Perfluorooctanesulfonic acid	0.42		2.48	3.6	128	2.47	3.1	108	15	40-150/30
68259-12-1	Perfluorononanesulfonic acid	ND		2.57	3.5	136	2.56	3.3	129	6	40-150/30
335-77-3	Perfluorodecanesulfonic acid	ND		2.58	3.5	136	2.57	3.3	128	6	40-150/30
79780-39-5	Perfluorododecanesulfonic aci	ND		2.59	2.6	100	2.58	2.4	93	8	40-150/30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		10	12.8	128	9.99	11.7	117	9	40-150/30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		10.2	12.5	123	10.1	12.6	124	1	40-150/30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		10.3	13.1	128	10.2	13.3	130	2	40-150/30
754-91-6	PFOSA	ND		2.67	3.6	135	2.66	3.1	116	15	40-150/30
31506-32-8	MeFOSA	ND		5.35	5.2	97	5.33	5.1	96	2	40-150/30
4151-50-2	EtFOSA	ND		5.35	5.4	101	5.33	5.4	101	0	40-150/30
2355-31-9	MeFOSAA	ND		2.67	3.5	131	2.66	3.4	128	3	40-150/30
2991-50-6	EtFOSAA	ND		2.67	3.2	120	2.66	3.2	120	0	40-150/30
24448-09-7	MeFOSE	ND		13.4	12.3	92	13.3	12.2	92	1	40-150/30
1691-99-2	EtFOSE	ND		13.4	13.0	97	13.3	13.6	102	5	40-150/30
13252-13-6	HFPO-DA (GenX)	ND		5.35	5.1	95	5.33	5.2	98	2	40-150/30
919005-14-4	ADONA	ND		5.05	4.6	91	5.03	4.7	93	2	40-150/30
377-73-1	PFMPA	ND		5.35	5.7	107	5.33	5.6	105	2	40-150/30
863090-89-5	PFMBA	ND		5.35	5.6	105	5.33	5.6	105	0	40-150/30
151772-58-6	NFDHA	ND		5.35	5.7	107	5.33	5.4	101	5	40-150/30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		5	4.3	86	4.98	4.3	86	0	40-150/30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		5.05	4.3	85	5.03	4.4	87	2	40-150/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC11206
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP299-MS	6Q29127.D	1	11/30/23	MV	11/27/23	OP299	S6Q402
OP299-MSD	6Q29128.D	1	11/30/23	MV	11/27/23	OP299	S6Q402
FC11206-4	6Q29126.D	1	11/30/23	MV	11/27/23	OP299	S6Q402

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11206-4, FC11206-6

CAS No.	Compound	FC11206-4 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
113507-82-7	PFEESA	ND		4.76	5.1	107	4.74	5.1	108	0	40-150/30
356-02-5	3:3 Fluorotelomer carboxylate	ND		13.4	8.0	60	13.3	8.8	66	10	40-150/30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		66.9	59.1	88	66.6	60.8	91	3	40-150/30
812-70-4	7:3 Fluorotelomer carboxylate	ND		66.9	63.9	96	66.6	62.5	94	2	40-150/30

CAS No.	ID Standard Recoveries	MS	MSD	FC11206-4	Limits
	13C4-PFBA	73%	77%	72%	20-150%
	13C5-PFPeA	73%	81%	74%	20-150%
	13C5-PFHxA	73%	78%	74%	20-150%
	13C4-PFHpA	72%	83%	74%	20-150%
	13C8-PFOA	69%	78%	71%	20-150%
	13C9-PFNA	66%	72%	72%	20-150%
	13C6-PFDA	72%	73%	74%	20-150%
	13C7-PFUnDA	67%	71%	63%	20-150%
	13C2-PFDoDA	67%	63%	63%	20-150%
	13C2-PFTeDA	53%	50%	52%	20-150%
	13C3-PFBS	67%	75%	70%	20-150%
	13C3-PFHxS	71%	80%	74%	20-150%
	13C8-PFOS	69%	74%	78%	20-150%
	13C8-FOSA	66%	77%	71%	20-150%
	d3-MeFOSA	63%	66%	65%	20-150%
	d5-EtFOSA	62%	62%	64%	20-150%
	d3-MeFOSAA	71%	80%	70%	20-150%
	d5-EtFOSAA	73%	75%	69%	20-150%
	d7-MeFOSE	52%	51%	53%	20-150%
	d9-EtFOSE	58%	53%	58%	20-150%
	13C2-4:2FTS	73%	88%	74%	20-180%
	13C2-6:2FTS	85%	92%	81%	20-180%
	13C2-8:2FTS	85%	92%	82%	20-180%
	13C3-HFPO-DA	81%	89%	80%	20-150%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC11349

Sampling Dates: 11/15/23 - 11/16/23



Report to:

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ATTN: Shannon Suggs

Total number of pages in report: 50

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC11349

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FC11349-1	11/15/23	10:30	MK	11/18/23	AQ	Water	JAMESTOWN WWTP (INFLUENT)
FC11349-2	11/15/23	10:35	MK	11/18/23	AQ	Water	JAMESTOWN WWTP (EFFLUENT)
FC11349-3	11/15/23	14:20	MK	11/18/23	AQ	Water	FARGO WWTP (EFFLUENT)
FC11349-4	11/15/23	14:30	MK	11/18/23	AQ	Water	FARGO WWTP (INFLUENT)
FC11349-5	11/16/23	09:30	MK	11/18/23	AQ	Water	GRAND FORKS WWTP (EFFLUENT)
FC11349-6	11/16/23	09:45	MK	11/18/23	AQ	Water	GRAND FORKS WWTP (INFLUENT)

2

Summary of Hits

Job Number: FC11349
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 11/15/23 thru 11/16/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC11349-1	**JAMESTOWN WWTP (INFLUENT)**					
No hits reported in this sample.						
FC11349-2	**JAMESTOWN WWTP (EFFLUENT)**					
Perfluoropentanoic acid		8.5	4.0	0.99	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		3.4	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		0.87 J	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.6 J	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		3.4	2.0	0.99	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		1.0 J	2.0	0.99	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		1.9 J	2.0	0.99	ng/l	EPA DRAFT 1633
FC11349-3	**FARGO WWTP (EFFLUENT)**					
Perfluoropentanoic acid		3.8 J	4.2	1.1	ng/l	EPA DRAFT 1633
Perfluoropentanoic acid [a]		5.8	4.1	1.0	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		6.6	2.1	0.53	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid [a]		10.3	2.1	0.52	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid [a]		1.3 J	2.1	0.52	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.5 J	2.1	0.53	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid [b]		2.4	2.1	0.52	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		2.5	2.1	0.53	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		2.6	2.1	1.1	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid [a]		2.7	2.1	1.0	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		2.5	2.1	1.1	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid [a]		2.1	2.1	1.0	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		1.1 J	2.1	1.1	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid [b]		1.9 J	2.1	1.0	ng/l	EPA DRAFT 1633
6:2 Fluorotelomer sulfonate		21.0	8.4	4.2	ng/l	EPA DRAFT 1633
6:2 Fluorotelomer sulfonate [c]		23.2	8.2	4.1	ng/l	EPA DRAFT 1633
FC11349-4	**FARGO WWTP (INFLUENT)**					
Perfluorohexanoic acid		11.3	2.4	0.59	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		3.0	2.4	0.59	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		2.6	2.4	0.59	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		2.7	2.4	1.2	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		3.3	2.4	1.2	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		4.4	2.4	1.2	ng/l	EPA DRAFT 1633
FC11349-5	**GRAND FORKS WWTP (EFFLUENT)**					
Perfluorobutanoic acid		27.2	7.9	4.0	ng/l	EPA DRAFT 1633

Summary of Hits

Job Number: FC11349
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 11/15/23 thru 11/16/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Perfluoropentanoic acid		13.6	4.0	0.99	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		8.3	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		3.1	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		2.9	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		4.0	2.0	0.99	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		4.4	2.0	0.99	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		3.7	2.0	0.99	ng/l	EPA DRAFT 1633
FC11349-6	**GRAND FORKS WWTP (INFLUENT)**					
Perfluorohexanoic acid		12.9	2.1	0.52	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		2.9	2.1	0.52	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		4.1	2.1	0.52	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		7.2	2.1	1.0	ng/l	EPA DRAFT 1633
Perfluoropentanesulfonic acid		2.4	2.1	1.2	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		11.8	2.1	1.0	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		15.2	2.1	1.0	ng/l	EPA DRAFT 1633
5:3 Fluorotelomer carboxylate		24.2 J	52	10	ng/l	EPA DRAFT 1633

(a) Confirmation run.
(b) Confirmation run. Associated Low Level BS outside of control limits.
(c) Confirmation run. Associated Low Level BS outside of control limits high.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	JAMESTOWN WWTP (INFLUENT)		
Lab Sample ID:	FC11349-1	**Date Sampled:**	11/15/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q54387.D	1	11/27/23 16:15	AL	11/27/23 08:05	OP297A	S4Q795
Run #2 [a]	4Q54419.D	10	11/28/23 13:19	AL	11/27/23 08:05	OP297A	S4Q796

	Initial Volume	Final Volume
Run #1	60.0 ml	5.0 ml
Run #2	60.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	67	33	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	33	8.3	ng/l	
307-24-4	Perfluorohexanoic acid	ND	17	4.2	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	17	4.2	ng/l	
335-67-1	Perfluorooctanoic acid [b]	ND	17	4.2	ng/l	
375-95-1	Perfluorononanoic acid	ND	17	5.1	ng/l	
335-76-2	Perfluorodecanoic acid	ND	17	4.2	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	17	5.0	ng/l	
307-55-1	Perfluorododecanoic acid [b]	ND	17	5.0	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	17	7.0	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	17	4.2	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	17	8.3	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	17	9.3	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	17	8.3	ng/l	
375-92-8	Perfluoroheptanesulfonic aci [b]	ND	17	8.3	ng/l	
1763-23-1	Perfluorooctanesulfonic acid [b]	ND	17	8.3	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	17	8.3	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	17	8.3	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	17	9.5	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND [c]	670	330	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND [c]	670	330	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND [c]	670	340	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA [b]	ND	17	8.3	ng/l	
31506-32-8	MeFOSA	ND	17	8.3	ng/l	
4151-50-2	EtFOSA	ND	17	8.3	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	JAMESTOWN WWTP (INFLUENT)		
Lab Sample ID:	FC11349-1	**Date Sampled:**	11/15/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	17	8.3	ng/l	
2991-50-6	EtFOSAA	ND [c]	170	110	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND [c]	1700	830	ng/l	
1691-99-2	EtFOSE	ND [c]	1700	830	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	67	17	ng/l	
919005-14-4	ADONA	ND	67	17	ng/l	
377-73-1	PFMPA	ND	33	8.3	ng/l	
863090-89-5	PFMBA	ND	33	9.5	ng/l	
151772-58-6	NFDHA	ND	33	10	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	67	17	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	67	17	ng/l	
113507-82-7	PFEESA	ND	33	8.3	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [d]	ND	83	42	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	420	83	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	420	83	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	83%	87%	20-150%
	13C5-PFPeA	87%	87%	20-150%
	13C5-PFHxA	91%	89%	20-150%
	13C4-PFHpA	99%	97%	20-150%
	13C8-PFOA	93%	92%	20-150%
	13C9-PFNA	95%	86%	20-150%
	13C6-PFDA	89%	83%	20-150%
	13C7-PFUnDA	70%	85%	20-150%
	13C2-PFDoDA	41%	50%	20-150%
	13C2-PFTeDA	25%	20%	20-150%
	13C3-PFBS	100%	89%	20-150%
	13C3-PFHxS	98%	107%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	JAMESTOWN WWTP (INFLUENT)		
Lab Sample ID:	FC11349-1	**Date Sampled:**	11/15/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	79%	62%	20-150%
	13C8-FOSA	43%	56%	20-150%
	d3-MeFOSA	30%	33%	20-150%
	d5-EtFOSA	20%	24%	20-150%
	d3-MeFOSAA	119%	66%	20-150%
	d5-EtFOSAA	153% [e]	78%	20-150%
	d7-MeFOSE	19% [e]	23%	20-150%
	d9-EtFOSE	13% [e]	22%	20-150%
	13C2-4:2FTS	226% [e]	102%	20-180%
	13C2-6:2FTS	365% [e]	96%	20-180%
	13C2-8:2FTS	328% [e]	84%	20-180%
	13C3-HFPO-DA	81%	103%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Associated Low Level BS outside of control limits high, sample was ND.
(c) Result is from Run# 2
(d) Associated BS outside control limits high, sample was ND.
(e) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	JAMESTOWN WWTP (EFFLUENT)		
Lab Sample ID:	FC11349-2	**Date Sampled:**	11/15/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q54582.D	1	12/01/23 17:51	AL	12/01/23 10:05	OP387	S4Q799
Run #2 [a]	4Q54388.D	1	11/27/23 16:30	AL	11/27/23 08:05	OP297A	S4Q795

	Initial Volume	Final Volume
Run #1	505 ml	5.0 ml
Run #2	495 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.9	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	8.5	4.0	0.99	ng/l	
307-24-4	Perfluorohexanoic acid	3.4	2.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	0.87	2.0	0.50	ng/l	J
335-67-1	Perfluorooctanoic acid	1.6	2.0	0.50	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.0	0.60	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.59	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.59	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.83	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	3.4	2.0	0.99	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	1.0	2.0	0.99	ng/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	0.99	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	1.9	2.0	0.99	ng/l	J
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	0.99	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	0.99	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.9	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.9	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.9	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	0.99	ng/l	
31506-32-8	MeFOSA	ND	2.0	0.99	ng/l	
4151-50-2	EtFOSA	ND	2.0	0.99	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	JAMESTOWN WWTP (EFFLUENT)		
Lab Sample ID:	FC11349-2	**Date Sampled:**	11/15/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	0.99	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	9.9	ng/l	
1691-99-2	EtFOSE	ND	20	9.9	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.9	2.0	ng/l	
919005-14-4	ADONA	ND	7.9	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	0.99	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.9	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.9	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	0.99	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [b]	ND	9.9	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	50	9.9	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	9.9	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	51%	53%	20-150%
	13C5-PFPeA	100%	87%	20-150%
	13C5-PFHxA	98%	94%	20-150%
	13C4-PFHpA	103%	102%	20-150%
	13C8-PFOA	95%	95%	20-150%
	13C9-PFNA	100%	96%	20-150%
	13C6-PFDA	97%	93%	20-150%
	13C7-PFUnDA	89%	90%	20-150%
	13C2-PFDoDA	77%	79%	20-150%
	13C2-PFTeDA	45%	42%	20-150%
	13C3-PFBS	87%	90%	20-150%
	13C3-PFHxS	96%	99%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	JAMESTOWN WWTP (EFFLUENT)		
Lab Sample ID:	FC11349-2	**Date Sampled:**	11/15/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	87%	97%	20-150%
	13C8-FOSA	86%	135%	20-150%
	d3-MeFOSA	71%	89%	20-150%
	d5-EtFOSA	67%	81%	20-150%
	d3-MeFOSAA	86%	135%	20-150%
	d5-EtFOSAA	94%	159% [c]	20-150%
	d7-MeFOSE	60%	70%	20-150%
	d9-EtFOSE	66%	70%	20-150%
	13C2-4:2FTS	107%	116%	20-180%
	13C2-6:2FTS	78%	89%	20-180%
	13C2-8:2FTS	74%	102%	20-180%
	13C3-HFPO-DA	87%	100%	20-150%

(a) Confirmation run.
(b) Associated BS outside control limits high, sample was ND.
(c) Outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FARGO WWTP (EFFLUENT)		
Lab Sample ID:	FC11349-3	**Date Sampled:**	11/15/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4Q54389.D	1	11/27/23 16:45	AL	11/27/23 08:05	OP297A	S4Q795
Run #2	4Q54583.D	1	12/01/23 18:06	AL	12/01/23 10:05	OP387	S4Q799

	Initial Volume	Final Volume
Run #1	485 ml	5.0 ml
Run #2	475 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.2	4.1	ng/l	
375-22-4	Perfluorobutanoic acid	ND [b]	8.4	4.2	ng/l	
2706-90-3	Perfluoropentanoic acid	5.8	4.1	1.0	ng/l	
2706-90-3	Perfluoropentanoic acid	3.8 [b]	4.2	1.1	ng/l	J
307-24-4	Perfluorohexanoic acid	10.3	2.1	0.52	ng/l	
307-24-4	Perfluorohexanoic acid	6.6 [b]	2.1	0.53	ng/l	
375-85-9	Perfluoroheptanoic acid	1.3	2.1	0.52	ng/l	J
375-85-9	Perfluoroheptanoic acid	1.5 [b]	2.1	0.53	ng/l	J
335-67-1	Perfluorooctanoic acid [c]	2.4	2.1	0.52	ng/l	
335-67-1	Perfluorooctanoic acid	2.5 [b]	2.1	0.53	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.63	ng/l	
375-95-1	Perfluorononanoic acid	ND [b]	2.1	0.64	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.52	ng/l	
335-76-2	Perfluorodecanoic acid	ND [b]	2.1	0.53	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.62	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND [b]	2.1	0.63	ng/l	
307-55-1	Perfluorododecanoic acid [d]	ND	2.1	0.62	ng/l	
307-55-1	Perfluorododecanoic acid	ND [b]	2.1	0.63	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.87	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND [b]	2.1	0.88	ng/l	
376-06-7	Perfluorotetradecanoic acid [e]	ND	2.1	0.52	ng/l	
376-06-7	Perfluorotetradecanoic acid [e]	ND [b]	2.1	0.53	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	2.7	2.1	1.0	ng/l	
375-73-5	Perfluorobutanesulfonic acid	2.6 [b]	2.1	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND [b]	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	2.1	2.1	1.0	ng/l	
355-46-4	Perfluorohexanesulfonic acid	2.5 [b]	2.1	1.1	ng/l	
375-92-8	Perfluoroheptanesulfonic aci [d]	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: FARGO WWTP (EFFLUENT)
Lab Sample ID: FC11349-3
Matrix: AQ - Water
Method: EPA DRAFT 1633 EPA 1633 DRAFT
Project: PFAS; ND

Date Sampled: 11/15/23
Date Received: 11/18/23
Percent Solids: n/a

CAS No.	Compound	Result	RL	MDL	Units	Q
375-92-8	Perfluoroheptanesulfonic acid	ND [b]	2.1	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid [c]	1.9	2.1	1.0	ng/l	J
1763-23-1	Perfluorooctanesulfonic acid	1.1 [b]	2.1	1.1	ng/l	J
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND [b]	2.1	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND [b]	2.1	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND [b]	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND [b]	8.4	4.2	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate [f]	23.2	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	21.0 [b]	8.4	4.2	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate [d]	ND	8.2	4.2	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND [b]	8.4	4.3	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA [d]	ND	2.1	1.0	ng/l	
754-91-6	PFOSA	ND [b]	2.1	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
31506-32-8	MeFOSA	ND [b]	2.1	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND [b]	2.1	1.1	ng/l	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.0	ng/l	
2355-31-9	MeFOSAA	ND [b]	2.1	1.1	ng/l	
2991-50-6	EtFOSAA [d]	ND	2.1	1.4	ng/l	
2991-50-6	EtFOSAA	ND [b]	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
24448-09-7	MeFOSE	ND [b]	21	11	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND [b]	21	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FARGO WWTP (EFFLUENT)		
Lab Sample ID:	FC11349-3	**Date Sampled:**	11/15/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
13252-13-6	HFPO-DA (GenX)	ND [b]	8.4	2.1	ng/l	
919005-14-4	ADONA	ND	8.2	2.1	ng/l	
919005-14-4	ADONA	ND [b]	8.4	2.1	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
377-73-1	PFMPA	ND [b]	4.2	1.1	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
863090-89-5	PFMBA	ND [b]	4.2	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND [b]	4.2	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.1	ng/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND [b]	8.4	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND [b]	8.4	2.1	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
113507-82-7	PFEESA	ND [b]	4.2	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [g]	ND	10	5.2	ng/l	
356-02-5	3:3 Fluorotelomer carboxylat [g]	ND [b]	11	5.3	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND [b]	53	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND [b]	53	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	67%	71%	20-150%
	13C5-PFPeA	91%	103%	20-150%
	13C5-PFHxA	92%	95%	20-150%
	13C4-PFHpA	92%	96%	20-150%
	13C8-PFOA	92%	91%	20-150%
	13C9-PFNA	85%	92%	20-150%
	13C6-PFDA	93%	87%	20-150%
	13C7-PFUnDA	74%	81%	20-150%
	13C2-PFDoDA	48%	48%	20-150%
	13C2-PFTeDA	15% [h]	16% [h]	20-150%
	13C3-PFBS	86%	87%	20-150%
	13C3-PFHxS	89%	94%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FARGO WWTP (EFFLUENT)		
Lab Sample ID:	FC11349-3	**Date Sampled:**	11/15/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%	81%	20-150%
	13C8-FOSA	76%	80%	20-150%
	d3-MeFOSA	62%	62%	20-150%
	d5-EtFOSA	63%	60%	20-150%
	d3-MeFOSAA	101%	111%	20-150%
	d5-EtFOSAA	100%	125%	20-150%
	d7-MeFOSE	53%	60%	20-150%
	d9-EtFOSE	58%	61%	20-150%
	13C2-4:2FTS	126%	145%	20-180%
	13C2-6:2FTS	98%	129%	20-180%
	13C2-8:2FTS	109%	126%	20-180%
	13C3-HFPO-DA	92%	78%	20-150%

(a) Confirmation run.
(b) Result is from Run# 2
(c) Associated Low Level BS outside of control limits.
(d) Associated Low Level BS outside of control limits high, sample was ND.
(e) Associated ID Standard outside control limits.
(f) Associated Low Level BS outside of control limits high.
(g) Associated BS outside control limits high, sample was ND.
(h) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FARGO WWTP (INFLUENT)		
Lab Sample ID:	FC11349-4	**Date Sampled:**	11/15/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q54584.D	1	12/01/23 18:20	AL	12/01/23 10:05	OP387	S4Q799
Run #2 [a]	4Q54390.D	1	11/27/23 16:59	AL	11/27/23 08:05	OP297A	S4Q795

	Initial Volume	Final Volume
Run #1	425 ml	5.0 ml
Run #2	480 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND	9.4	4.7	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.7	1.2	ng/l	
307-24-4	Perfluorohexanoic acid	11.3	2.4	0.59	ng/l	
375-85-9	Perfluoroheptanoic acid	3.0	2.4	0.59	ng/l	
335-67-1	Perfluorooctanoic acid	2.6	2.4	0.59	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.4	0.72	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.4	0.59	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.4	0.71	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.4	0.71	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.4	0.99	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.4	0.59	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	2.7	2.4	1.2	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.4	1.3	ng/l	
355-46-4	Perfluorohexanesulfonic acid	3.3	2.4	1.2	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.4	1.2	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	4.4	2.4	1.2	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.4	1.2	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.4	1.2	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.4	1.3	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate [b]	ND	9.4	4.7	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate [b]	ND	9.4	4.7	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	9.4	4.8	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.4	1.2	ng/l	
31506-32-8	MeFOSA	ND	2.4	1.2	ng/l	
4151-50-2	EtFOSA	ND	2.4	1.2	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FARGO WWTP (INFLUENT)		
Lab Sample ID:	FC11349-4	**Date Sampled:**	11/15/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.4	1.2	ng/l	
2991-50-6	EtFOSAA	ND	2.4	1.6	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	24	12	ng/l	
1691-99-2	EtFOSE	ND	24	12	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	9.4	2.4	ng/l	
919005-14-4	ADONA	ND	9.4	2.4	ng/l	
377-73-1	PFMPA	ND	4.7	1.2	ng/l	
863090-89-5	PFMBA	ND	4.7	1.3	ng/l	
151772-58-6	NFDHA	ND	4.7	1.4	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	9.4	2.4	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	9.4	2.4	ng/l	
113507-82-7	PFEESA	ND	4.7	1.2	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [c]	ND	12	5.9	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	59	12	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	59	12	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	16% [d]	15% [d]	20-150%
	13C5-PFPeA	83%	74%	20-150%
	13C5-PFHxA	89%	97%	20-150%
	13C4-PFHpA	94%	107%	20-150%
	13C8-PFOA	88%	103%	20-150%
	13C9-PFNA	95%	102%	20-150%
	13C6-PFDA	80%	105%	20-150%
	13C7-PFUnDA	73%	80%	20-150%
	13C2-PFDoDA	54%	53%	20-150%
	13C2-PFTeDA	35%	30%	20-150%
	13C3-PFBS	95%	111%	20-150%
	13C3-PFHxS	97%	99%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FARGO WWTP (INFLUENT)		
Lab Sample ID:	FC11349-4	**Date Sampled:**	11/15/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%	110%	20-150%
	13C8-FOSA	89%	93%	20-150%
	d3-MeFOSA	67%	64%	20-150%
	d5-EtFOSA	53%	54%	20-150%
	d3-MeFOSAA	63%	65%	20-150%
	d5-EtFOSAA	74%	72%	20-150%
	d7-MeFOSE	61%	55%	20-150%
	d9-EtFOSE	38%	38%	20-150%
	13C2-4:2FTS	244% [d]	238% [d]	20-180%
	13C2-6:2FTS	230% [d]	270% [d]	20-180%
	13C2-8:2FTS	145%	175%	20-180%
	13C3-HFPO-DA	70%	91%	20-150%

(a) Confirmation run.
(b) Associated ID Standard outside control limits.
(c) Associated BS outside control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GRAND FORKS WWTP (EFFLUENT)		
Lab Sample ID:	FC11349-5	**Date Sampled:**	11/16/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q54585.D	1	12/01/23 18:35	AL	12/01/23 10:05	OP387	S4Q799
Run #2 [a]	4Q54391.D	1	11/27/23 17:14	AL	11/27/23 08:05	OP297A	S4Q795

	Initial Volume	Final Volume
Run #1	505 ml	5.0 ml
Run #2	495 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	27.2	7.9	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	13.6	4.0	0.99	ng/l	
307-24-4	Perfluorohexanoic acid	8.3	2.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	3.1	2.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	2.9	2.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.60	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.59	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.59	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.83	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	4.0	2.0	0.99	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	4.4	2.0	0.99	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	0.99	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	3.7	2.0	0.99	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	0.99	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	0.99	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.9	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.9	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.9	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	0.99	ng/l	
31506-32-8	MeFOSA	ND	2.0	0.99	ng/l	
4151-50-2	EtFOSA	ND	2.0	0.99	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GRAND FORKS WWTP (EFFLUENT)		
Lab Sample ID:	FC11349-5	**Date Sampled:**	11/16/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	0.99	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	9.9	ng/l	
1691-99-2	EtFOSE	ND	20	9.9	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.9	2.0	ng/l	
919005-14-4	ADONA	ND	7.9	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	0.99	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.9	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.9	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	0.99	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [b]	ND	9.9	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	50	9.9	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	9.9	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	51%	54%	20-150%
	13C5-PFPeA	105%	86%	20-150%
	13C5-PFHxA	101%	91%	20-150%
	13C4-PFHpA	106%	94%	20-150%
	13C8-PFOA	96%	87%	20-150%
	13C9-PFNA	98%	89%	20-150%
	13C6-PFDA	96%	83%	20-150%
	13C7-PFUnDA	78%	79%	20-150%
	13C2-PFDoDA	65%	62%	20-150%
	13C2-PFTeDA	41%	36%	20-150%
	13C3-PFBS	87%	86%	20-150%
	13C3-PFHxS	99%	93%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GRAND FORKS WWTP (EFFLUENT)		
Lab Sample ID:	FC11349-5	**Date Sampled:**	11/16/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	82%	91%	20-150%
	13C8-FOSA	127%	108%	20-150%
	d3-MeFOSA	72%	70%	20-150%
	d5-EtFOSA	67%	67%	20-150%
	d3-MeFOSAA	123%	124%	20-150%
	d5-EtFOSAA	136%	126%	20-150%
	d7-MeFOSE	70%	69%	20-150%
	d9-EtFOSE	84%	103%	20-150%
	13C2-4:2FTS	124%	119%	20-180%
	13C2-6:2FTS	105%	97%	20-180%
	13C2-8:2FTS	112%	119%	20-180%
	13C3-HFPO-DA	90%	95%	20-150%

(a) Confirmation run.
(b) Associated BS outside control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GRAND FORKS WWTP (INFLUENT)		
Lab Sample ID:	FC11349-6	**Date Sampled:**	11/16/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q54586.D	1	12/01/23 18:50	AL	12/01/23 10:05	OP387	S4Q799
Run #2 [a]	4Q54392.D	1	11/27/23 17:29	AL	11/27/23 08:05	OP297A	S4Q795

	Initial Volume	Final Volume
Run #1	485 ml	5.0 ml
Run #2	480 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [b]	ND	8.2	4.1	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	12.9	2.1	0.52	ng/l	
375-85-9	Perfluoroheptanoic acid	2.9	2.1	0.52	ng/l	
335-67-1	Perfluorooctanoic acid	4.1	2.1	0.52	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.63	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.52	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.62	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.62	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.87	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.52	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	7.2	2.1	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	2.4	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	11.8	2.1	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	15.2	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate [b]	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate [b]	ND	8.2	4.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GRAND FORKS WWTP (INFLUENT)		
Lab Sample ID:	FC11349-6	**Date Sampled:**	11/16/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.1	ng/l	
919005-14-4	ADONA	ND	8.2	2.1	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.1	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [c]	ND	10	5.2	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	24.2	52	10	ng/l	J
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	9% [d]	11% [d]	20-150%
	13C5-PFPeA	70%	62%	20-150%
	13C5-PFHxA	97%	93%	20-150%
	13C4-PFHpA	108%	101%	20-150%
	13C8-PFOA	103%	99%	20-150%
	13C9-PFNA	119%	91%	20-150%
	13C6-PFDA	113%	86%	20-150%
	13C7-PFUnDA	79%	81%	20-150%
	13C2-PFDoDA	68%	60%	20-150%
	13C2-PFTeDA	52%	42%	20-150%
	13C3-PFBS	106%	110%	20-150%
	13C3-PFHxS	104%	97%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GRAND FORKS WWTP (INFLUENT)		
Lab Sample ID:	FC11349-6	**Date Sampled:**	11/16/23
Matrix:	AQ - Water	**Date Received:**	11/18/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%	99%	20-150%
	13C8-FOSA	143%	112%	20-150%
	d3-MeFOSA	88%	67%	20-150%
	d5-EtFOSA	77%	58%	20-150%
	d3-MeFOSAA	60%	59%	20-150%
	d5-EtFOSAA	62%	57%	20-150%
	d7-MeFOSE	73%	46%	20-150%
	d9-EtFOSE	47%	37%	20-150%
	13C2-4:2FTS	245% [d]	212% [d]	20-180%
	13C2-6:2FTS	252% [d]	253% [d]	20-180%
	13C2-8:2FTS	150%	138%	20-180%
	13C3-HFPO-DA	77%	87%	20-150%

(a) Confirmation run.
(b) Associated ID Standard outside control limits.
(c) Associated BS outside control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL: 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : FC11349 PAGE 1 OF 1

SGS - ORLANDO Quote #

Client / Reporting Information		Project Information	
Company Name:	NDDEQ PFAS	Project Name:	NDDEQ PFAS
Address:	4201 Normandy St	Street	
City: Bismarck	State: ND Zip: 58503	City	State
Project Contact: SSuggs	Email: SSuggs@nd.gov	Project #	
Phone #: 701-328-6409		Fax #	
Sampler(s) Name(s) (Printed) Sampler 1:	Sampler 2:	Client Purchase Order #	

Analytical Information: LCED 1,4 33 LIST 40

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION: OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LAB USE ONLY
1	Jamestown WWTP (influent)	11/15/23	10:30	MK	WW											
2	Jamestown WWTP (effluent)	11/15/23	10:35	MK	WW											
3	Fargo WWTP (effluent)	11/15/23	2:20	MK	WW											
4	Fargo WWTP (influent)	11/15/23	2:30	MK	WW											
5	Grand Forks WWTP (effluent)	11/16/23	9:30	MK	WW											
6	Grand Forks WWTP (influent)	11/16/23	9:45	MK	WW											

INITIAL ASSESSMENT

LABEL VERIFICATION

Turnaround Time (Business days)

- 10 Day (Business) — Approved By: / Date:
- 7 Day
- 5 Day
- 3 Day *RUSH*
- 2 Day *RUSH*
- 1 Day *RUSH*
- Other

Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- ☐ COMMERCIAL "A" (RESULTS ONLY)
- ☐ COMMERCIAL "B" (RESULTS PLUS QC)
- ☐ REDT1 (EPA LEVEL 3)
- ☐ FULLT1 (EPA LEVEL 4)
- ☐ EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	SSuggs	11/17/23	2 FedEx	3 11/17/23		4 11/18/23 1100
5	Relinquished by/Affiliation	Date Time:	6 Received By/Affiliation	7 Relinquished By/Affiliation	Date Time:	8 Received By/Affiliation

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 4.0 IR#4

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

FC11349: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: fc11349 **Client:** NDDEQ PFAS **Project:** NDDEQ PFAS

Date / Time Received: 11/18/2023 11:00:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7865 3004 7926

Cooler Temps (Raw Measured) °C: Cooler 1: (4.0);

Cooler Temps (Corrected) °C: Cooler 1: (4.4);

Cooler Information	Y	or	N
1. Custody Seals Present:	☑		☐
2. Custody Seals Intact:	☑		☐
3. Temp criteria achieved:	☑		☐
4. Cooler temp verification:	IR Gun		
5. Cooler media:	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑

	W	or	S	N/A
3. Type of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles:	☑		☐	
2. Samples presented properly	☑		☐	
3. Suffiient volume/containers recv'd for analysis	☑		☐	
4. Condition of sample:	Intact			
5. Sample recv'd within HT	☑		☐	
6. Dates/Times/IDs on COC match sample label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar Received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc Information

Number of Encores: 25 Gram 5 Gram

Number of Lab Filtered Metals:

Test Strip Lot #s: pH 0-3: 226422 pH 10-12: Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #

Comments

SM001
Rev. Date 05/04/17

Technician: SHAYLAP Date: 11/18/2023 11:53:02 AM Reviewer: Date:

FC11349: Chain of Custody
Page 2 of 2

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP297A-MB	4Q54385.D	1	11/27/23	AL	11/27/23	OP297A	S4Q795

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-1, FC11349-3

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP297A-MB	4Q54385.D	1	11/27/23	AL	11/27/23	OP297A	S4Q795

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-1, FC11349-3

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	110%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	109%	20-150%
	13C4-PFHpA	108%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	106%	20-150%
	13C6-PFDA	105%	20-150%
	13C7-PFUnDA	113%	20-150%
	13C2-PFDoDA	89%	20-150%
	13C2-PFTeDA	85%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	115%	20-150%
	13C8-PFOS	90%	20-150%
	13C8-FOSA	79%	20-150%
	d3-MeFOSA	67%	20-150%
	d5-EtFOSA	78%	20-150%
	d3-MeFOSAA	94%	20-150%
	d5-EtFOSAA	84%	20-150%
	d7-MeFOSE	72%	20-150%
	d9-EtFOSE	82%	20-150%
	13C2-4:2FTS	83%	20-180%
	13C2-6:2FTS	84%	20-180%
	13C2-8:2FTS	82%	20-180%
	13C3-HFPO-DA	119%	20-150%

Method Blank Summary

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP387-MB	4Q54580.D	1	12/01/23	AL	12/01/23	OP387	S4Q799

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP387-MB	4Q54580.D	1	12/01/23	AL	12/01/23	OP387	S4Q799

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-4

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	105%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	100%	20-150%
	13C7-PFUnDA	92%	20-150%
	13C2-PFDoDA	83%	20-150%
	13C2-PFTeDA	75%	20-150%
	13C3-PFBS	95%	20-150%
	13C3-PFHxS	103%	20-150%
	13C8-PFOS	95%	20-150%
	13C8-FOSA	79%	20-150%
	d3-MeFOSA	66%	20-150%
	d5-EtFOSA	74%	20-150%
	d3-MeFOSAA	86%	20-150%
	d5-EtFOSAA	76%	20-150%
	d7-MeFOSE	67%	20-150%
	d9-EtFOSE	79%	20-150%
	13C2-4:2FTS	101%	20-180%
	13C2-6:2FTS	103%	20-180%
	13C2-8:2FTS	74%	20-180%
	13C3-HFPO-DA	96%	20-150%

Instrument Blank

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q795-IBLK	4Q54369.D	1	11/27/23	AL	n/a	n/a	S4Q795

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-1, FC11349-3

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	0.0018	0.0080	0.0010	ug/l	J
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q795-IBLK	4Q54369.D	1	11/27/23	AL	n/a	n/a	S4Q795

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-1, FC11349-3

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	96%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	97%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	99%	20-150%
	13C7-PFUnDA	105%	20-150%
	13C2-PFDoDA	96%	20-150%
	13C2-PFTeDA	97%	20-150%
	13C3-PFBS	105%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	102%	20-150%
	13C8-FOSA	91%	20-150%
	d3-MeFOSAA	78%	20-150%
	d5-EtFOSAA	76%	20-150%
	13C2-4:2FTS	99%	20-180%
	13C2-6:2FTS	74%	20-180%
	13C2-8:2FTS	75%	20-180%

Instrument Blank

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q796-IBLK	4Q54415.D	1	11/28/23	AL	n/a	n/a	S4Q796

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-1

CAS No.	Compound	Result	RL	MDL	Units	Q
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	94%	20-150%
	13C5-PFHxA	99%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	97%	20-150%
	13C9-PFNA	94%	20-150%
	13C6-PFDA	94%	20-150%
	13C7-PFUnDA	105%	20-150%
	13C2-PFDoDA	91%	20-150%
	13C2-PFTeDA	93%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	101%	20-150%
	13C8-FOSA	102%	20-150%
	d3-MeFOSAA	91%	20-150%
	d5-EtFOSAA	94%	20-150%
	13C2-4:2FTS	91%	20-180%
	13C2-6:2FTS	92%	20-180%
	13C2-8:2FTS	100%	20-180%

Instrument Blank

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q799-IBLK	4Q54566.D	1	12/01/23	AL	n/a	n/a	S4Q799

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	0.0012	0.0080	0.0010	ug/l	J
4151-50-2	EtFOSA	0.0016	0.0080	0.0010	ug/l	J
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q799-IBLK	4Q54566.D	1	12/01/23	AL	n/a	n/a	S4Q799

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-4

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	100%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	99%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	105%	20-150%
	13C6-PFDA	100%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	99%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	90%	20-150%
	d3-MeFOSAA	92%	20-150%
	d5-EtFOSAA	85%	20-150%
	13C2-4:2FTS	97%	20-180%
	13C2-6:2FTS	84%	20-180%
	13C2-8:2FTS	78%	20-180%

Continuing Calibration Blank

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q795-ICCB	4Q54382.D	1	11/27/23	AL	n/a	n/a	S4Q795

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-1, FC11349-3

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q795-ICCB	4Q54382.D	1	11/27/23	AL	n/a	n/a	S4Q795

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-1, FC11349-3

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	96%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	92%	20-150%
	13C6-PFDA	95%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	93%	20-150%
	13C2-PFTeDA	94%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	97%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSAA	92%	20-150%
	d5-EtFOSAA	92%	20-150%
	13C2-4:2FTS	74%	20-180%
	13C2-6:2FTS	81%	20-180%
	13C2-8:2FTS	74%	20-180%

Continuing Calibration Blank

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q799-ICCB	4Q54577.D	1	12/01/23	AL	n/a	n/a	S4Q799

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-2, FC11349-3, FC11349-4, FC11349-5, FC11349-6

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q799-ICCB	4Q54577.D	1	12/01/23	AL	n/a	n/a	S4Q799

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-2, FC11349-3, FC11349-4, FC11349-5, FC11349-6

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	98%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	97%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	103%	20-150%
	13C7-PFUnDA	104%	20-150%
	13C2-PFDoDA	100%	20-150%
	13C2-PFTeDA	102%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	107%	20-150%
	13C8-PFOS	97%	20-150%
	13C8-FOSA	92%	20-150%
	d3-MeFOSAA	92%	20-150%
	d5-EtFOSAA	86%	20-150%
	13C2-4:2FTS	99%	20-180%
	13C2-6:2FTS	97%	20-180%
	13C2-8:2FTS	83%	20-180%

Blank Spike Summary

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP297A-LLBS	4Q54384.D	1	11/27/23	AL	11/27/23	OP297A	S4Q795

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-1, FC11349-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0234	146	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0118	148	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0060	150	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0054	135	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0061	153*	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0055	138	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0060	150	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0054	135	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0064	160*	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0059	148	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0053	133	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0053	149	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0054	143	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0054	148	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0065	171*	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0058	156*	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0048	125	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0049	127	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0048	124	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0212	141	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0233	153*	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0268	174*	40-150
754-91-6	PFOSA	0.004	0.0064	160*	40-150
31506-32-8	MeFOSA	0.008	0.0086	108	40-150
4151-50-2	EtFOSA	0.008	0.0093	116	40-150
2355-31-9	MeFOSAA	0.004	0.0056	140	40-150
2991-50-6	EtFOSAA	0.004	0.0064	160*	40-150
24448-09-7	MeFOSE	0.02	0.0228	114	40-150
1691-99-2	EtFOSE	0.02	0.0229	115	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0094	118	40-150
919005-14-4	ADONA	0.00756	0.0084	111	40-150
377-73-1	PFMPA	0.008	0.0099	124	40-150
863090-89-5	PFMBA	0.008	0.0101	126	40-150
151772-58-6	NFDHA	0.008	0.0082	103	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0076	102	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0068	90	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP297A-LLBS	4Q54384.D	1	11/27/23	AL	11/27/23	OP297A	S4Q795

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-1, FC11349-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0084	118	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0192	96	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.113	113	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.109	109	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	107%	20-150%
	13C5-PFPeA	103%	20-150%
	13C5-PFHxA	107%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	104%	20-150%
	13C9-PFNA	97%	20-150%
	13C6-PFDA	107%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	84%	20-150%
	13C2-PFTeDA	82%	20-150%
	13C3-PFBS	105%	20-150%
	13C3-PFHxS	109%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	91%	20-150%
	d3-MeFOSA	82%	20-150%
	d5-EtFOSA	91%	20-150%
	d3-MeFOSAA	96%	20-150%
	d5-EtFOSAA	89%	20-150%
	d7-MeFOSE	78%	20-150%
	d9-EtFOSE	91%	20-150%
	13C2-4:2FTS	86%	20-180%
	13C2-6:2FTS	81%	20-180%
	13C2-8:2FTS	82%	20-180%
	13C3-HFPO-DA	117%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP387-LLBS	4Q54579.D	1	12/01/23	AL	12/01/23	OP387	S4Q799

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0173	108	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0080	100	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0042	105	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0038	95	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0042	105	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0034	85	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0041	103	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0043	108	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0045	113	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0044	110	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0039	98	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0041	116	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0044	117	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0043	118	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0038	100	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0044	119	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0046	120	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0031	80	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0030	77	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0152	101	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0153	101	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0158	103	40-150
754-91-6	PFOSA	0.004	0.0043	108	40-150
31506-32-8	MeFOSA	0.008	0.0080	100	40-150
4151-50-2	EtFOSA	0.008	0.0080	100	40-150
2355-31-9	MeFOSAA	0.004	0.0044	110	40-150
2991-50-6	EtFOSAA	0.004	0.0046	115	40-150
24448-09-7	MeFOSE	0.02	0.0193	97	40-150
1691-99-2	EtFOSE	0.02	0.0183	92	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0086	108	40-150
919005-14-4	ADONA	0.00756	0.0075	99	40-150
377-73-1	PFMPA	0.008	0.0082	103	40-150
863090-89-5	PFMBA	0.008	0.0081	101	40-150
151772-58-6	NFDHA	0.008	0.0058	73	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0079	106	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0064	85	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP387-LLBS	4Q54579.D	1	12/01/23	AL	12/01/23	OP387	S4Q799

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0075	105	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0185	93	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.0978	98	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.101	101	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	109%	20-150%
	13C5-PFPeA	111%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	107%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	106%	20-150%
	13C6-PFDA	105%	20-150%
	13C7-PFUnDA	94%	20-150%
	13C2-PFDoDA	85%	20-150%
	13C2-PFTeDA	73%	20-150%
	13C3-PFBS	98%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	85%	20-150%
	13C8-FOSA	86%	20-150%
	d3-MeFOSA	76%	20-150%
	d5-EtFOSA	83%	20-150%
	d3-MeFOSAA	84%	20-150%
	d5-EtFOSAA	85%	20-150%
	d7-MeFOSE	77%	20-150%
	d9-EtFOSE	90%	20-150%
	13C2-4:2FTS	95%	20-180%
	13C2-6:2FTS	101%	20-180%
	13C2-8:2FTS	91%	20-180%
	13C3-HFPO-DA	99%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP297A-BS [a]	4Q54383.D	1	11/27/23	AL	11/27/23	OP297A	S4Q795

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-1, FC11349-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.119	119	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0665	133	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0300	120	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0306	122	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0309	124	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0300	120	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0327	131	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0305	122	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0310	124	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0293	117	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0305	122	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0286	129	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0278	118	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0264	116	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0273	115	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0261	113	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0271	113	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0263	109	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0239	99	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.119	127	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.122	128	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.120	125	40-150
754-91-6	PFOSA	0.025	0.0307	123	40-150
31506-32-8	MeFOSA	0.05	0.0493	99	40-150
4151-50-2	EtFOSA	0.05	0.0479	96	40-150
2355-31-9	MeFOSAA	0.025	0.0321	128	40-150
2991-50-6	EtFOSAA	0.025	0.0301	120	40-150
24448-09-7	MeFOSE	0.125	0.123	98	40-150
1691-99-2	EtFOSE	0.125	0.118	94	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0483	97	40-150
919005-14-4	ADONA	0.0473	0.0452	96	40-150
377-73-1	PFMPA	0.05	0.0291	58	40-150
863090-89-5	PFMBA	0.05	0.0577	115	40-150
151772-58-6	NFDHA	0.05	0.0475	95	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0420	90	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0399	84	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP297A-BS [a]	4Q54383.D	1	11/27/23	AL	11/27/23	OP297A	S4Q795

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-1, FC11349-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0460	103	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.197	158*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.622	100	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.595	95	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	33%	20-150%
	13C5-PFPeA	88%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	99%	20-150%
	13C7-PFUnDA	105%	20-150%
	13C2-PFDoDA	93%	20-150%
	13C2-PFTeDA	83%	20-150%
	13C3-PFBS	98%	20-150%
	13C3-PFHxS	108%	20-150%
	13C8-PFOS	106%	20-150%
	13C8-FOSA	87%	20-150%
	d3-MeFOSA	83%	20-150%
	d5-EtFOSA	89%	20-150%
	d3-MeFOSAA	93%	20-150%
	d5-EtFOSAA	87%	20-150%
	d7-MeFOSE	69%	20-150%
	d9-EtFOSE	79%	20-150%
	13C2-4:2FTS	76%	20-180%
	13C2-6:2FTS	81%	20-180%
	13C2-8:2FTS	82%	20-180%
	13C3-HFPO-DA	114%	20-150%

(a) Insufficient sample for MS/MSD.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP387-BS [a]	4Q54578.D	1	12/01/23	AL	12/01/23	OP387	S4Q799

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.113	113	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0551	110	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0264	106	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0265	106	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0282	113	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0267	107	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0266	106	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0282	113	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0274	110	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0264	106	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0265	106	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0249	112	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0255	108	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0254	111	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0247	104	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0263	113	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0253	105	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0232	96	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0209	86	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.103	110	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.0991	104	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.110	115	40-150
754-91-6	PFOSA	0.025	0.0267	107	40-150
31506-32-8	MeFOSA	0.05	0.0496	99	40-150
4151-50-2	EtFOSA	0.05	0.0499	100	40-150
2355-31-9	MeFOSAA	0.025	0.0258	103	40-150
2991-50-6	EtFOSAA	0.025	0.0291	116	40-150
24448-09-7	MeFOSE	0.125	0.123	98	40-150
1691-99-2	EtFOSE	0.125	0.123	98	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0530	106	40-150
919005-14-4	ADONA	0.0473	0.0527	112	40-150
377-73-1	PFMPA	0.05	0.0304	61	40-150
863090-89-5	PFMBA	0.05	0.0557	111	40-150
151772-58-6	NFDHA	0.05	0.0434	87	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0511	109	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0501	106	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11349
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP387-BS [a]	4Q54578.D	1	12/01/23	AL	12/01/23	OP387	S4Q799

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11349-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0483	109	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.219	175*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.642	103	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.649	104	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	36%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	107%	20-150%
	13C4-PFHpA	109%	20-150%
	13C8-PFOA	104%	20-150%
	13C9-PFNA	106%	20-150%
	13C6-PFDA	103%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	98%	20-150%
	13C2-PFTeDA	84%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	105%	20-150%
	13C8-PFOS	106%	20-150%
	13C8-FOSA	94%	20-150%
	d3-MeFOSA	85%	20-150%
	d5-EtFOSA	81%	20-150%
	d3-MeFOSAA	93%	20-150%
	d5-EtFOSAA	96%	20-150%
	d7-MeFOSE	65%	20-150%
	d9-EtFOSE	71%	20-150%
	13C2-4:2FTS	91%	20-180%
	13C2-6:2FTS	96%	20-180%
	13C2-8:2FTS	85%	20-180%
	13C3-HFPO-DA	97%	20-150%

(a) Insufficient sample for MS/MSD.

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

North Dakota DEQ

PFAS; ND

SGS Job Number: FC11482

Sampling Dates: 11/20/23 - 11/22/23



Report to:

North Dakota DEQ
4201 Normandy St
Bismark, ND 58503
ssuggs@nd.gov

ATTN: Shannon Suggs

Total number of pages in report: **91**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

Norm Farmer
Technical Director

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SGS North America Inc.

Sample Summary

North Dakota DEQ

Job No: FC11482

PFAS; ND

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FC11482-1	11/20/23	10:35	MK	11/27/23	AQ	Water	DICKINSON WWTP (EFFLUENT)
FC11482-2	11/20/23	10:40	MK	11/27/23	AQ	Water	DICKINSON WWTP (INFLUENT)
FC11482-3	11/20/23	14:10	MK	11/27/23	AQ	Water	WATFORD CITY WWTP (INFLUENT)
FC11482-4	11/20/23	14:15	MK	11/27/23	AQ	Water	WATFORD CITY WWTP (EFFLUENT)
FC11482-5	11/20/23	14:25	MK	11/27/23	AQ	Field Blank Water	BLANK
FC11482-6	11/22/23	11:15	MK	11/27/23	AQ	Water	BISMARK WWTP (EFFLUENT)
FC11482-7	11/22/23	11:20	MK	11/27/23	AQ	Water	BISMARK WWTP (EFFLUENT DUP)
FC11482-8	11/22/23	11:25	MK	11/27/23	AQ	Water	BISMARK WWTP (INFLUENT)
FC11482-9	11/22/23	11:30	MK	11/27/23	AQ	Water	BISMARK WWTP (INFLUENT DUP)
FC11482-10	11/22/23	13:10	MK	11/27/23	AQ	Water	MANDAN WWTP (INFLUENT)
FC11482-11	11/22/23	13:12	MK	11/27/23	AQ	Water	MANDAN WWTP (EFFLUENT)
FC11482-12	11/22/23	13:15	MK	11/27/23	AQ	Water	BLANK (2)

Summary of Hits

Job Number: FC11482
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 11/20/23 thru 11/22/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FC11482-1	**DICKINSON WWTP (EFFLUENT)**					
Perfluorobutanoic acid		10.2	7.9	4.0	ng/l	EPA DRAFT 1633
Perfluoropentanoic acid		24.9	4.0	0.99	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		22.3	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		3.4	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		7.8	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		7.4	2.0	0.99	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		1.9 J	2.0	0.99	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		3.0	2.0	0.99	ng/l	EPA DRAFT 1633
FC11482-2	**DICKINSON WWTP (INFLUENT)**					
Perfluoropentanoic acid		10	4.1	1.0	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		6.1	2.0	0.51	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		2.0	2.0	0.51	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		2.8	2.0	0.51	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		22.3	2.0	1.0	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		1.7 J	2.0	1.0	ng/l	EPA DRAFT 1633
FC11482-3	**WATFORD CITY WWTP (INFLUENT)**					
Perfluorohexanoic acid		1.3 J	2.0	0.51	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		0.64 J	2.0	0.51	ng/l	EPA DRAFT 1633
FC11482-4	**WATFORD CITY WWTP (EFFLUENT)**					
Perfluorobutanoic acid		15.8	7.8	3.9	ng/l	EPA DRAFT 1633
Perfluoropentanoic acid		19.8	3.9	0.97	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		22.3	1.9	0.49	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		7.1	1.9	0.49	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		5.6	1.9	0.49	ng/l	EPA DRAFT 1633
Perfluorononanoic acid		1.5 J	1.9	0.59	ng/l	EPA DRAFT 1633
Perfluorodecanoic acid		0.93 J	1.9	0.49	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		4.1	1.9	0.97	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid		2.0	1.9	0.97	ng/l	EPA DRAFT 1633
FC11482-5	**BLANK**					
No hits reported in this sample.						
FC11482-6	**BISMARK WWTP (EFFLUENT)**					
Perfluoropentanoic acid		4.0 J	4.1	1.0	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		6.0	2.1	0.52	ng/l	EPA DRAFT 1633

Summary of Hits

Job Number: FC11482
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 11/20/23 thru 11/22/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Perfluoroheptanoic acid		1.9 J	2.1	0.52	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.9 J	2.1	0.52	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		1.7 J	2.1	1.0	ng/l	EPA DRAFT 1633
FC11482-7	**BISMARK WWTP (EFFLUENT DUP)**					
Perfluorobutanoic acid		9.0	8.0	4.0	ng/l	EPA DRAFT 1633
Perfluoropentanoic acid		3.3 J	4.0	1.0	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		6.0	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		2.1	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		2.0	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		2.6	2.0	1.0	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		1.4 J	2.0	1.0	ng/l	EPA DRAFT 1633
MeFOSAA [a]		1.4 J	2.0	1.0	ng/l	EPA DRAFT 1633
FC11482-8	**BISMARK WWTP (INFLUENT)**					
Perfluorohexanoic acid		4.2	2.2	0.54	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		3.1	2.2	0.54	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.6 J	2.2	0.54	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		1.5 J	2.2	1.1	ng/l	EPA DRAFT 1633
FC11482-9	**BISMARK WWTP (INFLUENT DUP)**					
Perfluorohexanoic acid		4.4	2.1	0.52	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		3.2	2.1	0.52	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.6 J	2.1	0.52	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		2.4	2.1	1.0	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		1.7 J	2.1	1.0	ng/l	EPA DRAFT 1633
FC11482-10	**MANDAN WWTP (INFLUENT)**					
Perfluoroheptanoic acid		0.97 J	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		1.6 J	2.0	0.50	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		15.9	2.0	1.0	ng/l	EPA DRAFT 1633
FC11482-11	**MANDAN WWTP (EFFLUENT)**					
Perfluorobutanoic acid		8.8	8.4	4.2	ng/l	EPA DRAFT 1633
Perfluoropentanoic acid		20.7	4.2	1.1	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		12.7	2.1	0.53	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid		1.5 J	2.1	0.53	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid		5.8	2.1	0.53	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid		12.2	2.1	1.1	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid		1.5 J	2.1	1.1	ng/l	EPA DRAFT 1633

Summary of Hits

Job Number: FC11482
Account: North Dakota DEQ
Project: PFAS; ND
Collected: 11/20/23 thru 11/22/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Perfluorooctanesulfonic acid		2.3	2.1	1.1	ng/l	EPA DRAFT 1633

FC11482-12 **BLANK (2)**

No hits reported in this sample.

(a) Associated ID Standard outside control limits.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	DICKINSON WWTP (EFFLUENT)		
Lab Sample ID:	FC11482-1	**Date Sampled:**	11/20/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q54739.D	1	12/06/23 14:34	AL	12/04/23 09:20	OP428	S4Q802
Run #2							

	Initial Volume	Final Volume
Run #1	505 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	10.2	7.9	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	24.9	4.0	0.99	ng/l	
307-24-4	Perfluorohexanoic acid	22.3	2.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	3.4	2.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	7.8	2.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.60	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.59	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.59	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.83	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	7.4	2.0	0.99	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	1.9	2.0	0.99	ng/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	0.99	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	3.0	2.0	0.99	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	0.99	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	0.99	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.9	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.9	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.9	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	0.99	ng/l	
31506-32-8	MeFOSA	ND	2.0	0.99	ng/l	
4151-50-2	EtFOSA	ND	2.0	0.99	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DICKINSON WWTP (EFFLUENT)		
Lab Sample ID:	FC11482-1	**Date Sampled:**	11/20/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	0.99	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	9.9	ng/l	
1691-99-2	EtFOSE	ND	20	9.9	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.9	2.0	ng/l	
919005-14-4	ADONA	ND	7.9	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	0.99	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.9	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.9	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	0.99	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.9	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	50	9.9	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	9.9	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	52%		20-150%
	13C5-PFPeA	90%		20-150%
	13C5-PFHxA	91%		20-150%
	13C4-PFHpA	94%		20-150%
	13C8-PFOA	88%		20-150%
	13C9-PFNA	94%		20-150%
	13C6-PFDA	91%		20-150%
	13C7-PFUnDA	87%		20-150%
	13C2-PFDoDA	72%		20-150%
	13C2-PFTeDA	40%		20-150%
	13C3-PFBS	85%		20-150%
	13C3-PFHxS	87%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DICKINSON WWTP (EFFLUENT)		
Lab Sample ID:	FC11482-1	**Date Sampled:**	11/20/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	90%		20-150%
	13C8-FOSA	90%		20-150%
	d3-MeFOSA	83%		20-150%
	d5-EtFOSA	74%		20-150%
	d3-MeFOSAA	96%		20-150%
	d5-EtFOSAA	109%		20-150%
	d7-MeFOSE	65%		20-150%
	d9-EtFOSE	71%		20-150%
	13C2-4:2FTS	119%		20-180%
	13C2-6:2FTS	107%		20-180%
	13C2-8:2FTS	104%		20-180%
	13C3-HFPO-DA	84%		20-150%

(a) Associated BS outside control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DICKINSON WWTP (INFLUENT)		
Lab Sample ID:	FC11482-2	**Date Sampled:**	11/20/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q54740.D	1	12/06/23 14:48	AL	12/04/23 09:20	OP428	S4Q802
Run #2 [a]	4Q54959.D	1	12/10/23 18:02	AL	12/08/23 08:15	OP518	S4Q805

	Initial Volume	Final Volume
Run #1	490 ml	5.0 ml
Run #2	60.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND [b]	67	33	ng/l	
2706-90-3	Perfluoropentanoic acid	10	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	6.1	2.0	0.51	ng/l	
375-85-9	Perfluoroheptanoic acid	2.0	2.0	0.51	ng/l	
335-67-1	Perfluorooctanoic acid	2.8	2.0	0.51	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.86	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	22.3	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	1.7	2.0	1.0	ng/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND [b]	67	33	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND [b]	67	33	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DICKINSON WWTP (INFLUENT)		
Lab Sample ID:	FC11482-2	**Date Sampled:**	11/20/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.0	ng/l	
919005-14-4	ADONA	ND	8.2	2.0	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.0	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [c]	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	14% [d]	94%	20-150%
	13C5-PFPeA	80%	99%	20-150%
	13C5-PFHxA	110%	97%	20-150%
	13C4-PFHpA	115%	101%	20-150%
	13C8-PFOA	113%	100%	20-150%
	13C9-PFNA	116%	97%	20-150%
	13C6-PFDA	118%	104%	20-150%
	13C7-PFUnDA	87%	80%	20-150%
	13C2-PFDoDA	66%	59%	20-150%
	13C2-PFTeDA	56%	48%	20-150%
	13C3-PFBS	126%	109%	20-150%
	13C3-PFHxS	116%	112%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DICKINSON WWTP (INFLUENT)		
Lab Sample ID:	FC11482-2	**Date Sampled:**	11/20/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	118%	82%	20-150%
	13C8-FOSA	138%	95%	20-150%
	d3-MeFOSA	90%	61%	20-150%
	d5-EtFOSA	75%	57%	20-150%
	d3-MeFOSAA	51%	76%	20-150%
	d5-EtFOSAA	40%	76%	20-150%
	d7-MeFOSE	70%	44%	20-150%
	d9-EtFOSE	43%	44%	20-150%
	13C2-4:2FTS	249% [d]	146%	20-180%
	13C2-6:2FTS	281% [d]	158%	20-180%
	13C2-8:2FTS	128%	140%	20-180%
	13C3-HFPO-DA	93%	85%	20-150%

(a) Sample re-extracted due to EIS failure in the original run.
(b) Result is from Run# 2
(c) Associated BS outside control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WATFORD CITY WWTP (INFLUENT)		
Lab Sample ID:	FC11482-3	**Date Sampled:**	11/20/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q54743.D	1	12/06/23 15:33	AL	12/04/23 09:20	OP428	S4Q802
Run #2 [a]	4Q54960.D	1	12/10/23 18:17	AL	12/08/23 08:15	OP518	S4Q805

	Initial Volume	Final Volume
Run #1	490 ml	5.0 ml
Run #2	60.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND [b]	67	33	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	1.3	2.0	0.51	ng/l	J
375-85-9	Perfluoroheptanoic acid	0.64	2.0	0.51	ng/l	J
335-67-1	Perfluorooctanoic acid	ND	2.0	0.51	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.62	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.51	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.61	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.61	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.86	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.51	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.2	4.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND [b]	67	33	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WATFORD CITY WWTP (INFLUENT)		
Lab Sample ID:	FC11482-3	**Date Sampled:**	11/20/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.0	ng/l	
919005-14-4	ADONA	ND	8.2	2.0	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.0	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [c]	ND	10	5.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	51	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	51	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	10% [d]	94%	20-150%
	13C5-PFPeA	64%	96%	20-150%
	13C5-PFHxA	89%	93%	20-150%
	13C4-PFHpA	98%	94%	20-150%
	13C8-PFOA	95%	97%	20-150%
	13C9-PFNA	99%	93%	20-150%
	13C6-PFDA	98%	95%	20-150%
	13C7-PFUnDA	81%	86%	20-150%
	13C2-PFDoDA	73%	65%	20-150%
	13C2-PFTeDA	90%	59%	20-150%
	13C3-PFBS	107%	97%	20-150%
	13C3-PFHxS	80%	101%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WATFORD CITY WWTP (INFLUENT)		
Lab Sample ID:	FC11482-3	**Date Sampled:**	11/20/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	105%	102%	20-150%
	13C8-FOSA	105%	113%	20-150%
	d3-MeFOSA	80%	80%	20-150%
	d5-EtFOSA	61%	77%	20-150%
	d3-MeFOSAA	45%	85%	20-150%
	d5-EtFOSAA	35%	88%	20-150%
	d7-MeFOSE	61%	59%	20-150%
	d9-EtFOSE	35%	58%	20-150%
	13C2-4:2FTS	174%	118%	20-180%
	13C2-6:2FTS	215% [d]	142%	20-180%
	13C2-8:2FTS	95%	124%	20-180%
	13C3-HFPO-DA	74%	81%	20-150%

(a) Sample re-extracted due to EIS failure in the original run.
(b) Result is from Run# 2
(c) Associated BS outside control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WATFORD CITY WWTP (EFFLUENT)		
Lab Sample ID:	FC11482-4	**Date Sampled:**	11/20/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q54750.D	1	12/06/23 17:17	AL	12/04/23 09:20	OP428	S4Q802
Run #2							

	Initial Volume	Final Volume
Run #1	515 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	15.8	7.8	3.9	ng/l	
2706-90-3	Perfluoropentanoic acid	19.8	3.9	0.97	ng/l	
307-24-4	Perfluorohexanoic acid	22.3	1.9	0.49	ng/l	
375-85-9	Perfluoroheptanoic acid	7.1	1.9	0.49	ng/l	
335-67-1	Perfluorooctanoic acid	5.6	1.9	0.49	ng/l	
375-95-1	Perfluorononanoic acid	1.5	1.9	0.59	ng/l	J
335-76-2	Perfluorodecanoic acid	0.93	1.9	0.49	ng/l	J
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.82	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.49	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	4.1	1.9	0.97	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.97	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.97	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	2.0	1.9	0.97	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.97	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.97	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.8	3.9	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.8	4.0	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.97	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.97	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.97	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WATFORD CITY WWTP (EFFLUENT)		
Lab Sample ID:	FC11482-4	**Date Sampled:**	11/20/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.97	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.7	ng/l	
1691-99-2	EtFOSE	ND	19	9.7	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.8	1.9	ng/l	
919005-14-4	ADONA	ND	7.8	1.9	ng/l	
377-73-1	PFMPA	ND	3.9	0.97	ng/l	
863090-89-5	PFMBA	ND	3.9	1.1	ng/l	
151772-58-6	NFDHA	ND	3.9	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.8	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.8	1.9	ng/l	
113507-82-7	PFEESA	ND	3.9	0.97	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.7	4.9	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	49	9.7	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	49	9.7	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	52%		20-150%
	13C5-PFPeA	93%		20-150%
	13C5-PFHxA	96%		20-150%
	13C4-PFHpA	99%		20-150%
	13C8-PFOA	94%		20-150%
	13C9-PFNA	99%		20-150%
	13C6-PFDA	98%		20-150%
	13C7-PFUnDA	95%		20-150%
	13C2-PFDoDA	79%		20-150%
	13C2-PFTeDA	46%		20-150%
	13C3-PFBS	91%		20-150%
	13C3-PFHxS	101%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	WATFORD CITY WWTP (EFFLUENT)		
Lab Sample ID:	FC11482-4	**Date Sampled:**	11/20/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	97%		20-150%
	13C8-FOSA	97%		20-150%
	d3-MeFOSA	83%		20-150%
	d5-EtFOSA	79%		20-150%
	d3-MeFOSAA	121%		20-150%
	d5-EtFOSAA	127%		20-150%
	d7-MeFOSE	69%		20-150%
	d9-EtFOSE	76%		20-150%
	13C2-4:2FTS	134%		20-180%
	13C2-6:2FTS	135%		20-180%
	13C2-8:2FTS	103%		20-180%
	13C3-HFPO-DA	85%		20-150%

(a) Associated BS outside control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BLANK		
Lab Sample ID:	FC11482-5	**Date Sampled:**	11/20/23
Matrix:	AQ - Field Blank Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q54752.D	1	12/06/23 17:46	AL	12/04/23 09:20	OP428	S4Q802
Run #2							

	Initial Volume	Final Volume
Run #1	505 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.9	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	0.99	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	2.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	ND	2.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.60	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.59	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.59	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.83	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.0	0.99	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	0.99	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	0.99	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	0.99	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	0.99	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	0.99	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.9	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.9	4.0	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.9	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	0.99	ng/l	
31506-32-8	MeFOSA	ND	2.0	0.99	ng/l	
4151-50-2	EtFOSA	ND	2.0	0.99	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BLANK		
Lab Sample ID:	FC11482-5	**Date Sampled:**	11/20/23
Matrix:	AQ - Field Blank Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	0.99	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	9.9	ng/l	
1691-99-2	EtFOSE	ND	20	9.9	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.9	2.0	ng/l	
919005-14-4	ADONA	ND	7.9	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	0.99	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.9	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.9	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	0.99	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.9	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	50	9.9	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	9.9	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	102%		20-150%
	13C5-PFPeA	99%		20-150%
	13C5-PFHxA	101%		20-150%
	13C4-PFHpA	103%		20-150%
	13C8-PFOA	99%		20-150%
	13C9-PFNA	103%		20-150%
	13C6-PFDA	98%		20-150%
	13C7-PFUnDA	87%		20-150%
	13C2-PFDoDA	82%		20-150%
	13C2-PFTeDA	75%		20-150%
	13C3-PFBS	94%		20-150%
	13C3-PFHxS	102%		20-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BLANK		
Lab Sample ID:	FC11482-5	**Date Sampled:**	11/20/23
Matrix:	AQ - Field Blank Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		20-150%
	13C8-FOSA	79%		20-150%
	d3-MeFOSA	80%		20-150%
	d5-EtFOSA	81%		20-150%
	d3-MeFOSAA	86%		20-150%
	d5-EtFOSAA	81%		20-150%
	d7-MeFOSE	73%		20-150%
	d9-EtFOSE	87%		20-150%
	13C2-4:2FTS	91%		20-180%
	13C2-6:2FTS	105%		20-180%
	13C2-8:2FTS	100%		20-180%
	13C3-HFPO-DA	100%		20-150%

(a) Associated BS outside control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BISMARK WWTP (EFFLUENT)		
Lab Sample ID:	FC11482-6	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q54753.D	1	12/06/23 18:01	AL	12/04/23 09:20	OP428	S4Q802
Run #2 [a]	4Q54754.D	10	12/06/23 18:16	AL	12/04/23 09:20	OP428	S4Q802

	Initial Volume	Final Volume
Run #1	485 ml	5.0 ml
Run #2	485 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.2	4.1	ng/l	
2706-90-3	Perfluoropentanoic acid	4.0	4.1	1.0	ng/l	J
307-24-4	Perfluorohexanoic acid	6.0	2.1	0.52	ng/l	
375-85-9	Perfluoroheptanoic acid	1.9	2.1	0.52	ng/l	J
335-67-1	Perfluorooctanoic acid	1.9	2.1	0.52	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.1	0.63	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.52	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.62	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.62	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.87	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.52	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.1	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	1.7	2.1	1.0	ng/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND [b]	82	41	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND [b]	82	41	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BISMARK WWTP (EFFLUENT)		
Lab Sample ID:	FC11482-6	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.0	ng/l	
2991-50-6	EtFOSAA	ND [b]	21	14	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.1	ng/l	
919005-14-4	ADONA	ND	8.2	2.1	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.1	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [c]	ND	10	5.2	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	76%	64%	20-150%
	13C5-PFPeA	109%	102%	20-150%
	13C5-PFHxA	113%	110%	20-150%
	13C4-PFHpA	117%	114%	20-150%
	13C8-PFOA	110%	104%	20-150%
	13C9-PFNA	112%	106%	20-150%
	13C6-PFDA	109%	108%	20-150%
	13C7-PFUnDA	96%	104%	20-150%
	13C2-PFDoDA	63%	70%	20-150%
	13C2-PFTeDA	26%	26%	20-150%
	13C3-PFBS	114%	101%	20-150%
	13C3-PFHxS	117%	99%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BISMARK WWTP (EFFLUENT)		
Lab Sample ID:	FC11482-6	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	104%	107%	20-150%
	13C8-FOSA	104%	88%	20-150%
	d3-MeFOSA	82%	83%	20-150%
	d5-EtFOSA	70%	66%	20-150%
	d3-MeFOSAA	149%	99%	20-150%
	d5-EtFOSAA	177% [d]	130%	20-150%
	d7-MeFOSE	70%	65%	20-150%
	d9-EtFOSE	67%	57%	20-150%
	13C2-4:2FTS	183% [d]	145%	20-180%
	13C2-6:2FTS	182% [d]	129%	20-180%
	13C2-8:2FTS	165%	103%	20-180%
	13C3-HFPO-DA	99%	103%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Result is from Run# 2
(c) Associated BS outside control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BISMARK WWTP (EFFLUENT DUP)		
Lab Sample ID:	FC11482-7	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q54755.D	1	12/06/23 18:30	AL	12/04/23 09:20	OP428	S4Q802
Run #2 [a]	4Q54756.D	10	12/06/23 18:45	AL	12/04/23 09:20	OP428	S4Q802

	Initial Volume	Final Volume
Run #1	500 ml	5.0 ml
Run #2	500 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	9.0	8.0	4.0	ng/l	
2706-90-3	Perfluoropentanoic acid	3.3	4.0	1.0	ng/l	J
307-24-4	Perfluorohexanoic acid	6.0	2.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	2.1	2.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	2.0	2.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.0	0.61	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.60	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.60	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.84	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	2.6	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	1.4	2.0	1.0	ng/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.0	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND [b]	80	40	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.0	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BISMARK WWTP (EFFLUENT DUP)		
Lab Sample ID:	FC11482-7	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA [c]	1.4	2.0	1.0	ng/l	J
2991-50-6	EtFOSAA	ND [b]	20	13	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.0	2.0	ng/l	
919005-14-4	ADONA	ND	8.0	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	1.0	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.0	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.0	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [d]	ND	10	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	50	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	77%	64%	20-150%
	13C5-PFPeA	118%	109%	20-150%
	13C5-PFHxA	117%	103%	20-150%
	13C4-PFHpA	120%	110%	20-150%
	13C8-PFOA	111%	98%	20-150%
	13C9-PFNA	117%	102%	20-150%
	13C6-PFDA	106%	100%	20-150%
	13C7-PFUnDA	94%	90%	20-150%
	13C2-PFDoDA	64%	41%	20-150%
	13C2-PFTeDA	22%	15% [e]	20-150%
	13C3-PFBS	111%	103%	20-150%
	13C3-PFHxS	109%	125%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BISMARK WWTP (EFFLUENT DUP)		
Lab Sample ID:	FC11482-7	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	105%	89%	20-150%
	13C8-FOSA	109%	86%	20-150%
	d3-MeFOSA	85%	63%	20-150%
	d5-EtFOSA	82%	57%	20-150%
	d3-MeFOSAA	157% [e]	94%	20-150%
	d5-EtFOSAA	188% [e]	131%	20-150%
	d7-MeFOSE	74%	60%	20-150%
	d9-EtFOSE	69%	54%	20-150%
	13C2-4:2FTS	173%	134%	20-180%
	13C2-6:2FTS	186% [e]	105%	20-180%
	13C2-8:2FTS	166%	96%	20-180%
	13C3-HFPO-DA	101%	100%	20-150%

(a) Dilution required (ID recovery standard failure).
(b) Result is from Run# 2
(c) Associated ID Standard outside control limits.
(d) Associated BS outside control limits high, sample was ND.
(e) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BISMARK WWTP (INFLUENT)		
Lab Sample ID:	FC11482-8	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q54757.D	1	12/06/23 19:00	AL	12/04/23 09:20	OP428	S4Q802
Run #2 [a]	4Q54961.D	1	12/10/23 18:32	AL	12/08/23 08:15	OP518	S4Q805

	Initial Volume	Final Volume
Run #1	460 ml	5.0 ml
Run #2	60.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	8.7	4.3	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.3	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	4.2	2.2	0.54	ng/l	
375-85-9	Perfluoroheptanoic acid	3.1	2.2	0.54	ng/l	
335-67-1	Perfluorooctanoic acid	1.6	2.2	0.54	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.2	0.66	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.2	0.54	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.2	0.65	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.2	0.65	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.2	0.91	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.2	0.54	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	2.2	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.2	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	1.5	2.2	1.1	ng/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	2.2	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.2	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.2	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.2	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.2	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND [b]	67	33	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND [b]	67	33	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.7	4.5	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.2	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.2	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.2	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BISMARK WWTP (INFLUENT)		
Lab Sample ID:	FC11482-8	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.2	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.2	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	22	11	ng/l	
1691-99-2	EtFOSE	ND	22	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.7	2.2	ng/l	
919005-14-4	ADONA	ND	8.7	2.2	ng/l	
377-73-1	PFMPA	ND	4.3	1.1	ng/l	
863090-89-5	PFMBA	ND	4.3	1.2	ng/l	
151772-58-6	NFDHA	ND	4.3	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.7	2.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.7	2.2	ng/l	
113507-82-7	PFEESA	ND	4.3	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [c]	ND	11	5.4	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	54	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	54	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	21%	90%	20-150%
	13C5-PFPeA	86%	100%	20-150%
	13C5-PFHxA	96%	98%	20-150%
	13C4-PFHpA	103%	96%	20-150%
	13C8-PFOA	104%	93%	20-150%
	13C9-PFNA	106%	89%	20-150%
	13C6-PFDA	103%	91%	20-150%
	13C7-PFUnDA	91%	75%	20-150%
	13C2-PFDoDA	58%	51%	20-150%
	13C2-PFTeDA	38%	33%	20-150%
	13C3-PFBS	115%	92%	20-150%
	13C3-PFHxS	107%	92%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BISMARK WWTP (INFLUENT)		
Lab Sample ID:	FC11482-8	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	103%	82%	20-150%
	13C8-FOSA	112%	96%	20-150%
	d3-MeFOSA	76%	61%	20-150%
	d5-EtFOSA	58%	54%	20-150%
	d3-MeFOSAA	68%	89%	20-150%
	d5-EtFOSAA	71%	93%	20-150%
	d7-MeFOSE	75%	51%	20-150%
	d9-EtFOSE	45%	64%	20-150%
	13C2-4:2FTS	274% [d]	128%	20-180%
	13C2-6:2FTS	276% [d]	130%	20-180%
	13C2-8:2FTS	175%	124%	20-180%
	13C3-HFPO-DA	81%	84%	20-150%

(a) Sample re-extracted due to EIS failure in the original run.
(b) Result is from Run# 2
(c) Associated BS outside control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BISMARK WWTP (INFLUENT DUP)		
Lab Sample ID:	FC11482-9	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q54761.D	1	12/06/23 19:59	AL	12/04/23 09:20	OP428	S4Q802
Run #2 [a]	4Q54962.D	1	12/10/23 18:46	AL	12/08/23 08:15	OP518	S4Q805

	Initial Volume	Final Volume
Run #1	485 ml	5.0 ml
Run #2	60.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND [b]	67	33	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.1	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	4.4	2.1	0.52	ng/l	
375-85-9	Perfluoroheptanoic acid	3.2	2.1	0.52	ng/l	
335-67-1	Perfluorooctanoic acid	1.6	2.1	0.52	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.1	0.63	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.52	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.62	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.62	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.87	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.52	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	2.4	2.1	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	1.7	2.1	1.0	ng/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.1	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND [b]	67	33	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND [b]	67	33	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.2	4.2	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BISMARK WWTP (INFLUENT DUP)		
Lab Sample ID:	FC11482-9	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	10	ng/l	
1691-99-2	EtFOSE	ND	21	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.2	2.1	ng/l	
919005-14-4	ADONA	ND	8.2	2.1	ng/l	
377-73-1	PFMPA	ND	4.1	1.0	ng/l	
863090-89-5	PFMBA	ND	4.1	1.2	ng/l	
151772-58-6	NFDHA	ND	4.1	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.2	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.2	2.1	ng/l	
113507-82-7	PFEESA	ND	4.1	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [c]	ND	10	5.2	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	52	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	52	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	15% [d]	89%	20-150%
	13C5-PFPeA	85%	97%	20-150%
	13C5-PFHxA	104%	93%	20-150%
	13C4-PFHpA	111%	97%	20-150%
	13C8-PFOA	109%	96%	20-150%
	13C9-PFNA	111%	98%	20-150%
	13C6-PFDA	108%	94%	20-150%
	13C7-PFUnDA	97%	84%	20-150%
	13C2-PFDoDA	57%	63%	20-150%
	13C2-PFTeDA	35%	46%	20-150%
	13C3-PFBS	116%	91%	20-150%
	13C3-PFHxS	112%	94%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BISMARK WWTP (INFLUENT DUP)		
Lab Sample ID:	FC11482-9	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	115%	86%	20-150%
	13C8-FOSA	114%	103%	20-150%
	d3-MeFOSA	75%	69%	20-150%
	d5-EtFOSA	57%	67%	20-150%
	d3-MeFOSAA	73%	100%	20-150%
	d5-EtFOSAA	81%	107%	20-150%
	d7-MeFOSE	73%	59%	20-150%
	d9-EtFOSE	43%	61%	20-150%
	13C2-4:2FTS	257% [d]	144%	20-180%
	13C2-6:2FTS	265% [d]	129%	20-180%
	13C2-8:2FTS	171%	134%	20-180%
	13C3-HFPO-DA	86%	82%	20-150%

(a) Sample re-extracted due to EIS failure in the original run.
(b) Result is from Run# 2
(c) Associated BS outside control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MANDAN WWTP (INFLUENT)		
Lab Sample ID:	FC11482-10	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q54763.D	1	12/06/23 20:28	AL	12/04/23 09:20	OP428	S4Q802
Run #2 [a]	4Q54963.D	1	12/10/23 19:01	AL	12/08/23 08:15	OP518	S4Q805

	Initial Volume	Final Volume
Run #1	500 ml	5.0 ml
Run #2	60.0 ml	5.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND [b]	67	33	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	4.0	1.0	ng/l	
307-24-4	Perfluorohexanoic acid	ND	2.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	0.97	2.0	0.50	ng/l	J
335-67-1	Perfluorooctanoic acid	1.6	2.0	0.50	ng/l	J
375-95-1	Perfluorononanoic acid	ND	2.0	0.61	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.0	0.60	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.0	0.60	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.0	0.84	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	15.9	2.0	1.0	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	2.0	1.0	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	2.0	1.0	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	2.0	1.0	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.0	1.0	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.0	1.0	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.0	4.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND [b]	67	33	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.0	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.0	1.0	ng/l	
31506-32-8	MeFOSA	ND	2.0	1.0	ng/l	
4151-50-2	EtFOSA	ND	2.0	1.0	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MANDAN WWTP (INFLUENT)		
Lab Sample ID:	FC11482-10	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.0	1.0	ng/l	
2991-50-6	EtFOSAA	ND	2.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	20	10	ng/l	
1691-99-2	EtFOSE	ND	20	10	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.0	2.0	ng/l	
919005-14-4	ADONA	ND	8.0	2.0	ng/l	
377-73-1	PFMPA	ND	4.0	1.0	ng/l	
863090-89-5	PFMBA	ND	4.0	1.1	ng/l	
151772-58-6	NFDHA	ND	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.0	2.0	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.0	2.0	ng/l	
113507-82-7	PFEESA	ND	4.0	1.0	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [c]	ND	10	5.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	50	10	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	50	10	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	7% [d]	89%	20-150%
	13C5-PFPeA	52%	99%	20-150%
	13C5-PFHxA	95%	93%	20-150%
	13C4-PFHpA	109%	98%	20-150%
	13C8-PFOA	104%	93%	20-150%
	13C9-PFNA	106%	87%	20-150%
	13C6-PFDA	92%	90%	20-150%
	13C7-PFUnDA	84%	71%	20-150%
	13C2-PFDoDA	80%	51%	20-150%
	13C2-PFTeDA	88%	46%	20-150%
	13C3-PFBS	109%	96%	20-150%
	13C3-PFHxS	112%	99%	20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MANDAN WWTP (INFLUENT)
Lab Sample ID: FC11482-10
Matrix: AQ - Water
Method: EPA DRAFT 1633 EPA 1633 DRAFT
Project: PFAS; ND

Date Sampled: 11/22/23
Date Received: 11/27/23
Percent Solids: n/a

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%	93%	20-150%
	13C8-FOSA	92%	96%	20-150%
	d3-MeFOSA	84%	61%	20-150%
	d5-EtFOSA	62%	59%	20-150%
	d3-MeFOSAA	37%	68%	20-150%
	d5-EtFOSAA	28%	74%	20-150%
	d7-MeFOSE	63%	44%	20-150%
	d9-EtFOSE	30%	39%	20-150%
	13C2-4:2FTS	152%	170%	20-180%
	13C2-6:2FTS	236% [d]	141%	20-180%
	13C2-8:2FTS	102%	127%	20-180%
	13C3-HFPO-DA	78%	82%	20-150%

(a) Sample re-extracted due to EIS failure in the original run.
(b) Result is from Run# 2
(c) Associated BS outside control limits high, sample was ND.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MANDAN WWTP (EFFLUENT)		
Lab Sample ID:	FC11482-11	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q54766.D	1	12/06/23 21:13	AL	12/04/23 09:20	OP428	S4Q802
Run #2							

	Initial Volume	Final Volume
Run #1	475 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	8.8	8.4	4.2	ng/l	
2706-90-3	Perfluoropentanoic acid	20.7	4.2	1.1	ng/l	
307-24-4	Perfluorohexanoic acid	12.7	2.1	0.53	ng/l	
375-85-9	Perfluoroheptanoic acid	1.5	2.1	0.53	ng/l	J
335-67-1	Perfluorooctanoic acid	5.8	2.1	0.53	ng/l	
375-95-1	Perfluorononanoic acid	ND	2.1	0.64	ng/l	
335-76-2	Perfluorodecanoic acid	ND	2.1	0.53	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	2.1	0.63	ng/l	
307-55-1	Perfluorododecanoic acid	ND	2.1	0.63	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	2.1	0.88	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	2.1	0.53	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	12.2	2.1	1.1	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	2.1	1.2	ng/l	
355-46-4	Perfluorohexanesulfonic acid	1.5	2.1	1.1	ng/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	2.1	1.1	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	2.3	2.1	1.1	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	2.1	1.1	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	2.1	1.1	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	2.1	1.2	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	8.4	4.2	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	8.4	4.2	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	8.4	4.3	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	2.1	1.1	ng/l	
31506-32-8	MeFOSA	ND	2.1	1.1	ng/l	
4151-50-2	EtFOSA	ND	2.1	1.1	ng/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MANDAN WWTP (EFFLUENT)		
Lab Sample ID:	FC11482-11	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	2.1	1.1	ng/l	
2991-50-6	EtFOSAA	ND	2.1	1.4	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	21	11	ng/l	
1691-99-2	EtFOSE	ND	21	11	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	8.4	2.1	ng/l	
919005-14-4	ADONA	ND	8.4	2.1	ng/l	
377-73-1	PFMPA	ND	4.2	1.1	ng/l	
863090-89-5	PFMBA	ND	4.2	1.2	ng/l	
151772-58-6	NFDHA	ND	4.2	1.3	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	8.4	2.1	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	8.4	2.1	ng/l	
113507-82-7	PFEESA	ND	4.2	1.1	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	11	5.3	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	53	11	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	53	11	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	69%		20-150%
	13C5-PFPeA	96%		20-150%
	13C5-PFHxA	97%		20-150%
	13C4-PFHpA	102%		20-150%
	13C8-PFOA	94%		20-150%
	13C9-PFNA	97%		20-150%
	13C6-PFDA	100%		20-150%
	13C7-PFUnDA	95%		20-150%
	13C2-PFDoDA	84%		20-150%
	13C2-PFTeDA	51%		20-150%
	13C3-PFBS	93%		20-150%
	13C3-PFHxS	95%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MANDAN WWTP (EFFLUENT)		
Lab Sample ID:	FC11482-11	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	93%		20-150%
	13C8-FOSA	114%		20-150%
	d3-MeFOSA	89%		20-150%
	d5-EtFOSA	79%		20-150%
	d3-MeFOSAA	123%		20-150%
	d5-EtFOSAA	128%		20-150%
	d7-MeFOSE	83%		20-150%
	d9-EtFOSE	92%		20-150%
	13C2-4:2FTS	153%		20-180%
	13C2-6:2FTS	113%		20-180%
	13C2-8:2FTS	110%		20-180%
	13C3-HFPO-DA	88%		20-150%

(a) Associated BS outside control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BLANK (2)		
Lab Sample ID:	FC11482-12	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q54686.D	1	12/05/23 19:29	AL	12/04/23 09:20	OP428	S4Q801
Run #2							

	Initial Volume	Final Volume
Run #1	525 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	7.6	3.8	ng/l	
2706-90-3	Perfluoropentanoic acid	ND	3.8	0.95	ng/l	
307-24-4	Perfluorohexanoic acid	ND	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	ND	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	ND	1.9	0.48	ng/l	
375-95-1	Perfluorononanoic acid	ND	1.9	0.58	ng/l	
335-76-2	Perfluorodecanoic acid	ND	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	ND	1.9	0.57	ng/l	
307-55-1	Perfluorododecanoic acid	ND	1.9	0.57	ng/l	
72629-94-8	Perfluorotridecanoic acid	ND	1.9	0.80	ng/l	
376-06-7	Perfluorotetradecanoic acid	ND	1.9	0.48	ng/l	
PERFLUOROALKYL SULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	1.9	0.95	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	1.9	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	ND	1.9	0.95	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	1.9	0.95	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	1.9	0.95	ng/l	
68259-12-1	Perfluorononanesulfonic acid	ND	1.9	0.95	ng/l	
335-77-3	Perfluorodecanesulfonic acid	ND	1.9	0.95	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	1.9	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	7.6	3.8	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	7.6	3.8	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	7.6	3.9	ng/l	
PERFLUOROOCTANE SULFONAMIDES						
754-91-6	PFOSA	ND	1.9	0.95	ng/l	
31506-32-8	MeFOSA	ND	1.9	0.95	ng/l	
4151-50-2	EtFOSA	ND	1.9	0.95	ng/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	BLANK (2)		
Lab Sample ID:	FC11482-12	**Date Sampled:**	11/22/23
Matrix:	AQ - Water	**Date Received:**	11/27/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	PFAS; ND		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.9	0.95	ng/l	
2991-50-6	EtFOSAA	ND	1.9	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS						
24448-09-7	MeFOSE	ND	19	9.5	ng/l	
1691-99-2	EtFOSE	ND	19	9.5	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS						
13252-13-6	HFPO-DA (GenX)	ND	7.6	1.9	ng/l	
919005-14-4	ADONA	ND	7.6	1.9	ng/l	
377-73-1	PFMPA	ND	3.8	0.95	ng/l	
863090-89-5	PFMBA	ND	3.8	1.1	ng/l	
151772-58-6	NFDHA	ND	3.8	1.1	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS						
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	7.6	1.9	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	7.6	1.9	ng/l	
113507-82-7	PFEESA	ND	3.8	0.95	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS						
356-02-5	3:3 Fluorotelomer carboxylat [a]	ND	9.5	4.8	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	48	9.5	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	48	9.5	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	137%		20-150%
	13C5-PFPeA	138%		20-150%
	13C5-PFHxA	136%		20-150%
	13C4-PFHpA	139%		20-150%
	13C8-PFOA	129%		20-150%
	13C9-PFNA	126%		20-150%
	13C6-PFDA	138%		20-150%
	13C7-PFUnDA	123%		20-150%
	13C2-PFDoDA	115%		20-150%
	13C2-PFTeDA	104%		20-150%
	13C3-PFBS	131%		20-150%
	13C3-PFHxS	138%		20-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: BLANK (2)
Lab Sample ID: FC11482-12
Matrix: AQ - Water
Method: EPA DRAFT 1633 EPA 1633 DRAFT
Project: PFAS; ND

Date Sampled: 11/22/23
Date Received: 11/27/23
Percent Solids: n/a

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	125%		20-150%
	13C8-FOSA	106%		20-150%
	d3-MeFOSA	105%		20-150%
	d5-EtFOSA	97%		20-150%
	d3-MeFOSAA	120%		20-150%
	d5-EtFOSAA	119%		20-150%
	d7-MeFOSE	100%		20-150%
	d9-EtFOSE	116%		20-150%
	13C2-4:2FTS	138%		20-180%
	13C2-6:2FTS	147%		20-180%
	13C2-8:2FTS	132%		20-180%
	13C3-HFPO-DA	131%		20-150%

(a) Associated BS outside control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL: 407-425-6700 FAX: 407-425-0707
www.sgs.com

FC 11482
SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: NDDEQ PFAS
Address: 4201 Normandy St
City: Bismarck State: ND Zip: 58503
Project Contact: SSuggs Email: SSuggs@nd.gov
Phone #: 701-328-6409
Sampler(s) Name(s) (Printed) Sampler 1: Sampler 2:

Project Information

Project Name: NDDEQ PFAS
Street 4201 Normandy St
City Bismarck State ND
Project #
Fax #
Client Purchase Order #

Analytical Information

LCID 16733 List 40

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION: OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNA	DI WATER	MEOH	LAB USE ONLY
1	Dickinson WWTP (effluent)	11/20/23	10:35	MK	WW											
2	Dickinson WWTP (influent)	11/20/23	10:40	MK	WW											
3	Watford City WWTP (influent)	11/20/23	2:10	MK	WW											
4	Watford City WWTP (effluent)	11/20/23	2:15	MK	WW											
5	Blank	11/20/23	2:25	MK	WW											
6	Bismarck WWTP (effluent)	11/22/23	11:15	MK	WW											
7	Bismarck WWTP (effluent Dup)	11/22/23	11:20	MK	WW											
8	Bismarck WWTP (influent)	11/22/23	11:25	MK	WW											
9	Bismarck WWTP (influent Dup)	11/22/23	11:30	MK	WW											
10	Mandan WWTP (influent)	11/22/23	1:10	MK	WW											
11	Mandan WWTP (effluent)	11/22/23	1:12	MK	WW											
12	Blank (2)	11/22/23	1:16	MK	WW											

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

INITIAL ASSESSMENT
LABEL VERIFICATION
20.0 IR#1 (ME2-7E8) ICE

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	SSuggs	11/20/23	2 FedEx	3	0900 27Nov23	4 SGS
5	Relinquished by/Affiliation	Date Time:	6 Received By/Affiliation	7 Relinquished By/Affiliation	Date Time:	8 Received By/Affiliation

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 20.4 CORRECTED

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

FC11482: Chain of Custody
Page 1 of 3

SGS - Orlando Sample Receipt Summary

Job Number: fc11482 **Client:** NDDEQ PFAS **Project:** NDDEQ PFAS

Date / Time Received: 11/27/2023 9:00:00 AM **Delivery Method:** FED EX **Airbill #'s:** 7867 8532 8622

Cooler Temps (Raw Measured) °C: Cooler 1: (20.0);

Cooler Temps (Corrected) °C: Cooler 1: (20.4);

Cooler Information	Y	or	N
1. Custody Seals Present:	☑		☐
2. Custody Seals Intact:	☑		☐
3. Temp criteria achieved:	☐		☑
4. Cooler temp verification:	IR Gun		
5. Cooler media:	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑

	W	or	S	N/A
3. Type of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles:	☑		☐	
2. Samples presented properly	☑		☐	
3. Suffiient volume/containers recv'd for analysis	☑		☐	
4. Condition of sample:	Intact			
5. Sample recv'd within HT	☑		☐	
6. Dates/Times/IDs on COC match sample label	☐		☑	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar Received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc Information

Number of Encores: 25 Gram 5 Gram

Number of Lab Filtered Metals:

Test Strip Lot #s: pH 0-3: 226422 pH 10-12: Other: (Specify) pH 1.0 - 12.0 222221

Residual Chlorine Test Strip Lot #

Comments TEMP CRITERIA NOT MET DUE TO MELTED ICE, RECEIVED AT 20.4 C.
SAMPLE #1 ID "DICKINSON WWTP (EFFLUENT)", COC SAMPLE TIME STATES 10:35, BOTTLE LABEL STATES TAKEN AT 10:40.
SAMPLE #2 ID "DICKINSON WWTP (INFLUENT)", COC SAMPLE TIME STATES 10:40, BOTTLE LABEL STATES TAKEN AT 10:35.

Sample Receipt Summary 112723 EK Technician: TORYW Date: 11/27/2023 12:50:25 PM Reviewer: Date:

Responded to by: JDS

Response Date: 11/27/23

Response:

Per client, Shannon Suggs, please analyze samples as received. Thank you.

FC11482: Chain of Custody
Page 3 of 3

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-MB	4Q54628.D	1	12/04/23	AL	12/04/23	OP428	S4Q800

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-MB	4Q54628.D	1	12/04/23	AL	12/04/23	OP428	S4Q800

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	112%	20-150%
	13C5-PFPeA	113%	20-150%
	13C5-PFHxA	111%	20-150%
	13C4-PFHpA	113%	20-150%
	13C8-PFOA	108%	20-150%
	13C9-PFNA	106%	20-150%
	13C6-PFDA	121%	20-150%
	13C7-PFUnDA	119%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	93%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	107%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	85%	20-150%
	d3-MeFOSA	77%	20-150%
	d5-EtFOSA	86%	20-150%
	d3-MeFOSAA	100%	20-150%
	d5-EtFOSAA	96%	20-150%
	d7-MeFOSE	76%	20-150%
	d9-EtFOSE	92%	20-150%
	13C2-4:2FTS	103%	20-180%
	13C2-6:2FTS	107%	20-180%
	13C2-8:2FTS	107%	20-180%
	13C3-HFPO-DA	106%	20-150%

Method Blank Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-MB	4Q54669.D	1	12/05/23	AL	12/04/23	OP428	S4Q801

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-MB	4Q54669.D	1	12/05/23	AL	12/04/23	OP428	S4Q801

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	113%	20-150%
	13C5-PFPeA	111%	20-150%
	13C5-PFHxA	106%	20-150%
	13C4-PFHpA	111%	20-150%
	13C8-PFOA	112%	20-150%
	13C9-PFNA	105%	20-150%
	13C6-PFDA	103%	20-150%
	13C7-PFUnDA	103%	20-150%
	13C2-PFDoDA	101%	20-150%
	13C2-PFTeDA	91%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	112%	20-150%
	13C8-PFOS	106%	20-150%
	13C8-FOSA	84%	20-150%
	d3-MeFOSA	80%	20-150%
	d5-EtFOSA	86%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	97%	20-150%
	d7-MeFOSE	76%	20-150%
	d9-EtFOSE	93%	20-150%
	13C2-4:2FTS	111%	20-180%
	13C2-6:2FTS	106%	20-180%
	13C2-8:2FTS	111%	20-180%
	13C3-HFPO-DA	107%	20-150%

Method Blank Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-MB	4Q54738.D	1	12/06/23	AL	12/04/23	OP428	S4Q802

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0020	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0020	0.0010	ug/l	
31506-32-8	MeFOSA	ND	0.0020	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0020	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0020	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0020	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.010	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.010	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0040	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0040	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0040	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

Method Blank Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-MB	4Q54738.D	1	12/06/23	AL	12/04/23	OP428	S4Q802

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0040	0.0010	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.010	0.0050	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.050	0.010	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	112%	20-150%
	13C5-PFPeA	110%	20-150%
	13C5-PFHxA	110%	20-150%
	13C4-PFHpA	112%	20-150%
	13C8-PFOA	109%	20-150%
	13C9-PFNA	108%	20-150%
	13C6-PFDA	116%	20-150%
	13C7-PFUnDA	112%	20-150%
	13C2-PFDoDA	100%	20-150%
	13C2-PFTeDA	92%	20-150%
	13C3-PFBS	105%	20-150%
	13C3-PFHxS	111%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	88%	20-150%
	d3-MeFOSA	80%	20-150%
	d5-EtFOSA	88%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	107%	20-150%
	d7-MeFOSE	73%	20-150%
	d9-EtFOSE	91%	20-150%
	13C2-4:2FTS	126%	20-180%
	13C2-6:2FTS	138%	20-180%
	13C2-8:2FTS	128%	20-180%
	13C3-HFPO-DA	111%	20-150%

Method Blank Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP518-MB	4Q54958.D	1	12/10/23	AL	12/08/23	OP518	S4Q805

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-2, FC11482-3, FC11482-8, FC11482-9, FC11482-10

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.067	0.033	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.067	0.033	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.067	0.033	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	95%	20-150%
	13C4-PFHpA	97%	20-150%
	13C8-PFOA	96%	20-150%
	13C9-PFNA	97%	20-150%
	13C6-PFDA	96%	20-150%
	13C7-PFUnDA	94%	20-150%
	13C2-PFDoDA	77%	20-150%
	13C2-PFTeDA	72%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	107%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	56%	20-150%
	d3-MeFOSA	58%	20-150%
	d5-EtFOSA	63%	20-150%
	d3-MeFOSAA	95%	20-150%
	d5-EtFOSAA	83%	20-150%
	d7-MeFOSE	47%	20-150%
	d9-EtFOSE	61%	20-150%
	13C2-4:2FTS	107%	20-180%
	13C2-6:2FTS	111%	20-180%
	13C2-8:2FTS	113%	20-180%
	13C3-HFPO-DA	89%	20-150%

Instrument Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q801-IBLK	4Q54661.D	1	12/05/23	AL	n/a	n/a	S4Q801

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-12

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	0.0013	0.0080	0.0010	ug/l	J
4151-50-2	EtFOSA	0.0022	0.0080	0.0010	ug/l	J
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q801-IBLK	4Q54661.D	1	12/05/23	AL	n/a	n/a	S4Q801

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-12

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	100%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	100%	20-150%
	13C6-PFDA	107%	20-150%
	13C7-PFUnDA	107%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	105%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	103%	20-150%
	13C8-PFOS	104%	20-150%
	13C8-FOSA	104%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	96%	20-150%
	13C2-4:2FTS	97%	20-180%
	13C2-6:2FTS	99%	20-180%
	13C2-8:2FTS	93%	20-180%

Instrument Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q802-IBLK	4Q54728.D	1	12/06/23	AL	n/a	n/a	S4Q802

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	0.0023	0.0080	0.0010	ug/l	J
4151-50-2	EtFOSA	0.0017	0.0080	0.0010	ug/l	J
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q802-IBLK	4Q54728.D	1	12/06/23	AL	n/a	n/a	S4Q802

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	100%	20-150%
	13C5-PFHxA	98%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	93%	20-150%
	13C7-PFUnDA	102%	20-150%
	13C2-PFDoDA	99%	20-150%
	13C2-PFTeDA	96%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	92%	20-150%
	13C8-FOSA	92%	20-150%
	d3-MeFOSAA	102%	20-150%
	d5-EtFOSAA	102%	20-150%
	13C2-4:2FTS	113%	20-180%
	13C2-6:2FTS	122%	20-180%
	13C2-8:2FTS	113%	20-180%

Instrument Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q805-IBLK	4Q54947.D	1	12/10/23	AL	n/a	n/a	S4Q805

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-2, FC11482-3, FC11482-8, FC11482-9, FC11482-10

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	97%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	98%	20-150%
	13C7-PFUnDA	104%	20-150%
	13C2-PFDoDA	96%	20-150%
	13C2-PFTeDA	101%	20-150%
	13C3-PFBS	96%	20-150%
	13C3-PFHxS	98%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	93%	20-150%
	d3-MeFOSAA	88%	20-150%
	d5-EtFOSAA	85%	20-150%
	13C2-4:2FTS	92%	20-180%
	13C2-6:2FTS	83%	20-180%
	13C2-8:2FTS	81%	20-180%

Continuing Calibration Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q801-ICCB	4Q54685.D	1	12/05/23	AL	n/a	n/a	S4Q801

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-12

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q801-ICCB	4Q54685.D	1	12/05/23	AL	n/a	n/a	S4Q801

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-12

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	98%	20-150%
	13C5-PFHxA	99%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	105%	20-150%
	13C7-PFUnDA	102%	20-150%
	13C2-PFDoDA	105%	20-150%
	13C2-PFTeDA	104%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	105%	20-150%
	13C8-PFOS	101%	20-150%
	13C8-FOSA	111%	20-150%
	d3-MeFOSAA	113%	20-150%
	d5-EtFOSAA	115%	20-150%
	13C2-4:2FTS	108%	20-180%
	13C2-6:2FTS	110%	20-180%
	13C2-8:2FTS	101%	20-180%

Continuing Calibration Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q802-ICCB	4Q54735.D	1	12/06/23	AL	n/a	n/a	S4Q802

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q802-ICCB	4Q54735.D	1	12/06/23	AL	n/a	n/a	S4Q802

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	103%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	103%	20-150%
	13C9-PFNA	106%	20-150%
	13C6-PFDA	90%	20-150%
	13C7-PFUnDA	95%	20-150%
	13C2-PFDoDA	92%	20-150%
	13C2-PFTeDA	92%	20-150%
	13C3-PFBS	96%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	93%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSAA	103%	20-150%
	d5-EtFOSAA	100%	20-150%
	13C2-4:2FTS	113%	20-180%
	13C2-6:2FTS	104%	20-180%
	13C2-8:2FTS	116%	20-180%

Continuing Calibration Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q802-ICCB	4Q54749.D	1	12/06/23	AL	n/a	n/a	S4Q802

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q802-ICCB	4Q54749.D	1	12/06/23	AL	n/a	n/a	S4Q802

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	100%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	105%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	105%	20-150%
	13C7-PFUnDA	105%	20-150%
	13C2-PFDoDA	101%	20-150%
	13C2-PFTeDA	97%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	109%	20-150%
	13C8-PFOS	94%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSAA	93%	20-150%
	d5-EtFOSAA	98%	20-150%
	13C2-4:2FTS	105%	20-180%
	13C2-6:2FTS	107%	20-180%
	13C2-8:2FTS	111%	20-180%

Continuing Calibration Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q802-ICCB	4Q54760.D	1	12/06/23	AL	n/a	n/a	S4Q802

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-9, FC11482-10, FC11482-11

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q802-ICCB	4Q54760.D	1	12/06/23	AL	n/a	n/a	S4Q802

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-9, FC11482-10, FC11482-11

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	102%	20-150%
	13C6-PFDA	103%	20-150%
	13C7-PFUnDA	110%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	101%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	91%	20-150%
	13C8-FOSA	93%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	101%	20-150%
	13C2-4:2FTS	122%	20-180%
	13C2-6:2FTS	119%	20-180%
	13C2-8:2FTS	116%	20-180%

Continuing Calibration Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q805-ICCB	4Q54955.D	1	12/10/23	AL	n/a	n/a	S4Q805

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-2, FC11482-3, FC11482-8, FC11482-9, FC11482-10

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	99%	20-150%
	13C5-PFPeA	104%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	96%	20-150%
	13C9-PFNA	95%	20-150%
	13C6-PFDA	100%	20-150%
	13C7-PFUnDA	105%	20-150%
	13C2-PFDoDA	94%	20-150%
	13C2-PFTeDA	93%	20-150%
	13C3-PFBS	98%	20-150%
	13C3-PFHxS	104%	20-150%
	13C8-PFOS	101%	20-150%
	13C8-FOSA	98%	20-150%
	d3-MeFOSAA	101%	20-150%
	d5-EtFOSAA	98%	20-150%
	13C2-4:2FTS	108%	20-180%
	13C2-6:2FTS	102%	20-180%
	13C2-8:2FTS	97%	20-180%

Instrument Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q800-IBLK	4Q54614.D	1	12/04/23	AL	n/a	n/a	S4Q800

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP428-BS, OP428-LLBS

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	0.0012	0.0080	0.0010	ug/l	J
4151-50-2	EtFOSA	0.0015	0.0080	0.0010	ug/l	J
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q800-IBLK	4Q54614.D	1	12/04/23	AL	n/a	n/a	S4Q800

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP428-BS, OP428-LLBS

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	104%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	109%	20-150%
	13C6-PFDA	103%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	104%	20-150%
	13C3-PFBS	108%	20-150%
	13C3-PFHxS	114%	20-150%
	13C8-PFOS	89%	20-150%
	13C8-FOSA	93%	20-150%
	d3-MeFOSAA	79%	20-150%
	d5-EtFOSAA	78%	20-150%
	13C2-4:2FTS	78%	20-180%
	13C2-6:2FTS	88%	20-180%
	13C2-8:2FTS	78%	20-180%

Continuing Calibration Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q800-ICCB	4Q54622.D	1	12/04/23	AL	n/a	n/a	S4Q800

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP428-BS, OP428-LLBS, OP428-MB

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q800-ICCB	4Q54622.D	1	12/04/23	AL	n/a	n/a	S4Q800

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

OP428-BS, OP428-LLBS, OP428-MB

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	104%	20-150%
	13C8-PFOA	97%	20-150%
	13C9-PFNA	103%	20-150%
	13C6-PFDA	100%	20-150%
	13C7-PFUnDA	103%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	94%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	98%	20-150%
	13C8-PFOS	92%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSAA	91%	20-150%
	d5-EtFOSAA	85%	20-150%
	13C2-4:2FTS	100%	20-180%
	13C2-6:2FTS	91%	20-180%
	13C2-8:2FTS	88%	20-180%

Blank Spike Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-LLBS	4Q54627.D	1	12/04/23	AL	12/04/23	OP428	S4Q800

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0176	110	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0088	110	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0044	110	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0041	103	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0043	108	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0038	95	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0041	103	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0041	103	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0040	100	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0041	103	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0041	103	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0047	132	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0036	96	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0037	101	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0046	121	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0052	140	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0049	127	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0036	93	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0037	95	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0171	114	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0170	112	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0156	102	40-150
754-91-6	PFOSA	0.004	0.0043	108	40-150
31506-32-8	MeFOSA	0.008	0.0076	95	40-150
4151-50-2	EtFOSA	0.008	0.0079	99	40-150
2355-31-9	MeFOSAA	0.004	0.0038	95	40-150
2991-50-6	EtFOSAA	0.004	0.0036	90	40-150
24448-09-7	MeFOSE	0.02	0.0189	95	40-150
1691-99-2	EtFOSE	0.02	0.0178	89	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0087	109	40-150
919005-14-4	ADONA	0.00756	0.0082	108	40-150
377-73-1	PFMPA	0.008	0.0086	108	40-150
863090-89-5	PFMBA	0.008	0.0084	105	40-150
151772-58-6	NFDHA	0.008	0.0078	98	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0084	112	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0081	107	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-LLBS	4Q54627.D	1	12/04/23	AL	12/04/23	OP428	S4Q800

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0072	101	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0182	91	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.0976	98	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.0989	99	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	105%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	103%	20-150%
	13C6-PFDA	102%	20-150%
	13C7-PFUnDA	94%	20-150%
	13C2-PFDoDA	93%	20-150%
	13C2-PFTeDA	75%	20-150%
	13C3-PFBS	98%	20-150%
	13C3-PFHxS	113%	20-150%
	13C8-PFOS	88%	20-150%
	13C8-FOSA	84%	20-150%
	d3-MeFOSA	78%	20-150%
	d5-EtFOSA	79%	20-150%
	d3-MeFOSAA	91%	20-150%
	d5-EtFOSAA	89%	20-150%
	d7-MeFOSE	70%	20-150%
	d9-EtFOSE	83%	20-150%
	13C2-4:2FTS	93%	20-180%
	13C2-6:2FTS	93%	20-180%
	13C2-8:2FTS	105%	20-180%
	13C3-HFPO-DA	93%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-LLBS	4Q54668.D	1	12/05/23	AL	12/04/23	OP428	S4Q801

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0176	110	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0085	106	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0041	103	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0043	108	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0044	110	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0045	113	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0050	125	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0046	115	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0045	113	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0040	100	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0043	108	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0037	104	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0039	104	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0038	104	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0040	105	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0047	127	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0042	109	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0039	101	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0033	85	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0163	109	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0160	105	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0167	109	40-150
754-91-6	PFOSA	0.004	0.0044	110	40-150
31506-32-8	MeFOSA	0.008	0.0071	89	40-150
4151-50-2	EtFOSA	0.008	0.0081	101	40-150
2355-31-9	MeFOSAA	0.004	0.0045	113	40-150
2991-50-6	EtFOSAA	0.004	0.0045	113	40-150
24448-09-7	MeFOSE	0.02	0.0200	100	40-150
1691-99-2	EtFOSE	0.02	0.0184	92	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0072	90	40-150
919005-14-4	ADONA	0.00756	0.0077	102	40-150
377-73-1	PFMPA	0.008	0.0084	105	40-150
863090-89-5	PFMBA	0.008	0.0085	106	40-150
151772-58-6	NFDHA	0.008	0.0077	96	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0078	104	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0074	98	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-LLBS	4Q54668.D	1	12/05/23	AL	12/04/23	OP428	S4Q801

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0075	105	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0181	91	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.0972	97	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.0946	95	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	105%	20-150%
	13C5-PFPeA	108%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	97%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	103%	20-150%
	13C2-PFDoDA	96%	20-150%
	13C2-PFTeDA	83%	20-150%
	13C3-PFBS	105%	20-150%
	13C3-PFHxS	110%	20-150%
	13C8-PFOS	93%	20-150%
	13C8-FOSA	83%	20-150%
	d3-MeFOSA	71%	20-150%
	d5-EtFOSA	75%	20-150%
	d3-MeFOSAA	95%	20-150%
	d5-EtFOSAA	88%	20-150%
	d7-MeFOSE	66%	20-150%
	d9-EtFOSE	81%	20-150%
	13C2-4:2FTS	104%	20-180%
	13C2-6:2FTS	103%	20-180%
	13C2-8:2FTS	111%	20-180%
	13C3-HFPO-DA	99%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-LLBS	4Q54737.D	1	12/06/23	AL	12/04/23	OP428	S4Q802

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.016	0.0171	107	40-150
2706-90-3	Perfluoropentanoic acid	0.008	0.0085	106	40-150
307-24-4	Perfluorohexanoic acid	0.004	0.0044	110	40-150
375-85-9	Perfluoroheptanoic acid	0.004	0.0042	105	40-150
335-67-1	Perfluorooctanoic acid	0.004	0.0040	100	40-150
375-95-1	Perfluorononanoic acid	0.004	0.0043	108	40-150
335-76-2	Perfluorodecanoic acid	0.004	0.0048	120	40-150
2058-94-8	Perfluoroundecanoic acid	0.004	0.0039	98	40-150
307-55-1	Perfluorododecanoic acid	0.004	0.0045	113	40-150
72629-94-8	Perfluorotridecanoic acid	0.004	0.0038	95	40-150
376-06-7	Perfluorotetradecanoic acid	0.004	0.0043	108	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00355	0.0046	130	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00376	0.0045	120	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00366	0.0036	98	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00381	0.0039	102	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00371	0.0040	108	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00385	0.0039	101	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00386	0.0033	85	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00388	0.0037	95	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.015	0.0151	101	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0152	0.0161	106	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0154	0.0205	133	40-150
754-91-6	PFOSA	0.004	0.0046	115	40-150
31506-32-8	MeFOSA	0.008	0.0075	94	40-150
4151-50-2	EtFOSA	0.008	0.0085	106	40-150
2355-31-9	MeFOSAA	0.004	0.0044	110	40-150
2991-50-6	EtFOSAA	0.004	0.0048	120	40-150
24448-09-7	MeFOSE	0.02	0.0197	99	40-150
1691-99-2	EtFOSE	0.02	0.0195	98	40-150
13252-13-6	HFPO-DA (GenX)	0.008	0.0078	98	40-150
919005-14-4	ADONA	0.00756	0.0078	103	40-150
377-73-1	PFMPA	0.008	0.0085	106	40-150
863090-89-5	PFMBA	0.008	0.0084	105	40-150
151772-58-6	NFDHA	0.008	0.0080	100	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.00748	0.0078	104	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.00756	0.0075	99	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-LLBS	4Q54737.D	1	12/06/23	AL	12/04/23	OP428	S4Q802

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.00712	0.0081	114	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.02	0.0187	94	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.1	0.106	106	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.1	0.105	105	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	105%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	103%	20-150%
	13C9-PFNA	106%	20-150%
	13C6-PFDA	98%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	92%	20-150%
	13C2-PFTeDA	77%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	112%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	87%	20-150%
	d3-MeFOSA	77%	20-150%
	d5-EtFOSA	80%	20-150%
	d3-MeFOSAA	107%	20-150%
	d5-EtFOSAA	103%	20-150%
	d7-MeFOSE	70%	20-150%
	d9-EtFOSE	81%	20-150%
	13C2-4:2FTS	125%	20-180%
	13C2-6:2FTS	128%	20-180%
	13C2-8:2FTS	116%	20-180%
	13C3-HFPO-DA	103%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP518-LLBS	4Q54957.D	1	12/10/23	AL	12/08/23	OP518	S4Q805

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-2, FC11482-3, FC11482-8, FC11482-9, FC11482-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.133	0.135	101	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.125	0.109	87	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.127	0.137	108	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	100%	20-150%
	13C5-PFHxA	96%	20-150%
	13C4-PFHpA	99%	20-150%
	13C8-PFOA	97%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	94%	20-150%
	13C7-PFUnDA	88%	20-150%
	13C2-PFDoDA	73%	20-150%
	13C2-PFTeDA	68%	20-150%
	13C3-PFBS	85%	20-150%
	13C3-PFHxS	89%	20-150%
	13C8-PFOS	96%	20-150%
	13C8-FOSA	78%	20-150%
	d3-MeFOSA	69%	20-150%
	d5-EtFOSA	72%	20-150%
	d3-MeFOSAA	99%	20-150%
	d5-EtFOSAA	91%	20-150%
	d7-MeFOSE	63%	20-150%
	d9-EtFOSE	80%	20-150%
	13C2-4:2FTS	102%	20-180%
	13C2-6:2FTS	97%	20-180%
	13C2-8:2FTS	103%	20-180%
	13C3-HFPO-DA	88%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-BS	4Q54626.D	1	12/04/23	AL	12/04/23	OP428	S4Q800

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.118	118	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0583	117	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0282	113	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0274	110	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0288	115	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0284	114	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0280	112	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0279	112	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0286	114	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0274	110	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0278	111	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0257	116	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0257	109	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0248	109	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0273	115	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0270	116	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0271	113	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0257	107	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0252	104	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.113	121	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.108	114	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.109	114	40-150
754-91-6	PFOSA	0.025	0.0297	119	40-150
31506-32-8	MeFOSA	0.05	0.0521	104	40-150
4151-50-2	EtFOSA	0.05	0.0523	105	40-150
2355-31-9	MeFOSAA	0.025	0.0287	115	40-150
2991-50-6	EtFOSAA	0.025	0.0273	109	40-150
24448-09-7	MeFOSE	0.125	0.130	104	40-150
1691-99-2	EtFOSE	0.125	0.125	100	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0530	106	40-150
919005-14-4	ADONA	0.0473	0.0552	117	40-150
377-73-1	PFMPA	0.05	0.0289	58	40-150
863090-89-5	PFMBA	0.05	0.0607	121	40-150
151772-58-6	NFDHA	0.05	0.0514	103	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0553	118	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0538	114	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-BS	4Q54626.D	1	12/04/23	AL	12/04/23	OP428	S4Q800

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0505	113	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.222	178*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.691	111	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.677	108	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	28%	20-150%
	13C5-PFPeA	95%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	100%	20-150%
	13C9-PFNA	107%	20-150%
	13C6-PFDA	104%	20-150%
	13C7-PFUnDA	110%	20-150%
	13C2-PFDoDA	101%	20-150%
	13C2-PFTeDA	92%	20-150%
	13C3-PFBS	93%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	87%	20-150%
	d3-MeFOSA	88%	20-150%
	d5-EtFOSA	90%	20-150%
	d3-MeFOSAA	96%	20-150%
	d5-EtFOSAA	99%	20-150%
	d7-MeFOSE	70%	20-150%
	d9-EtFOSE	89%	20-150%
	13C2-4:2FTS	79%	20-180%
	13C2-6:2FTS	92%	20-180%
	13C2-8:2FTS	88%	20-180%
	13C3-HFPO-DA	95%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-BS	4Q54667.D	1	12/05/23	AL	12/04/23	OP428	S4Q801

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.119	119	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0557	111	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0278	111	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0279	112	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0280	112	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0298	119	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0261	104	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0294	118	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0306	122	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0304	122	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0295	118	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0271	122	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0264	112	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0238	104	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0277	116	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0279	120	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0288	120	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0265	110	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0256	106	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.107	114	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.107	113	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.114	119	40-150
754-91-6	PFOSA	0.025	0.0292	117	40-150
31506-32-8	MeFOSA	0.05	0.0502	100	40-150
4151-50-2	EtFOSA	0.05	0.0522	104	40-150
2355-31-9	MeFOSAA	0.025	0.0278	111	40-150
2991-50-6	EtFOSAA	0.025	0.0287	115	40-150
24448-09-7	MeFOSE	0.125	0.127	102	40-150
1691-99-2	EtFOSE	0.125	0.123	98	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0533	107	40-150
919005-14-4	ADONA	0.0473	0.0524	111	40-150
377-73-1	PFMPA	0.05	0.0280	56	40-150
863090-89-5	PFMBA	0.05	0.0569	114	40-150
151772-58-6	NFDHA	0.05	0.0496	99	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0524	112	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0502	106	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-BS	4Q54667.D	1	12/05/23	AL	12/04/23	OP428	S4Q801

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0495	111	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.225	180*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.666	107	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.674	108	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	28%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	106%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	112%	20-150%
	13C7-PFUnDA	108%	20-150%
	13C2-PFDoDA	98%	20-150%
	13C2-PFTeDA	91%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	109%	20-150%
	13C8-PFOS	95%	20-150%
	13C8-FOSA	82%	20-150%
	d3-MeFOSA	83%	20-150%
	d5-EtFOSA	81%	20-150%
	d3-MeFOSAA	98%	20-150%
	d5-EtFOSAA	98%	20-150%
	d7-MeFOSE	68%	20-150%
	d9-EtFOSE	83%	20-150%
	13C2-4:2FTS	95%	20-180%
	13C2-6:2FTS	111%	20-180%
	13C2-8:2FTS	106%	20-180%
	13C3-HFPO-DA	105%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-BS	4Q54736.D	1	12/06/23	AL	12/04/23	OP428	S4Q802

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.114	114	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0548	110	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0284	114	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0288	115	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0277	111	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0285	114	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0293	117	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0290	116	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0271	108	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0279	112	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0274	110	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0262	118	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0263	112	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0243	106	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0281	118	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0267	115	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0285	119	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0266	110	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0268	111	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.102	109	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.113	119	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.115	120	40-150
754-91-6	PFOSA	0.025	0.0290	116	40-150
31506-32-8	MeFOSA	0.05	0.0514	103	40-150
4151-50-2	EtFOSA	0.05	0.0554	111	40-150
2355-31-9	MeFOSAA	0.025	0.0288	115	40-150
2991-50-6	EtFOSAA	0.025	0.0302	121	40-150
24448-09-7	MeFOSE	0.125	0.128	102	40-150
1691-99-2	EtFOSE	0.125	0.121	97	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0539	108	40-150
919005-14-4	ADONA	0.0473	0.0521	110	40-150
377-73-1	PFMPA	0.05	0.0281	56	40-150
863090-89-5	PFMBA	0.05	0.0581	116	40-150
151772-58-6	NFDHA	0.05	0.0521	104	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0468	0.0536	115	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0473	0.0495	105	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-BS	4Q54736.D	1	12/06/23	AL	12/04/23	OP428	S4Q802

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0510	115	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.225	180*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.688	110	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.675	108	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	28%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	103%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	106%	20-150%
	13C9-PFNA	96%	20-150%
	13C6-PFDA	98%	20-150%
	13C7-PFUnDA	103%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	90%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	108%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	85%	20-150%
	d3-MeFOSA	85%	20-150%
	d5-EtFOSA	81%	20-150%
	d3-MeFOSAA	101%	20-150%
	d5-EtFOSAA	101%	20-150%
	d7-MeFOSE	66%	20-150%
	d9-EtFOSE	83%	20-150%
	13C2-4:2FTS	112%	20-180%
	13C2-6:2FTS	118%	20-180%
	13C2-8:2FTS	115%	20-180%
	13C3-HFPO-DA	103%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP518-BS [a]	4Q54956.D	1	12/10/23	AL	12/08/23	OP518	S4Q805

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-2, FC11482-3, FC11482-8, FC11482-9, FC11482-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.833	0.943	113	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.781	0.928	119	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.792	0.873	110	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	104%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	103%	20-150%
	13C8-PFOA	97%	20-150%
	13C9-PFNA	94%	20-150%
	13C6-PFDA	101%	20-150%
	13C7-PFUnDA	97%	20-150%
	13C2-PFDoDA	86%	20-150%
	13C2-PFTeDA	82%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	106%	20-150%
	13C8-PFOS	92%	20-150%
	13C8-FOSA	74%	20-150%
	d3-MeFOSA	66%	20-150%
	d5-EtFOSA	68%	20-150%
	d3-MeFOSAA	91%	20-150%
	d5-EtFOSAA	88%	20-150%
	d7-MeFOSE	55%	20-150%
	d9-EtFOSE	68%	20-150%
	13C2-4:2FTS	93%	20-180%
	13C2-6:2FTS	108%	20-180%
	13C2-8:2FTS	105%	20-180%
	13C3-HFPO-DA	94%	20-150%

(a) Insufficient sample for MS/MSD.

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-MS	4Q54751.D	1	12/06/23	AL	12/04/23	OP428	S4Q802
FC11482-4	4Q54750.D	1	12/06/23	AL	12/04/23	OP428	S4Q802

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	FC11482-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	0.0158		0.098	0.117	103	40-150
2706-90-3	Perfluoropentanoic acid	0.0198		0.049	0.0726	108	40-150
307-24-4	Perfluorohexanoic acid	0.0223		0.0245	0.0499	113	40-150
375-85-9	Perfluoroheptanoic acid	0.0071		0.0245	0.0356	116	40-150
335-67-1	Perfluorooctanoic acid	0.0056		0.0245	0.0322	109	40-150
375-95-1	Perfluorononanoic acid	0.0015	J	0.0245	0.0293	113	40-150
335-76-2	Perfluorodecanoic acid	0.00093	J	0.0245	0.0258	101	40-150
2058-94-8	Perfluoroundecanoic acid	ND		0.0245	0.0285	116	40-150
307-55-1	Perfluorododecanoic acid	ND		0.0245	0.0271	111	40-150
72629-94-8	Perfluorotridecanoic acid	ND		0.0245	0.0225	92	40-150
376-06-7	Perfluorotetradecanoic acid	ND		0.0245	0.0274	112	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0041		0.0217	0.0304	121	40-150
2706-91-4	Perfluoropentanesulfonic acid	ND		0.0231	0.0259	112	40-150
355-46-4	Perfluorohexanesulfonic acid	ND		0.0224	0.0226	101	40-150
375-92-8	Perfluoroheptanesulfonic acid	ND		0.0234	0.0276	118	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0020		0.0227	0.0287	117	40-150
68259-12-1	Perfluorononanesulfonic acid	ND		0.0236	0.0269	114	40-150
335-77-3	Perfluorodecanesulfonic acid	ND		0.0237	0.0230	97	40-150
79780-39-5	Perfluorododecanesulfonic aci	ND		0.0238	0.0148	62	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.0919	0.109	119	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.0931	0.102	110	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.0941	0.104	111	40-150
754-91-6	PFOSA	ND		0.0245	0.0267	109	40-150
31506-32-8	MeFOSA	ND		0.049	0.0521	106	40-150
4151-50-2	EtFOSA	ND		0.049	0.0535	109	40-150
2355-31-9	MeFOSAA	ND		0.0245	0.0275	112	40-150
2991-50-6	EtFOSAA	ND		0.0245	0.0297	121	40-150
24448-09-7	MeFOSE	ND		0.123	0.121	99	40-150
1691-99-2	EtFOSE	ND		0.123	0.128	104	40-150
13252-13-6	HFPO-DA (GenX)	ND		0.049	0.0518	106	40-150
919005-14-4	ADONA	ND		0.0463	0.0534	115	40-150
377-73-1	PFMPA	ND		0.049	0.0392	80	40-150
863090-89-5	PFMBA	ND		0.049	0.0555	113	40-150
151772-58-6	NFDHA	ND		0.049	0.0382	78	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.0458	0.0474	103	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.0463	0.0405	87	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-MS	4Q54751.D	1	12/06/23	AL	12/04/23	OP428	S4Q802
FC11482-4	4Q54750.D	1	12/06/23	AL	12/04/23	OP428	S4Q802

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	FC11482-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	ND		0.0436	0.0460	105	40-150
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.123	0.278	227*	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.613	0.769	126	40-150
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.613	0.716	117	40-150

CAS No.	ID Standard Recoveries	MS	FC11482-4	Limits
	13C4-PFBA	44%	52%	20-150%
	13C5-PFPeA	93%	93%	20-150%
	13C5-PFHxA	98%	96%	20-150%
	13C4-PFHpA	99%	99%	20-150%
	13C8-PFOA	97%	94%	20-150%
	13C9-PFNA	96%	99%	20-150%
	13C6-PFDA	105%	98%	20-150%
	13C7-PFUnDA	95%	95%	20-150%
	13C2-PFDoDA	80%	79%	20-150%
	13C2-PFTeDA	49%	46%	20-150%
	13C3-PFBS	95%	91%	20-150%
	13C3-PFHxS	106%	101%	20-150%
	13C8-PFOS	91%	97%	20-150%
	13C8-FOSA	103%	97%	20-150%
	d3-MeFOSA	86%	83%	20-150%
	d5-EtFOSA	82%	79%	20-150%
	d3-MeFOSAA	123%	121%	20-150%
	d5-EtFOSAA	125%	127%	20-150%
	d7-MeFOSE	79%	69%	20-150%
	d9-EtFOSE	86%	76%	20-150%
	13C2-4:2FTS	134%	134%	20-180%
	13C2-6:2FTS	134%	135%	20-180%
	13C2-8:2FTS	119%	103%	20-180%
	13C3-HFPO-DA	91%	85%	20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-DUP	4Q54687.D	1	12/05/23	AL	12/04/23	OP428	S4Q801
FC11482-12	4Q54686.D	1	12/05/23	AL	12/04/23	OP428	S4Q801

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	FC11482-12 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	ND		ND		nc	30
2706-90-3	Perfluoropentanoic acid	ND		ND		nc	30
307-24-4	Perfluorohexanoic acid	ND		ND		nc	30
375-85-9	Perfluoroheptanoic acid	ND		ND		nc	30
335-67-1	Perfluorooctanoic acid	ND		ND		nc	30
375-95-1	Perfluorononanoic acid	ND		ND		nc	30
335-76-2	Perfluorodecanoic acid	ND		ND		nc	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC11482
Account: NDDEQNDB North Dakota DEQ
Project: PFAS; ND

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP428-DUP	4Q54687.D	1	12/05/23	AL	12/04/23	OP428	S4Q801
FC11482-12	4Q54686.D	1	12/05/23	AL	12/04/23	OP428	S4Q801

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC11482-1, FC11482-2, FC11482-3, FC11482-4, FC11482-5, FC11482-6, FC11482-7, FC11482-8, FC11482-9, FC11482-10, FC11482-11, FC11482-12

CAS No.	Compound	FC11482-12 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC11482-12	Limits
	13C4-PFBA	104%	137%	20-150%
	13C5-PFPeA	102%	138%	20-150%
	13C5-PFHxA	102%	136%	20-150%
	13C4-PFHpA	102%	139%	20-150%
	13C8-PFOA	98%	129%	20-150%
	13C9-PFNA	101%	126%	20-150%
	13C6-PFDA	96%	138%	20-150%
	13C7-PFUnDA	96%	123%	20-150%
	13C2-PFDoDA	84%	115%	20-150%
	13C2-PFTeDA	78%	104%	20-150%
	13C3-PFBS	103%	131%	20-150%
	13C3-PFHxS	110%	138%	20-150%
	13C8-PFOS	95%	125%	20-150%
	13C8-FOSA	86%	106%	20-150%
	d3-MeFOSA	76%	105%	20-150%
	d5-EtFOSA	84%	97%	20-150%
	d3-MeFOSAA	94%	120%	20-150%
	d5-EtFOSAA	89%	119%	20-150%
	d7-MeFOSE	80%	100%	20-150%
	d9-EtFOSE	93%	116%	20-150%
	13C2-4:2FTS	105%	138%	20-180%
	13C2-6:2FTS	102%	147%	20-180%
	13C2-8:2FTS	112%	132%	20-180%
	13C3-HFPO-DA	94%	131%	20-150%

* = Outside of Control Limits.

SGS AXYS

2045 Mills Road West
Sidney, BC, Canada V8L5X2

TEL: (250) 655-5800
TOLL-FREE: 1-888-373-0881

SGS AXYS Client No.: 5123

Client Address: SGS Orlando
4405 Vineland Rd, Suite C-15
Orlando, FL, US,

The SGS AXYS contact for these data is Ivona Zysk.

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BATCH SUMMARY

Batch ID: WG86521	***Date:*** 27-Oct-2023
Analysis Type: Per- and Polyfluoroalkyl Substances (PFAS)	***Matrix Type:*** Tissue

BATCH MAKEUP

Contract: 5123

Samples:

L39314-1	DCB23-21
L39314-2	DCB23-10
L39314-3	DCB23-1
L39314-4	DCB23-9
L39314-5	DCB23-7
L39314-6	DCB23-14
L39314-7	DCB23-3
L39314-8	DCB23-12
L39314-9	DCB23-13
L39314-10	DCB23-4
L39314-11	DCB23-2
L39314-12	DCB23-5
L39314-13	DCB23-6
L39314-14	DCB23-15
L39314-15	DCB23-8
L39314-16	DCB23-11

Blank:
WG86521-101

Reference or Spike:
WG86521-102
WG86521-103

Duplicate:
WG86521-104

Comments:

1. Data are considered final.
2. Data are not blank corrected. Blank data should be taken into consideration when evaluating sample data.
3. Blank data should be evaluated against specifications using the same blank sample size as the size of the client samples.
4. In the continuing calibration verification (FC3L_407 S:38) ADONA was observed above the method control limit. As the analyte was not detected in the client samples, data are not considered to be affected.
5. In the continuing calibration verifications (FC3L_407 S:53 and S:63, respectively), the surrogate compounds 13C8-PFOSA and D9-N-ETFOSE were observed outside the method control limits. As the target analytes PFOSA and NETFOSE were observed within method specifications, this is deemed not to have any effect on the data.
6. Percent recoveries of several surrogates in the client samples and QC samples were observed to be outside the method limits and these surrogates have been flagged with a 'V' on the report forms. As the isotope dilution method of quantification produces data that are recovery corrected, the slight variance from the method acceptance criteria is deemed not to affect the quantification of these analytes.
   However, there were some instances where the percent recovery for a surrogate fell below 1%. Where this was observed, the native analyte, with the surrogate being its exact labeled analogue, were not considered quantifiable and flagged with 'NQ'. The data for these compounds are not available.

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February 2017

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(Cooler)

5123

SGS AXYS

2045 Mills Road West TEL: (250) 655-5800
Sidney, British Columbia, Canada V8L 5X2 FAX: (250) 655-5811

CHAIN OF CUSTODY

WB34008

REPORT TO:		INVOICE TO:	
Company	NDDEQ	Company	NDDEQ
Address		Address	
Contact	Shawna Suggs	Contact	Shawna Suggs
Phone	701-328-6409	Phone	701-328-6409
FAX		FAX	
E-mail	SSuggs@nd.gov	E-mail	SSuggs@nd.gov
Project Name/Number:		Sampler's Name:	Lane Dart
		Signature:	

Client Sample Identification	Matrix	Sampling Date	Sampling Time	Container Type/No.	AXYS Lab Sample ID (Lab use only)	ANALYSIS REQUESTED
DCB23-21	T	5/9/23			L39314 - 1	whole body hexagenizations
DCB23-10	T	5/9/23			2	MCA-110
DCB23-1	T	5/9/23			3	
DCB23-9	T	5/9/23			4	
DCB23-7	T	5/9/23			5	
DCB23-14	T	5/9/23			6	

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time	Courier	Waybill No.
	5/9/23	3:10 PM		5/9/23	3:10 PM	FedEx	
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time	Sample Receipt	
			Megan Shrum	5/10/23	10:07		

Remarks:

Sample Receipt	Cooler
Temp °C	
Custody Seal #	
Seal Intact Y / N	
Sample Tags Y / N	

Cooler 3

SGS AXYS

2045 Mills Road West TEL: (250) 655-5800
Sidney, British Columbia, Canada V8L 5X2 FAX: (250) 655-5811

CHAIN OF CUSTODY

5/23
WB34010

REPORT TO:		INVOICE TO:	
Company	NDDEQ	Company	NDDEQ
Address		Address	
Contact	Shannon Suggs	Contact	Shannon Suggs
Phone	701-328-6409	Phone	701-328-6409
FAX		FAX	
E-mail	ssuggs@nd.gov	E-mail	ssuggs@nd.gov

Project Name/Number: Stoke of North Dakota PFAS Sampling

Sampler's Name: Lane Dahl

Signature: [signature]

ANALYSIS REQUESTED

Client Sample Identification	Matrix	Sampling Date	Sampling Time	Container Type/No.	AXYS Lab Sample ID (Lab use only)		
DCB23-3	T	5/9/23			L39314 – 7	MLA-110	whole body Homogenization
DCB23-12	T	5/9/23			8		
DCB23-13	T	5/9/23			9		
DCB23-4	T	5/9/23			10		
DCB23-2	T	5/9/23			11		

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time	Courier	Waybill No.
[signature]	5/9/23	3:10 pm	Gail By Fedex	5/9/23	3:10 pm		
Relinquished by (Signature)	Date	Time	Received by (Signature) Mega Shah	5/10/23	10:07		

Remarks:

Sample Receipt

	Cooler
Temp °C	
Custody Seal #	
Seal Intact Y / N	
Sample Tags Y / N	

SGS AXYS

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SGS AXYS

2045 Mills Road West TEL: (250) 655-5800
Sidney, British Columbia, Canada V8L 5X2 FAX: (250) 655-5811

(cooler)

5123

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:	
Company	NDEQ	Company	NDEQ
Address		Address	
Contact	Shannon Suggs	Contact	Shannon Suggs
Phone	701-328-6409	Phone	701-328-6409
FAX		FAX	
E-mail	SSuggs@nd.gov	E-mail	SSuggs@nd.gov

Project Name/Number:

Sampler's Name: Laura Dahl

Signature:

Client Sample Identification	Matrix	Sampling Date	Sampling Time	Container Type/No.	AXYS Lab Sample ID (Lab use only)	ANALYSIS REQUESTED
DCB23-5	T	5/9/23			L39314-12	whole body homogenization MLA-110
DCB23-6	T	5/9/23			13	
DCB23-15	T	5/9/23			14	
DCB23-8	T	5/9/23			15	
DCB23-11	T	5/9/23			16	

Relinquished by (Signature)	Date 5/9 Time 3:10	Received by (Signature)	Date 5/9 Time 3:10
Relinquished by (Signature)	Date Time	Received by (Signature)	Date 5/10/23 Time 10:07

Courier | Waybill No.

Remarks:

Sample Receipt

	Cooler
Temp °C	
Custody Seal #	
Seal Intact Y / N	
Sample Tags Y / N	

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
DCB23-21
Sample Collection:
09-May-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L39314-1
Matrix:	TISSUE	**Sample Size:**	2.08 g (wet)
Sample Receipt Date:	10-May-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	13-Oct-2023 **Time:** 23:03:08	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC3L_407 S: 44**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 38
Concentration Units:	ng/g (wet weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.385 (Q)		
PFPeA	ND		0.192 (Q)		
PFHxA	ND		0.0962 (Q)		
PFHpA	ND		0.0962 (Q)		
PFOA	ND		0.0962 (Q)		
PFNA		1.53	0.0962 (Q)	2.81	
PFDA		1.01	0.0962 (Q)	2.59	1.000
PFUnA	B	0.753	0.0962 (Q)	3.93	1.000
PFDoA	J	0.141	0.0769 (Q)	9.18	0.999
PFTrDA	B J	0.357	0.0962 (Q)	2.45	0.951
PFTeDA	J	0.105	0.0962 (Q)	2.85	0.999
PFBS	ND		0.0962 (Q)		
PFPeS	ND		0.0966 (Q)		
PFHxS	K J	0.230	0.0962 (Q)	5.23	
PFHpS	ND		0.0962 (Q)		
PFOS		11.9	0.0962 (Q)	2.39	
PFNS	ND		0.0962 (Q)		
PFDS	ND		0.0962 (Q)		
PFDoS	ND		0.0962 (Q)		
4:2 FTS	ND		0.385 (Q)		
6:2 FTS	J	0.375	0.346 (Q)	0.29	1.001
8:2 FTS	ND		0.327 (Q)		
PFOSA	ND		0.0962 (Q)		
N-MeFOSA	ND		0.137 (S)		
N-EtFOSA	ND		0.269 (Q)		
MeFOSAA	ND		0.0962 (Q)		
EtFOSAA	ND		0.0962 (Q)		
N-MeFOSE	ND		0.962 (Q)		
N-EtFOSE	NQ				
HFPO-DA	ND		0.385 (Q)		
ADONA	ND		0.385 (Q)		
9Cl-PF3ONS	ND		0.386 (Q)		
11Cl-PF3OUdS	ND		0.385 (Q)		
3:3 FTCA	ND H		0.385 (Q)		
5:3 FTCA	ND		2.40 (Q)		
7:3 FTCA	ND		2.40 (Q)		
PFEESA	ND		0.0962 (Q)		
PFMPA	ND		0.192 (Q)		
PFMBA	ND		0.0962 (Q)		

NFDHA	ND H	0.192 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification; H = concentration is estimated; NQ = data not quantifiable.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

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SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-21
Sample Collection:
09-May-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L39314-1
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.08 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	13-Oct-2023 **Time:** 23:03:08	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 44**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 38

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA	V	40.0	4.84	12.1		0.997
13C5-PFPeA	V	20.0	6.52	32.6		0.867
13C5-PFHxA	V	10.0	4.37	43.7	13.9	0.999
13C4-PFHpA		10.0	5.07	50.7		0.874
13C8-PFOA		10.0	6.30	63.0		1.000
13C9-PFNA		5.00	4.44	88.8		1.000
13C6-PFDA		5.00	4.54	90.9		0.999
13C7-PFUnA		5.00	4.48	89.6		1.045
13C2-PFDoA		5.00	4.07	81.4		1.085
13C2-PFTeDA		5.00	1.76	35.1		1.191
13C3-PFBS		10.0	6.72	67.0	2.65	0.766
13C3-PFHxS		10.0	8.66	86.4	2.45	1.000
13C8-PFOS		10.1	9.73	96.7	2.12	1.000
13C2-4:2 FTS	V	20.2	4.82	23.9	1.92	0.806
13C2-6:2 FTS	V	20.0	9.75	48.8	2.33	1.002
13C2-8:2 FTS		20.0	14.4	72.0	3.43	1.241
13C8-PFOSA		10.0	8.40	84.0		1.173
D3-N-MeFOSA	V	10.0	0.407	4.07		1.350
D5-N-EtFOSA		10.0	0.621	6.21		1.386
D3-MeFOSAA		20.0	20.4	102		1.279
D5-EtFOSAA		20.0	21.1	105		1.302
d7-NMe-FOSE	V	100	2.27	2.26		1.333
d9-NEt-FOSE	NQ					
13C3-HFPO-DA	V	40.0	12.0	30.0	3.11	1.035

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits; NQ = data not quantifiable.
(2) R(%) = percent recovery.

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Signed: _____Joannas Balauag_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44; Report Filename: PFC_FC_LC_PFAS_L39314-1_Form2_FC3L_407S44_SJ3327348.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
DCB23-10
Sample Collection:
09-May-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L39314-2 (A)
Matrix:	TISSUE	**Sample Size:**	2.14 g (wet)
Sample Receipt Date:	10-May-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	13-Oct-2023 **Time:** 23:16:45	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC3L_407 S: 45**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 38
Concentration Units:	ng/g (wet weight basis)		

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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	K J	1.45	1.07 (S)		1.000
PFPeA	ND		0.366 (S)		
PFHxA	ND		0.203 (S)		
PFHpA	ND		0.0935 (Q)		
PFOA	ND		0.135 (S)		
PFNA		0.812	0.0935 (Q)	2.94	
PFDA		0.439	0.0935 (Q)	2.57	1.000
PFUnA	B J	0.326	0.0935 (Q)	4.75	1.000
PFDoA	J	0.076	0.0748 (Q)	10.4	1.000
PFTrDA	B J	0.175	0.0935 (Q)	3.54	0.951
PFTeDA	ND		0.0935 (Q)		
PFBS	ND		0.0935 (Q)		
PFPeS	ND		0.0939 (Q)		
PFHxS	K J	0.190	0.0935 (Q)	4.08	
PFHpS	ND		0.0935 (Q)		
PFOS		5.02	0.0935 (Q)	2.42	
PFNS	ND		0.0935 (Q)		
PFDS	ND		0.0935 (Q)		
PFDoS	ND		0.0935 (Q)		
4:2 FTS	ND		0.374 (Q)		
6:2 FTS	J	0.634	0.412 (S)	0.39	1.002
8:2 FTS	ND		0.318 (Q)		
PFOSA	ND		0.0935 (Q)		
N-MeFOSA	ND		0.0935 (Q)		
N-EtFOSA	ND		0.262 (Q)		
MeFOSAA	ND		0.0935 (Q)		
EtFOSAA	ND		0.0935 (Q)		
N-MeFOSE	ND		0.935 (Q)		
N-EtFOSE	NQ				
HFPO-DA	ND		0.374 (Q)		
ADONA	ND		0.374 (Q)		
9Cl-PF3ONS	ND		0.375 (Q)		
11Cl-PF3OUdS	ND		0.374 (Q)		
3:3 FTCA	ND H		0.374 (Q)		
5:3 FTCA	ND		2.34 (Q)		
7:3 FTCA	ND		2.34 (Q)		
PFEESA	ND		0.0935 (Q)		
PFMPA	ND		0.187 (Q)		
PFMBA	ND		0.0935 (Q)		

NFDHA	ND H	0.364 (S)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification; H = concentration is estimated; NQ = data not quantifiable.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

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Signed: Joannas Balauag

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Report Filename: PFC_FC_LC_PFAS_L39314-2_Form1A_FC3L_407S45_SJ3327349.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-10
Sample Collection:
09-May-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L39314-2 (A)
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.14 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	13-Oct-2023 **Time:** 23:16:45	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 45**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 38

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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA	V	40.0	1.08	2.69		1.000
13C5-PFPeA	V	20.0	1.16	5.81		0.868
13C5-PFHxA	V	10.0	0.998	9.98	12.5	1.000
13C4-PFHpA	V	10.0	1.26	12.6		0.872
13C8-PFOA	V	10.0	1.97	19.7		0.999
13C9-PFNA	V	5.00	1.94	38.9		1.000
13C6-PFDA		5.00	2.77	55.4		1.000
13C7-PFUnA		5.00	3.59	71.8		1.045
13C2-PFDoA		5.00	3.16	63.2		1.086
13C2-PFTeDA		5.00	1.36	27.1		1.191
13C3-PFBS	V	10.0	2.85	28.5	2.58	0.765
13C3-PFHxS		10.0	5.59	55.8	2.30	0.999
13C8-PFOS		10.1	8.92	88.6	2.21	1.001
13C2-4:2 FTS	V	20.2	0.955	4.74	1.94	0.805
13C2-6:2 FTS	V	20.0	1.68	8.42	2.34	1.002
13C2-8:2 FTS	V	20.0	5.98	29.8	3.52	1.240
13C8-PFOSA		10.0	6.88	68.8		1.169
D3-N-MeFOSA	V	10.0	0.516	5.16		1.349
D5-N-EtFOSA		10.0	0.826	8.26		1.385
D3-MeFOSAA		20.0	14.5	72.6		1.278
D5-EtFOSAA		20.0	17.9	89.5		1.301
d7-NMe-FOSE	V	100	2.28	2.27		1.333
d9-NEt-FOSE	NQ					
13C3-HFPO-DA	V	40.0	2.73	6.83	2.86	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits; NQ = data not quantifiable.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

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SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
DCB23-10 (Duplicate)
Sample Collection:
09-May-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	WG86521-104 (DUP L39314-2)
Matrix:	TISSUE	**Sample Size:**	2.07 g (wet)
Sample Receipt Date:	10-May-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	13-Oct-2023 **Time:** 23:30:23	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC3L_407 S: 46**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 38
Concentration Units:	ng/g (wet weight basis)		

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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	K J	0.716	0.407 (S)		0.997
PFPeA	ND		0.193 (Q)		
PFHxA	ND		0.0966 (Q)		
PFHpA	ND		0.0966 (Q)		
PFOA	ND		0.0966 (Q)		
PFNA		0.723	0.0966 (Q)	2.81	
PFDA	J	0.381	0.0966 (Q)	2.66	1.000
PFUnA	B J	0.320	0.0966 (Q)	3.15	1.000
PFDoA	J	0.083	0.0773 (Q)	6.80	1.001
PFTrDA	B J	0.165	0.0966 (Q)	3.31	0.951
PFTeDA	ND		0.0966 (Q)		
PFBS	ND		0.0966 (Q)		
PFPeS	ND		0.0971 (Q)		
PFHxS	K J	0.227	0.0966 (Q)	6.00	
PFHpS	ND		0.0966 (Q)		
PFOS		4.89	0.0966 (Q)	2.44	
PFNS	ND		0.0966 (Q)		
PFDS	ND		0.0966 (Q)		
PFDoS	ND		0.0966 (Q)		
4:2 FTS	ND		0.386 (Q)		
6:2 FTS	J	0.537	0.348 (Q)	0.37	1.002
8:2 FTS	ND		0.329 (Q)		
PFOSA	ND		0.0966 (Q)		
N-MeFOSA	ND		0.104 (S)		
N-EtFOSA	ND		0.271 (Q)		
MeFOSAA	ND		0.0966 (Q)		
EtFOSAA	ND		0.0966 (Q)		
N-MeFOSE	ND		0.966 (Q)		
N-EtFOSE	NQ				
HFPO-DA	ND		0.386 (Q)		
ADONA	ND		0.386 (Q)		
9Cl-PF3ONS	ND		0.387 (Q)		
11Cl-PF3OUdS	ND		0.387 (Q)		
3:3 FTCA	ND H		0.386 (Q)		
5:3 FTCA	ND		2.42 (Q)		
7:3 FTCA	ND		2.42 (Q)		
PFEESA	ND		0.0966 (Q)		
PFMPA	ND		0.193 (Q)		
PFMBA	ND		0.0966 (Q)		

NFDHA	ND H	0.193 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification; H = concentration is estimated; NQ = data not quantifiable.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

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Signed: Joannas Balauag

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_WG86521-104_Form1A_FC3L_407S46_SJ3327350.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-10 (Duplicate)
Sample Collection:
09-May-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	WG86521-104 (DUP L39314-2)
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.07 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	13-Oct-2023 **Time:** 23:30:23	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 46**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 38

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA	V	40.0	2.84	7.09		1.000
13C5-PFPeA	V	20.0	5.21	26.0		0.868
13C5-PFHxA	V	10.0	4.28	42.8	12.2	1.000
13C4-PFHpA		10.0	5.42	54.2		0.874
13C8-PFOA		10.0	7.03	70.3		1.000
13C9-PFNA		5.00	4.31	86.2		1.000
13C6-PFDA		5.00	4.66	93.2		0.999
13C7-PFUnA		5.00	4.70	94.1		1.045
13C2-PFDoA		5.00	3.94	78.8		1.085
13C2-PFTeDA		5.00	1.72	34.4		1.191
13C3-PFBS		10.0	6.64	66.3	2.63	0.765
13C3-PFHxS		10.0	9.41	93.9	2.37	0.999
13C8-PFOS		10.1	10.1	100	2.14	1.000
13C2-4:2 FTS	V	20.2	5.20	25.8	2.13	0.806
13C2-6:2 FTS		20.0	11.1	55.3	2.35	1.002
13C2-8:2 FTS		20.0	13.2	65.9	3.22	1.240
13C8-PFOSA		10.0	9.17	91.7		1.168
D3-N-MeFOSA	V	10.0	0.631	6.31		1.349
D5-N-EtFOSA		10.0	0.772	7.72		1.384
D3-MeFOSAA		20.0	18.8	94.0		1.279
D5-EtFOSAA		20.0	20.3	102		1.302
d7-NMe-FOSE	V	100	2.50	2.50		1.333
d9-NEt-FOSE	NQ					
13C3-HFPO-DA	V	40.0	12.0	30.0	3.15	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits; NQ = data not quantifiable.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Joannas Balauag_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_WG86521-104_Form2_FC3L_407S46_SJ3327350.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

PERFLUORINATED ORGANICS ANALYSIS REPORT
RELATIVE PERCENT DIFFERENCE

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. NDDEQ

Contract No.: 5123

Client ID: DCB23-10

Concentration Units: ng/g (wet weight basis)

COMPOUND	L39314-2 (A)		WG86521-104		MEAN	RELATIVE PERCENT DIFFERENCE
	LAB FLAG [1]	CONC. FOUND	LAB FLAG [1]	CONC. FOUND		
PFBA	K J	1.45	K J	0.716		
PFPeA	ND		ND			
PFHxA	ND		ND			
PFHpA	ND		ND			
PFOA	ND		ND			
PFNA		0.812		0.723	0.767	11.6
PFDA		0.439	J	0.381	0.410	14.2
PFUnA	J	0.326	J	0.320	0.323	1.57
PFDoA	J	0.076	J	0.083	0.079	8.22
PFTrDA	J	0.175	J	0.165	0.170	6.03
PFTeDA	ND		ND			
PFBS	ND		ND			
PFPeS	ND		ND			
PFHxS	K J	0.190	K J	0.227		
PFHpS	ND		ND			
PFOS		5.02		4.89	4.95	2.61
PFNS	ND		ND			
PFDS	ND		ND			
PFDoS	ND		ND			
4:2 FTS	ND		ND			
6:2 FTS	J	0.634	J	0.537	0.585	16.5
8:2 FTS	ND		ND			
PFOSA	ND		ND			
N-MeFOSA	ND		ND			
N-EtFOSA	ND		ND			
MeFOSAA	ND		ND			
EtFOSAA	ND		ND			
N-MeFOSE	ND		ND			
N-EtFOSE	NQ		NQ			
HFPO-DA	ND		ND			
ADONA	ND		ND			
9Cl-PF3ONS	ND		ND			
11Cl-PF3OUdS	ND		ND			
3:3 FTCA	ND H		ND H			
5:3 FTCA	ND		ND			
7:3 FTCA	ND		ND			
PFEESA	ND		ND			
PFMPA	ND		ND			
PFMBA	ND		ND			
NFDHA	ND H		ND H			

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than limit of quantification; H = concentration is estimated; NQ = data not quantifiable.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.
Signed: Joannas Balauag

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: RPD.xsl; Created: 27-Oct-2023 12:08:33; Application: XMLTransformer-1.18.44;
Report Filename: RPD_FC_LC_PFAS-RPD_WG86521-104_L39314-2_.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
DCB23-1
Sample Collection:
09-May-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L39314-3
Matrix:	TISSUE	**Sample Size:**	2.24 g (wet)
Sample Receipt Date:	10-May-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	13-Oct-2023 **Time:** 23:44:00	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC3L_407 S: 47**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 38
Concentration Units:	ng/g (wet weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	K J	1.39	0.839 (S)		1.003
PFPeA	ND		0.476 (S)		
PFHxA	ND		0.384 (S)		
PFHpA	ND		0.132 (S)		
PFOA	ND		0.217 (S)		
PFNA		1.24	0.0893 (Q)	2.69	
PFDA		0.928	0.0893 (Q)	2.85	1.000
PFUnA	B	0.665	0.0893 (Q)	4.03	1.000
PFDoA	J	0.141	0.0714 (Q)	9.92	0.999
PFTrDA	B	0.427	0.0893 (Q)	3.10	0.951
PFTeDA	ND		0.0893 (Q)		
PFBS	ND		0.0893 (Q)		
PFPeS	ND		0.0897 (Q)		
PFHxS	K J	0.228	0.0893 (Q)	17.5	
PFHpS	ND		0.0893 (Q)		
PFOS		8.92	0.0893 (Q)	2.44	
PFNS	ND		0.0893 (Q)		
PFDS	ND		0.0893 (Q)		
PFDoS	ND		0.0893 (Q)		
4:2 FTS	ND		0.357 (Q)		
6:2 FTS	J	0.461	0.455 (S)	0.28	1.003
8:2 FTS	ND		0.304 (Q)		
PFOSA	ND		0.0893 (Q)		
N-MeFOSA	ND		0.0893 (Q)		
N-EtFOSA	ND		0.250 (Q)		
MeFOSAA	ND		0.0893 (Q)		
EtFOSAA	ND		0.0893 (Q)		
N-MeFOSE	ND		0.893 (Q)		
N-EtFOSE	NQ				
HFPO-DA	ND		0.357 (Q)		
ADONA	ND		0.357 (Q)		
9Cl-PF3ONS	ND		0.358 (Q)		
11Cl-PF3OUdS	ND		0.358 (Q)		
3:3 FTCA	ND H		0.488 (S)		
5:3 FTCA	ND		2.23 (Q)		
7:3 FTCA	ND		2.23 (Q)		
PFEESA	ND		0.0893 (Q)		
PFMPA	ND		0.179 (Q)		
PFMBA	ND		0.0893 (Q)		

NFDHA	ND H	0.179 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification; H = concentration is estimated; NQ = data not quantifiable.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_L39314-3_Form1A_FC3L_407S47_SJ3327351.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-1
Sample Collection:
09-May-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L39314-3
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.24 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	13-Oct-2023 **Time:** 23:44:00	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 47**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 38

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA	V	40.0	0.883	2.21		1.000
13C5-PFPeA	V	20.0	0.748	3.74		0.868
13C5-PFHxA	V	10.0	0.641	6.41	14.6	1.000
13C4-PFHpA	V	10.0	0.849	8.49		0.873
13C8-PFOA	V	10.0	1.26	12.6		0.999
13C9-PFNA	V	5.00	1.47	29.4		1.000
13C6-PFDA	V	5.00	2.29	45.9		1.000
13C7-PFUnA		5.00	3.20	64.1		1.045
13C2-PFDoA		5.00	2.95	58.9		1.087
13C2-PFTeDA		5.00	1.24	24.7		1.192
13C3-PFBS	V	10.0	2.22	22.2	2.60	0.765
13C3-PFHxS	V	10.0	4.84	48.3	2.32	1.000
13C8-PFOS		10.1	8.55	85.0	2.28	1.000
13C2-4:2 FTS	V	20.2	0.847	4.20	1.98	0.805
13C2-6:2 FTS	V	20.0	1.36	6.81	2.93	1.002
13C2-8:2 FTS	V	20.0	3.94	19.6	3.10	1.240
13C8-PFOSA		10.0	6.26	62.6		1.169
D3-N-MeFOSA	V	10.0	0.574	5.74		1.348
D5-N-EtFOSA		10.0	1.03	10.3		1.384
D3-MeFOSAA		20.0	11.9	59.3		1.278
D5-EtFOSAA		20.0	17.0	84.9		1.302
d7-NMe-FOSE	V	100	2.42	2.41		1.332
d9-NEt-FOSE	NQ					
13C3-HFPO-DA	V	40.0	1.89	4.72	3.41	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits; NQ = data not quantifiable.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44; Report Filename: PFC_FC_LC_PFAS_L39314-3_Form2_FC3L_407S47_SJ3327351.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
DCB23-9
Sample Collection:
09-May-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L39314-4
Matrix:	TISSUE	**Sample Size:**	2.29 g (wet)
Sample Receipt Date:	10-May-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	13-Oct-2023 **Time:** 23:57:37	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC3L_407 S: 48**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 38
Concentration Units:	ng/g (wet weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.349 (Q)		
PFPeA	ND		0.175 (Q)		
PFHxA	ND		0.0873 (Q)		
PFHpA	ND		0.0873 (Q)		
PFOA	ND		0.0873 (Q)		
PFNA		0.791	0.0873 (Q)	2.63	
PFDA		0.862	0.0873 (Q)	2.59	1.000
PFUnA	B	0.703	0.0873 (Q)	4.22	1.000
PFDoA	K J	0.122	0.0699 (Q)	17.3	1.000
PFTrDA	B	0.373	0.0873 (Q)	3.81	0.952
PFTeDA	ND		0.0873 (Q)		
PFBS	ND		0.0873 (Q)		
PFPeS	ND		0.0878 (Q)		
PFHxS	K J	0.180	0.0873 (Q)	6.86	
PFHpS	ND		0.0873 (Q)		
PFOS		8.50	0.0873 (Q)	2.50	
PFNS	ND		0.0873 (Q)		
PFDS	ND		0.0873 (Q)		
PFDoS	ND		0.0873 (Q)		
4:2 FTS	ND		0.349 (Q)		
6:2 FTS	J	0.325	0.314 (Q)	0.26	1.002
8:2 FTS	ND		0.297 (Q)		
PFOSA	ND		0.0873 (Q)		
N-MeFOSA	ND		0.0873 (Q)		
N-EtFOSA	ND		0.245 (Q)		
MeFOSAA	ND		0.0873 (Q)		
EtFOSAA	ND		0.0873 (Q)		
N-MeFOSE	ND		0.873 (Q)		
N-EtFOSE	K J	0.887	0.873 (Q)		
HFPO-DA	ND		0.349 (Q)		
ADONA	ND		0.349 (Q)		
9Cl-PF3ONS	ND		0.350 (Q)		
11Cl-PF3OUdS	ND		0.350 (Q)		
3:3 FTCA	ND H		0.349 (Q)		
5:3 FTCA	ND		2.18 (Q)		
7:3 FTCA	ND		2.18 (Q)		
PFEESA	ND		0.0873 (Q)		
PFMPA	ND		0.175 (Q)		
PFMBA	ND		0.0873 (Q)		

NFDHA	ND H	0.175 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_L39314-4_Form1A_FC3L_407S48_SJ3327352.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-9
Sample Collection:
09-May-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L39314-4
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.29 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	13-Oct-2023 **Time:** 23:57:37	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 48**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 38

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	34.4	86.0		1.000
13C5-PFPeA		20.0	19.3	96.7		0.868
13C5-PFHxA		10.0	8.95	89.5	12.5	1.000
13C4-PFHpA		10.0	8.36	83.6		0.873
13C8-PFOA		10.0	8.61	86.1		1.000
13C9-PFNA		5.00	4.62	92.4		1.000
13C6-PFDA		5.00	4.07	81.4		1.000
13C7-PFUnA		5.00	3.73	74.7		1.045
13C2-PFDoA		5.00	3.13	62.7		1.087
13C2-PFTeDA		5.00	2.06	41.2		1.193
13C3-PFBS		10.0	8.64	86.3	2.60	0.765
13C3-PFHxS		10.0	9.25	92.4	2.39	1.000
13C8-PFOS		10.1	8.79	87.4	2.16	1.000
13C2-4:2 FTS		20.2	18.5	91.6	1.95	0.806
13C2-6:2 FTS		20.0	18.4	92.1	2.36	1.002
13C2-8:2 FTS		20.0	13.2	65.8	3.51	1.241
13C8-PFOSA		10.0	7.76	77.6		1.163
D3-N-MeFOSA		10.0	2.29	22.9		1.348
D5-N-EtFOSA		10.0	3.49	34.9		1.385
D3-MeFOSAA		20.0	17.1	85.4		1.279
D5-EtFOSAA		20.0	18.1	90.4		1.303
d7-NMe-FOSE		100	14.6	14.5		1.334
d9-NEt-FOSE		100	9.75	9.74		1.369
13C3-HFPO-DA		40.0	26.1	65.4	3.02	1.036

(1) Where applicable, custom lab flags have been used on this report.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Joannas Balauag_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44; Report Filename: PFC_FC_LC_PFAS_L39314-4_Form2_FC3L_407S48_SJ3327352.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
DCB23-7
Sample Collection:
09-May-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L39314-5
Matrix:	TISSUE	**Sample Size:**	2.70 g (wet)
Sample Receipt Date:	10-May-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	14-Oct-2023 **Time:** 00:11:15	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC3L_407 S: 49**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 38
Concentration Units:	ng/g (wet weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.296 (Q)		
PFPeA	ND		0.148 (Q)		
PFHxA	ND		0.0741 (Q)		
PFHpA	ND		0.0741 (Q)		
PFOA	ND		0.0741 (Q)		
PFNA		1.15	0.0741 (Q)	2.52	
PFDA		0.985	0.0741 (Q)	2.68	1.000
PFUnA	B	0.677	0.0741 (Q)	4.01	1.000
PFDoA	J	0.153	0.0593 (Q)	9.24	1.000
PFTrDA	B	0.381	0.0741 (Q)	3.14	0.951
PFTeDA	J	0.093	0.0741 (Q)	3.23	1.000
PFBS	ND		0.0741 (Q)		
PFPeS	ND		0.0744 (Q)		
PFHxS	K J	0.214	0.0741 (Q)	8.82	
PFHpS	ND		0.0741 (Q)		
PFOS		9.62	0.0741 (Q)	2.41	
PFNS	ND		0.0741 (Q)		
PFDS	ND		0.0741 (Q)		
PFDoS	ND		0.0741 (Q)		
4:2 FTS	ND		0.296 (Q)		
6:2 FTS	ND		0.267 (Q)		
8:2 FTS	ND		0.252 (Q)		
PFOSA	ND		0.0741 (Q)		
N-MeFOSA	ND		0.163 (S)		
N-EtFOSA	ND		0.207 (Q)		
MeFOSAA	ND		0.0741 (Q)		
EtFOSAA	ND		0.0741 (Q)		
N-MeFOSE	ND		0.741 (Q)		
N-EtFOSE	K J	1.90	0.741 (Q)		
HFPO-DA	ND		0.296 (Q)		
ADONA	ND		0.296 (Q)		
9Cl-PF3ONS	ND		0.297 (Q)		
11Cl-PF3OUdS	ND		0.297 (Q)		
3:3 FTCA	ND H		0.296 (Q)		
5:3 FTCA	ND		1.85 (Q)		
7:3 FTCA	ND		1.85 (Q)		
PFEESA	ND		0.0741 (Q)		
PFMPA	ND		0.148 (Q)		
PFMBA	ND		0.0741 (Q)		

NFDHA	ND H	0.148 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_L39314-5_Form1A_FC3L_407S49_SJ3327353.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-7
Sample Collection:
09-May-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L39314-5
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.70 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	14-Oct-2023 **Time:** 00:11:15	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 49**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 38

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	31.7	79.2		1.000
13C5-PFPeA		20.0	20.1	100		0.869
13C5-PFHxA		10.0	9.48	94.8	12.6	1.001
13C4-PFHpA		10.0	9.31	93.1		0.874
13C8-PFOA		10.0	9.21	92.1		1.000
13C9-PFNA		5.00	5.38	108		1.000
13C6-PFDA		5.00	4.85	97.1		1.000
13C7-PFUnA		5.00	4.84	96.8		1.045
13C2-PFDoA		5.00	4.18	83.5		1.086
13C2-PFTeDA		5.00	1.66	33.2		1.192
13C3-PFBS		10.0	8.64	86.3	2.53	0.766
13C3-PFHxS		10.0	9.94	99.3	2.45	0.999
13C8-PFOS		10.1	9.85	97.9	2.20	1.000
13C2-4:2 FTS		20.2	14.9	73.7	1.86	0.807
13C2-6:2 FTS		20.0	18.5	92.4	2.31	1.002
13C2-8:2 FTS		20.0	14.8	73.6	3.46	1.242
13C8-PFOSA		10.0	8.69	86.9		1.171
D3-N-MeFOSA	V	10.0	0.272	2.72		1.352
D5-N-EtFOSA		10.0	0.573	5.73		1.386
D3-MeFOSAA		20.0	17.4	87.0		1.280
D5-EtFOSAA		20.0	17.5	87.6		1.303
d7-NMe-FOSE	V	100	1.61	1.61		1.333
d9-NEt-FOSE	V	100	1.93	1.92		1.372
13C3-HFPO-DA		40.0	19.4	48.5	3.12	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Joannas Balauag_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_L39314-5_Form2_FC3L_407S49_SJ3327353.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
DCB23-14
Sample Collection:
09-May-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L39314-6
Matrix:	TISSUE	**Sample Size:**	2.52 g (wet)
Sample Receipt Date:	10-May-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	14-Oct-2023 **Time:** 00:24:52	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC3L_407 S: 50**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 38
Concentration Units:	ng/g (wet weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.317 (Q)		
PFPeA	ND		0.159 (Q)		
PFHxA	ND		0.0794 (Q)		
PFHpA	ND		0.0794 (Q)		
PFOA	ND		0.0794 (Q)		
PFNA		1.19	0.0794 (Q)	2.61	
PFDA		0.929	0.0794 (Q)	3.09	1.000
PFUnA	B	0.700	0.0794 (Q)	4.15	1.000
PFDoA	J	0.140	0.0635 (Q)	7.05	1.000
PFTrDA	B	0.359	0.0794 (Q)	3.24	0.951
PFTeDA	J	0.082	0.0794 (Q)	2.22	0.999
PFBS	ND		0.0794 (Q)		
PFPeS	ND		0.0798 (Q)		
PFHxS	K J	0.287	0.0794 (Q)	10.6	
PFHpS	ND		0.0794 (Q)		
PFOS		9.95	0.0794 (Q)	2.43	
PFNS	ND		0.0794 (Q)		
PFDS	ND		0.0794 (Q)		
PFDoS	ND		0.0794 (Q)		
4:2 FTS	ND		0.317 (Q)		
6:2 FTS	ND		0.286 (Q)		
8:2 FTS	ND		0.270 (Q)		
PFOSA	ND		0.0794 (Q)		
N-MeFOSA	ND		0.0794 (Q)		
N-EtFOSA	ND		0.222 (Q)		
MeFOSAA	ND		0.0794 (Q)		
EtFOSAA	ND		0.0794 (Q)		
N-MeFOSE	ND		0.794 (Q)		
N-EtFOSE	K	6.93	0.794 (Q)		
HFPO-DA	ND		0.317 (Q)		
ADONA	ND		0.317 (Q)		
9Cl-PF3ONS	ND		0.318 (Q)		
11Cl-PF3OUdS	ND		0.318 (Q)		
3:3 FTCA	ND H		0.317 (Q)		
5:3 FTCA	ND		1.98 (Q)		
7:3 FTCA	ND		1.98 (Q)		
PFEESA	ND		0.0794 (Q)		
PFMPA	ND		0.159 (Q)		
PFMBA	ND		0.0794 (Q)		

NFDHA	ND H	0.159 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44; Report Filename: PFC_FC_LC_PFAS_L39314-6_Form1A_FC3L_407S50_SJ3327354.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-14
Sample Collection:
09-May-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L39314-6
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.52 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	14-Oct-2023 **Time:** 00:24:52	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 50**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 38

This page is part of a total report that contains information necessary for accreditation compliance.
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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	23.4	58.6		1.000
13C5-PFPeA		20.0	19.1	95.7		0.868
13C5-PFHxA		10.0	9.12	91.2	12.0	1.000
13C4-PFHpA		10.0	8.66	86.6		0.874
13C8-PFOA		10.0	8.92	89.2		1.000
13C9-PFNA		5.00	5.47	109		1.000
13C6-PFDA		5.00	5.04	101		1.000
13C7-PFUnA		5.00	4.63	92.7		1.046
13C2-PFDoA		5.00	4.09	81.9		1.087
13C2-PFTeDA		5.00	1.79	35.8		1.192
13C3-PFBS		10.0	8.96	89.4	2.65	0.767
13C3-PFHxS		10.0	9.90	98.8	2.54	1.000
13C8-PFOS		10.1	10.3	102	2.20	1.000
13C2-4:2 FTS		20.2	14.3	70.8	1.98	0.807
13C2-6:2 FTS		20.0	17.6	88.1	2.38	1.001
13C2-8:2 FTS		20.0	16.7	83.6	3.33	1.241
13C8-PFOSA		10.0	9.02	90.2		1.173
D3-N-MeFOSA	V	10.0	0.363	3.63		1.349
D5-N-EtFOSA		10.0	0.680	6.80		1.385
D3-MeFOSAA		20.0	19.1	95.6		1.280
D5-EtFOSAA		20.0	19.1	95.7		1.303
d7-NMe-FOSE	V	100	2.25	2.24		1.333
d9-NEt-FOSE	V	100	1.09	1.09		1.370
13C3-HFPO-DA	V	40.0	14.2	35.5	2.95	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Joannas Balauag_____

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SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
DCB23-3
Sample Collection:
09-May-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L39314-7
Matrix:	TISSUE	**Sample Size:**	2.33 g (wet)
Sample Receipt Date:	10-May-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	14-Oct-2023 **Time:** 00:38:30	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC3L_407 S: 51**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 38
Concentration Units:	ng/g (wet weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.343 (Q)		
PFPeA	ND		0.172 (Q)		
PFHxA	ND		0.0858 (Q)		
PFHpA	ND		0.0858 (Q)		
PFOA	ND		0.0858 (Q)		
PFNA		1.17	0.0858 (Q)	2.62	
PFDA		0.841	0.0858 (Q)	2.73	1.000
PFUnA	B	0.641	0.0858 (Q)	4.34	1.001
PFDoA	J	0.146	0.0687 (Q)	10.1	1.000
PFTrDA	B J	0.300	0.0858 (Q)	2.78	0.951
PFTeDA	ND		0.0858 (Q)		
PFBS	ND		0.0858 (Q)		
PFPeS	ND		0.0863 (Q)		
PFHxS	K J	0.287	0.0858 (Q)	14.4	
PFHpS	ND		0.0858 (Q)		
PFOS		8.00	0.0858 (Q)	2.32	
PFNS	ND		0.0858 (Q)		
PFDS	ND		0.0858 (Q)		
PFDoS	ND		0.0858 (Q)		
4:2 FTS	ND		0.343 (Q)		
6:2 FTS	ND		0.309 (Q)		
8:2 FTS	ND		0.292 (Q)		
PFOSA	ND		0.0858 (Q)		
N-MeFOSA	ND		0.0858 (Q)		
N-EtFOSA	ND		0.240 (Q)		
MeFOSAA	ND		0.0858 (Q)		
EtFOSAA	ND		0.0858 (Q)		
N-MeFOSE	NQ				
N-EtFOSE	ND		0.858 (Q)		
HFPO-DA	ND		0.343 (Q)		
ADONA	ND		0.343 (Q)		
9Cl-PF3ONS	ND		0.344 (Q)		
11Cl-PF3OUdS	ND		0.344 (Q)		
3:3 FTCA	ND H		0.343 (Q)		
5:3 FTCA	ND		2.15 (Q)		
7:3 FTCA	ND		2.15 (Q)		
PFEESA	ND		0.0858 (Q)		
PFMPA	ND		0.172 (Q)		
PFMBA	ND		0.0858 (Q)		

NFDHA	ND H	0.172 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification; H = concentration is estimated; NQ = data not quantifiable.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_L39314-7_Form1A_FC3L_407S51_SJ3327355.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-3
Sample Collection:
09-May-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L39314-7
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.33 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	14-Oct-2023 **Time:** 00:38:30	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 51**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 38

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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	27.0	67.5		0.997
13C5-PFPeA		20.0	15.9	79.3		0.868
13C5-PFHxA		10.0	7.03	70.3	12.1	1.000
13C4-PFHpA		10.0	6.37	63.7		0.874
13C8-PFOA		10.0	6.51	65.1		1.000
13C9-PFNA		5.00	3.80	76.0		1.000
13C6-PFDA		5.00	3.42	68.4		1.000
13C7-PFUnA		5.00	3.00	59.9		1.045
13C2-PFDoA		5.00	2.43	48.5		1.087
13C2-PFTeDA		5.00	1.01	20.1		1.193
13C3-PFBS		10.0	6.49	64.8	2.73	0.766
13C3-PFHxS		10.0	6.89	68.8	2.41	1.000
13C8-PFOS		10.1	7.70	76.5	2.27	1.000
13C2-4:2 FTS		20.2	12.8	63.6	1.97	0.806
13C2-6:2 FTS		20.0	14.3	71.6	2.35	1.002
13C2-8:2 FTS		20.0	12.1	60.6	3.36	1.240
13C8-PFOSA		10.0	5.64	56.4		1.169
D3-N-MeFOSA	V	10.0	0.675	6.75		1.350
D5-N-EtFOSA		10.0	0.987	9.87		1.385
D3-MeFOSAA		20.0	12.8	64.0		1.278
D5-EtFOSAA		20.0	12.3	61.6		1.302
d7-NMe-FOSE	NQ					
d9-NEt-FOSE	V	100	2.53	2.53		1.369
13C3-HFPO-DA		40.0	18.0	45.0	3.11	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits; NQ = data not quantifiable.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Joannas Balauag_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_L39314-7_Form2_FC3L_407S51_SJ3327355.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
DCB23-12
Sample Collection:
09-May-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L39314-8
Matrix:	TISSUE	**Sample Size:**	2.27 g (wet)
Sample Receipt Date:	10-May-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	14-Oct-2023 **Time:** 00:52:07	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC3L_407 S: 52**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 38
Concentration Units:	ng/g (wet weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.352 (Q)		
PFPeA	ND		0.176 (Q)		
PFHxA	ND		0.0881 (Q)		
PFHpA	ND		0.0881 (Q)		
PFOA	ND		0.0881 (Q)		
PFNA		1.17	0.0881 (Q)	2.65	
PFDA		0.905	0.0881 (Q)	2.66	1.000
PFUnA	B	0.629	0.0881 (Q)	3.62	1.000
PFDoA	J	0.170	0.0705 (Q)	10.2	0.999
PFTrDA	B	0.358	0.0881 (Q)	2.58	0.951
PFTeDA	J	0.096	0.0881 (Q)	2.78	0.999
PFBS	ND		0.0881 (Q)		
PFPeS	ND		0.0885 (Q)		
PFHxS	K J	0.197	0.0881 (Q)	7.17	
PFHpS	ND		0.0881 (Q)		
PFOS		10.3	0.0881 (Q)	2.43	
PFNS	ND		0.0881 (Q)		
PFDS	ND		0.0881 (Q)		
PFDoS	ND		0.0881 (Q)		
4:2 FTS	ND		0.352 (Q)		
6:2 FTS	ND		0.317 (Q)		
8:2 FTS	ND		0.300 (Q)		
PFOSA	ND		0.0881 (Q)		
N-MeFOSA	ND		0.0881 (Q)		
N-EtFOSA	ND		0.247 (Q)		
MeFOSAA	ND		0.0881 (Q)		
EtFOSAA	ND		0.0881 (Q)		
N-MeFOSE	NQ				
N-EtFOSE	K J	1.26	0.881 (Q)		
HFPO-DA	ND		0.352 (Q)		
ADONA	ND		0.352 (Q)		
9Cl-PF3ONS	ND		0.353 (Q)		
11Cl-PF3OUdS	ND		0.353 (Q)		
3:3 FTCA	ND H		0.352 (Q)		
5:3 FTCA	ND		2.20 (Q)		
7:3 FTCA	ND		2.20 (Q)		
PFEESA	ND		0.0881 (Q)		
PFMPA	ND		0.176 (Q)		
PFMBA	ND		0.0881 (Q)		

NFDHA	ND H	0.176 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification; H = concentration is estimated; NQ = data not quantifiable.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_L39314-8_Form1A_FC3L_407S52_SJ3327356.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-12
Sample Collection:
09-May-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L39314-8
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.27 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	14-Oct-2023 **Time:** 00:52:07	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 52**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 38

This page is part of a total report that contains information necessary for accreditation compliance.
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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	36.1	90.2		1.000
13C5-PFPeA		20.0	22.7	113		0.868
13C5-PFHxA		10.0	9.91	99.1	11.8	1.000
13C4-PFHpA		10.0	8.49	84.9		0.874
13C8-PFOA		10.0	8.78	87.8		0.999
13C9-PFNA		5.00	5.39	108		1.000
13C6-PFDA		5.00	4.74	94.8		1.000
13C7-PFUnA		5.00	4.49	89.8		1.045
13C2-PFDoA		5.00	3.58	71.7		1.087
13C2-PFTeDA		5.00	1.36	27.1		1.192
13C3-PFBS		10.0	8.80	87.8	2.68	0.766
13C3-PFHxS		10.0	9.36	93.5	2.39	1.000
13C8-PFOS		10.1	9.91	98.5	2.09	1.000
13C2-4:2 FTS		20.2	17.1	84.9	1.97	0.806
13C2-6:2 FTS		20.0	19.7	98.6	2.41	1.002
13C2-8:2 FTS		20.0	16.0	80.0	3.31	1.240
13C8-PFOSA		10.0	8.10	81.0		1.170
D3-N-MeFOSA	V	10.0	0.823	8.23		1.350
D5-N-EtFOSA		10.0	1.13	11.3		1.385
D3-MeFOSAA		20.0	20.0	99.9		1.279
D5-EtFOSAA		20.0	20.7	104		1.302
d7-NMe-FOSE	NQ					
d9-NEt-FOSE	V	100	3.22	3.22		1.369
13C3-HFPO-DA		40.0	16.0	40.1	3.18	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits; NQ = data not quantifiable.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44; Report Filename: PFC_FC_LC_PFAS_L39314-8_Form2_FC3L_407S52_SJ3327356.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
DCB23-13
Sample Collection:
09-May-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L39314-9
Matrix:	TISSUE	**Sample Size:**	2.46 g (wet)
Sample Receipt Date:	10-May-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	14-Oct-2023 **Time:** 01:32:59	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC3L_407 S: 55**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 53
Concentration Units:	ng/g (wet weight basis)		

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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	K J	1.21	0.573 (S)		1.003
PFPeA	ND		0.165 (S)		
PFHxA	ND		0.0813 (Q)		
PFHpA	ND		0.0813 (Q)		
PFOA	ND		0.0813 (Q)		
PFNA		0.679	0.0813 (Q)	2.64	
PFDA		0.355	0.0813 (Q)	2.33	1.000
PFUnA	B J	0.291	0.0813 (Q)	3.97	1.000
PFDoA	K J	0.070	0.0650 (Q)	17.2	1.000
PFTrDA	B J	0.122	0.0813 (Q)	2.23	0.952
PFTeDA	ND		0.0813 (Q)		
PFBS	ND		0.0813 (Q)		
PFPeS	ND		0.0817 (Q)		
PFHxS	K J	0.219	0.0813 (Q)	13.0	
PFHpS	ND		0.0813 (Q)		
PFOS		4.38	0.0813 (Q)	2.54	
PFNS	ND		0.0813 (Q)		
PFDS	ND		0.0813 (Q)		
PFDoS	ND		0.0813 (Q)		
4:2 FTS	ND		0.325 (Q)		
6:2 FTS	ND		0.293 (Q)		
8:2 FTS	ND		0.276 (Q)		
PFOSA	ND		0.0813 (Q)		
N-MeFOSA	ND		0.0813 (Q)		
N-EtFOSA	ND		0.228 (Q)		
MeFOSAA	ND		0.0813 (Q)		
EtFOSAA	ND		0.0813 (Q)		
N-MeFOSE	ND		0.813 (Q)		
N-EtFOSE	NQ				
HFPO-DA	ND		0.325 (Q)		
ADONA	ND		0.325 (Q)		
9Cl-PF3ONS	ND		0.326 (Q)		
11Cl-PF3OUdS	ND		0.326 (Q)		
3:3 FTCA	ND H		0.325 (Q)		
5:3 FTCA	ND		2.03 (Q)		
7:3 FTCA	ND		2.03 (Q)		
PFEESA	ND		0.0813 (Q)		
PFMPA	ND		0.163 (Q)		
PFMBA	ND		0.0813 (Q)		

NFDHA	ND H	0.163 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification; H = concentration is estimated; NQ = data not quantifiable.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_L39314-9_Form1A_FC3L_407S55_SJ3327361.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-13
Sample Collection:
09-May-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L39314-9
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.46 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	14-Oct-2023 **Time:** 01:32:59	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 55**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 53

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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA	V	40.0	1.70	4.24		1.000
13C5-PFPeA	V	20.0	2.80	14.0		0.868
13C5-PFHxA	V	10.0	2.67	26.7	12.7	1.000
13C4-PFHpA	V	10.0	3.72	37.2		0.874
13C8-PFOA	V	10.0	4.99	49.9		1.000
13C9-PFNA		5.00	3.71	74.3		1.000
13C6-PFDA		5.00	4.15	82.9		1.000
13C7-PFUnA		5.00	4.39	87.7		1.045
13C2-PFDoA		5.00	3.44	68.8		1.087
13C2-PFTeDA		5.00	1.20	24.0		1.192
13C3-PFBS		10.0	5.45	54.4	2.80	0.766
13C3-PFHxS		10.0	8.99	89.8	2.57	1.000
13C8-PFOS		10.1	10.3	103	2.10	1.000
13C2-4:2 FTS	V	20.2	2.78	13.8	1.80	0.806
13C2-6:2 FTS	V	20.0	7.26	36.3	2.51	1.002
13C2-8:2 FTS		20.0	11.5	57.4	3.47	1.240
13C8-PFOSA		10.0	8.47	84.7		1.169
D3-N-MeFOSA	V	10.0	0.477	4.77		1.348
D5-N-EtFOSA		10.0	0.792	7.92		1.383
D3-MeFOSAA		20.0	17.8	89.1		1.278
D5-EtFOSAA		20.0	20.9	104		1.302
d7-NMe-FOSE	V	100	1.75	1.74		1.332
d9-NEt-FOSE	NQ					
13C3-HFPO-DA	V	40.0	6.75	16.9	3.15	1.035

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits; NQ = data not quantifiable.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

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SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-4
Sample Collection:
09-May-2023

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L39314-10
Matrix:	TISSUE	**Sample Size:**	2.75 g (wet)
Sample Receipt Date:	10-May-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	14-Oct-2023 **Time:** 01:46:53	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC3L_407 S: 56**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 53
Concentration Units:	ng/g (wet weight basis)		

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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.291 (Q)		
PFPeA	ND		0.145 (Q)		
PFHxA	ND		0.0727 (Q)		
PFHpA	ND		0.0727 (Q)		
PFOA	ND		0.0727 (Q)		
PFNA		0.962	0.0727 (Q)	2.65	
PFDA		0.682	0.0727 (Q)	2.79	1.000
PFUnA	B	0.598	0.0727 (Q)	4.56	1.000
PFDoA	J	0.138	0.0582 (Q)	8.15	0.999
PFTrDA	B	0.303	0.0727 (Q)	2.95	0.951
PFTeDA	J	0.075	0.0727 (Q)	2.30	1.000
PFBS	ND		0.0727 (Q)		
PFPeS	ND		0.0731 (Q)		
PFHxS	K J	0.227	0.0727 (Q)	8.98	
PFHpS	ND		0.0727 (Q)		
PFOS		6.79	0.0727 (Q)	2.42	
PFNS	ND		0.0727 (Q)		
PFDS	ND		0.0727 (Q)		
PFDoS	ND		0.0727 (Q)		
4:2 FTS	ND		0.291 (Q)		
6:2 FTS	ND		0.262 (Q)		
8:2 FTS	ND		0.247 (Q)		
PFOSA	ND		0.0727 (Q)		
N-MeFOSA	ND		0.0727 (Q)		
N-EtFOSA	ND		0.204 (Q)		
MeFOSAA	ND		0.0727 (Q)		
EtFOSAA	ND		0.0727 (Q)		
N-MeFOSE	NQ				
N-EtFOSE	K J	0.993	0.727 (Q)		
HFPO-DA	ND		0.291 (Q)		
ADONA	ND		0.291 (Q)		
9Cl-PF3ONS	ND		0.292 (Q)		
11Cl-PF3OUdS	ND		0.291 (Q)		
3:3 FTCA	ND H		0.291 (Q)		
5:3 FTCA	ND		1.82 (Q)		
7:3 FTCA	ND		1.82 (Q)		
PFEESA	ND		0.0727 (Q)		
PFMPA	ND		0.145 (Q)		
PFMBA	ND		0.0727 (Q)		

NFDHA	ND H	0.145 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification; H = concentration is estimated; NQ = data not quantifiable.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_L39314-10_Form1A_FC3L_407S56_SJ3327362.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-4
Sample Collection:
09-May-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L39314-10
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.75 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	14-Oct-2023 **Time:** 01:46:53	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 56**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 53

This page is part of a total report that contains information necessary for accreditation compliance.
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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	36.7	91.7		0.997
13C5-PFPeA		20.0	21.4	107		0.868
13C5-PFHxA		10.0	9.12	91.2	12.0	1.000
13C4-PFHpA		10.0	8.50	85.0		0.874
13C8-PFOA		10.0	8.79	87.9		1.000
13C9-PFNA		5.00	5.15	103		1.000
13C6-PFDA		5.00	4.51	90.2		1.000
13C7-PFUnA		5.00	4.32	86.4		1.045
13C2-PFDoA		5.00	3.83	76.6		1.087
13C2-PFTeDA		5.00	1.48	29.6		1.192
13C3-PFBS		10.0	8.99	89.7	2.71	0.766
13C3-PFHxS		10.0	9.36	93.5	2.37	1.000
13C8-PFOS		10.1	10.2	102	2.25	1.000
13C2-4:2 FTS		20.2	17.0	84.1	1.96	0.806
13C2-6:2 FTS		20.0	18.9	94.3	2.26	1.002
13C2-8:2 FTS		20.0	15.9	79.4	3.41	1.241
13C8-PFOSA		10.0	8.36	83.6		1.169
D3-N-MeFOSA	V	10.0	0.943	9.43		1.349
D5-N-EtFOSA		10.0	1.52	15.2		1.384
D3-MeFOSAA		20.0	18.7	93.7		1.279
D5-EtFOSAA		20.0	20.5	103		1.302
d7-NMe-FOSE	NQ					
d9-NEt-FOSE	V	100	3.32	3.32		1.368
13C3-HFPO-DA		40.0	18.6	46.5	3.04	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits; NQ = data not quantifiable.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Joannas Balauag_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_L39314-10_Form2_FC3L_407S56_SJ3327362.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
DCB23-2
Sample Collection:
09-May-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L39314-11
Matrix:	TISSUE	**Sample Size:**	2.05 g (wet)
Sample Receipt Date:	10-May-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	14-Oct-2023 **Time:** 02:00:30	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC3L_407 S: 57**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 53
Concentration Units:	ng/g (wet weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.390 (Q)		
PFPeA	ND		0.195 (Q)		
PFHxA	ND		0.0976 (Q)		
PFHpA	ND		0.0976 (Q)		
PFOA	ND		0.0976 (Q)		
PFNA		0.521	0.0976 (Q)	2.69	
PFDA	J	0.372	0.0976 (Q)	2.81	1.000
PFUnA	B J	0.355	0.0976 (Q)	5.25	1.000
PFDoA	K J	0.078	0.0780 (Q)	12.0	0.999
PFTrDA	B J	0.182	0.0976 (Q)	3.11	0.951
PFTeDA	ND		0.0976 (Q)		
PFBS	ND		0.0976 (Q)		
PFPeS	ND		0.0980 (Q)		
PFHxS	K J	0.199	0.0976 (Q)	19.3	
PFHpS	ND		0.0976 (Q)		
PFOS		4.43	0.0976 (Q)	2.53	
PFNS	ND		0.0976 (Q)		
PFDS	ND		0.0976 (Q)		
PFDoS	ND		0.0976 (Q)		
4:2 FTS	ND		0.390 (Q)		
6:2 FTS	ND		0.351 (Q)		
8:2 FTS	ND		0.332 (Q)		
PFOSA	ND		0.0976 (Q)		
N-MeFOSA	ND		0.153 (S)		
N-EtFOSA	ND		0.273 (Q)		
MeFOSAA	ND		0.0976 (Q)		
EtFOSAA	ND		0.0976 (Q)		
N-MeFOSE	ND		0.976 (Q)		
N-EtFOSE	K	3.53	0.976 (Q)		
HFPO-DA	ND		0.390 (Q)		
ADONA	ND		0.390 (Q)		
9Cl-PF3ONS	ND		0.391 (Q)		
11Cl-PF3OUdS	ND		0.391 (Q)		
3:3 FTCA	ND H		0.390 (Q)		
5:3 FTCA	ND		2.44 (Q)		
7:3 FTCA	ND		2.44 (Q)		
PFEESA	ND		0.0976 (Q)		
PFMPA	ND		0.195 (Q)		
PFMBA	ND		0.0976 (Q)		

NFDHA	ND H	0.195 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_L39314-11_Form1A_FC3L_407S57_SJ3327363.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-2
Sample Collection:
09-May-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L39314-11
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.05 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	14-Oct-2023 **Time:** 02:00:30	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 57**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 53

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA	V	40.0	9.80	24.5		1.000
13C5-PFPeA		20.0	11.5	57.6		0.868
13C5-PFHxA		10.0	6.45	64.5	11.0	1.000
13C4-PFHpA		10.0	7.04	70.4		0.874
13C8-PFOA		10.0	7.90	79.0		1.000
13C9-PFNA		5.00	4.71	94.1		1.001
13C6-PFDA		5.00	4.48	89.6		0.999
13C7-PFUnA		5.00	4.09	81.7		1.045
13C2-PFDoA		5.00	3.19	63.8		1.086
13C2-PFTeDA		5.00	1.22	24.4		1.191
13C3-PFBS		10.0	7.79	77.8	2.60	0.766
13C3-PFHxS		10.0	9.05	90.3	2.34	1.000
13C8-PFOS		10.1	9.61	95.5	2.17	1.000
13C2-4:2 FTS	V	20.2	9.29	46.1	1.96	0.806
13C2-6:2 FTS		20.0	14.2	71.0	2.36	1.002
13C2-8:2 FTS		20.0	13.4	66.9	3.49	1.241
13C8-PFOSA		10.0	8.30	83.0		1.170
D3-N-MeFOSA	V	10.0	0.346	3.46		1.350
D5-N-EtFOSA		10.0	0.538	5.38		1.384
D3-MeFOSAA		20.0	16.9	84.4		1.279
D5-EtFOSAA		20.0	18.3	91.3		1.302
d7-NMe-FOSE	V	100	1.66	1.65		1.332
d9-NEt-FOSE	V	100	1.71	1.71		1.371
13C3-HFPO-DA		40.0	16.0	39.9	2.99	1.035

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Joannas Balauag_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_L39314-11_Form2_FC3L_407S57_SJ3327363.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-5
Sample Collection:
09-May-2023

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L39314-12
Matrix:	TISSUE	**Sample Size:**	2.38 g (wet)
Sample Receipt Date:	10-May-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	14-Oct-2023 **Time:** 02:14:00	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC3L_407 S: 58**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 53
Concentration Units:	ng/g (wet weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.336 (Q)		
PFPeA	ND		0.168 (Q)		
PFHxA	ND		0.0840 (Q)		
PFHpA	ND		0.0840 (Q)		
PFOA	ND		0.0840 (Q)		
PFNA		1.06	0.0840 (Q)	2.61	
PFDA		1.07	0.0840 (Q)	2.66	1.001
PFUnA	B	0.754	0.0840 (Q)	4.36	1.000
PFDoA	J	0.161	0.0672 (Q)	10.3	1.000
PFTrDA	B	0.355	0.0840 (Q)	3.27	0.951
PFTeDA	ND		0.0840 (Q)		
PFBS	ND		0.0840 (Q)		
PFPeS	ND		0.0845 (Q)		
PFHxS	K J	0.212	0.0840 (Q)	7.20	
PFHpS	ND		0.0840 (Q)		
PFOS		9.96	0.0840 (Q)	2.37	
PFNS	ND		0.0840 (Q)		
PFDS	ND		0.0840 (Q)		
PFDoS	ND		0.0840 (Q)		
4:2 FTS	ND		0.336 (Q)		
6:2 FTS	ND		0.303 (Q)		
8:2 FTS	ND		0.286 (Q)		
PFOSA	ND		0.0840 (Q)		
N-MeFOSA	ND		0.0840 (Q)		
N-EtFOSA	ND		0.235 (Q)		
MeFOSAA	ND		0.0840 (Q)		
EtFOSAA	ND		0.0840 (Q)		
N-MeFOSE	ND		0.840 (Q)		
N-EtFOSE	K J	1.03	0.840 (Q)		
HFPO-DA	ND		0.336 (Q)		
ADONA	ND		0.336 (Q)		
9Cl-PF3ONS	ND		0.337 (Q)		
11Cl-PF3OUdS	ND		0.337 (Q)		
3:3 FTCA	ND H		0.336 (Q)		
5:3 FTCA	ND		2.10 (Q)		
7:3 FTCA	ND		2.10 (Q)		
PFEESA	ND		0.0840 (Q)		
PFMPA	ND		0.168 (Q)		
PFMBA	ND		0.0840 (Q)		

NFDHA	ND H	0.168 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_L39314-12_Form1A_FC3L_407S58_SJ3327364.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-5
Sample Collection:
09-May-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L39314-12
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.38 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	14-Oct-2023 **Time:** 02:14:00	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 58**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 53

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	35.2	88.1		0.997
13C5-PFPeA		20.0	21.2	106		0.868
13C5-PFHxA		10.0	9.18	91.8	11.6	1.000
13C4-PFHpA		10.0	8.93	89.3		0.874
13C8-PFOA		10.0	9.62	96.2		1.000
13C9-PFNA		5.00	5.33	107		1.000
13C6-PFDA		5.00	4.62	92.5		0.999
13C7-PFUnA		5.00	4.54	90.8		1.045
13C2-PFDoA		5.00	3.57	71.3		1.087
13C2-PFTeDA		5.00	1.56	31.1		1.192
13C3-PFBS		10.0	9.19	91.7	2.64	0.766
13C3-PFHxS		10.0	9.49	94.8	2.39	0.999
13C8-PFOS		10.1	10.5	104	2.21	1.000
13C2-4:2 FTS		20.2	17.5	86.7	1.91	0.806
13C2-6:2 FTS		20.0	18.9	94.5	2.28	1.002
13C2-8:2 FTS		20.0	16.5	82.3	3.38	1.240
13C8-PFOSA		10.0	8.29	82.9		1.169
D3-N-MeFOSA	V	10.0	0.953	9.53		1.350
D5-N-EtFOSA		10.0	1.41	14.1		1.385
D3-MeFOSAA		20.0	19.3	96.7		1.279
D5-EtFOSAA		20.0	20.5	103		1.302
d7-NMe-FOSE	V	100	1.23	1.23		1.332
d9-NEt-FOSE	V	100	4.52	4.51		1.369
13C3-HFPO-DA	V	40.0	14.3	35.8	3.08	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Joannas Balauag_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_L39314-12_Form2_FC3L_407S58_SJ3327364.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
DCB23-6
Sample Collection:
09-May-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L39314-13
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.68 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	14-Oct-2023 **Time:** 02:27:38	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 59**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng/g (wet weight basis)	**Cal. Ver. Data Filename:**	FC3L_407 S: 53

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	K	1.61	0.789 (S)		0.987
PFPeA	ND		0.313 (S)		
PFHxA	ND		0.150 (S)		
PFHpA	ND		0.0746 (Q)		
PFOA	ND		0.0746 (Q)		
PFNA		1.35	0.0746 (Q)	2.55	
PFDA		1.10	0.0746 (Q)	2.78	1.001
PFUnA	B	0.853	0.0746 (Q)	4.18	1.000
PFDoA	J	0.197	0.0597 (Q)	9.89	1.000
PFTrDA	B	0.452	0.0746 (Q)	3.15	0.952
PFTeDA	J	0.098	0.0746 (Q)	2.68	1.000
PFBS	ND		0.0746 (Q)		
PFPeS	ND		0.0750 (Q)		
PFHxS	K J	0.288	0.0746 (Q)	9.29	
PFHpS	ND		0.0746 (Q)		
PFOS		10.5	0.0746 (Q)	2.42	
PFNS	ND		0.0746 (Q)		
PFDS	ND		0.0746 (Q)		
PFDoS	ND		0.0746 (Q)		
4:2 FTS	ND		0.299 (Q)		
6:2 FTS	ND		0.269 (Q)		
8:2 FTS	ND		0.254 (Q)		
PFOSA	ND		0.0746 (Q)		
N-MeFOSA	ND		0.0746 (Q)		
N-EtFOSA	ND		0.209 (Q)		
MeFOSAA	ND		0.0746 (Q)		
EtFOSAA	ND		0.0746 (Q)		
N-MeFOSE	ND		0.746 (Q)		
N-EtFOSE	NQ				
HFPO-DA	ND		0.299 (Q)		
ADONA	ND		0.299 (Q)		
9Cl-PF3ONS	ND		0.299 (Q)		
11Cl-PF3OUdS	ND		0.299 (Q)		
3:3 FTCA	ND H		0.299 (Q)		
5:3 FTCA	ND		1.87 (Q)		
7:3 FTCA	ND		1.87 (Q)		
PFEESA	ND		0.0746 (Q)		
PFMPA	ND		0.149 (Q)		
PFMBA	ND		0.0746 (Q)		

NFDHA	ND H	0.149 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification; H = concentration is estimated; NQ = data not quantifiable.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

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Report Filename: PFC_FC_LC_PFAS_L39314-13_Form1A_FC3L_407S59_SJ3327365.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-6
Sample Collection:
09-May-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L39314-13
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.68 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	14-Oct-2023 **Time:** 02:27:38	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 59**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 53

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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA	V	40.0	1.29	3.22		0.997
13C5-PFPeA	V	20.0	1.48	7.38		0.867
13C5-PFHxA	V	10.0	1.35	13.5	14.9	1.000
13C4-PFHpA	V	10.0	2.03	20.3		0.874
13C8-PFOA	V	10.0	2.89	28.9		0.999
13C9-PFNA	V	5.00	2.44	48.7		1.000
13C6-PFDA		5.00	3.13	62.6		0.999
13C7-PFUnA		5.00	3.70	74.0		1.045
13C2-PFDoA		5.00	3.17	63.3		1.087
13C2-PFTeDA		5.00	1.08	21.7		1.192
13C3-PFBS	V	10.0	3.33	33.2	2.64	0.766
13C3-PFHxS		10.0	6.34	63.3	2.49	1.000
13C8-PFOS		10.1	9.13	90.7	2.24	1.000
13C2-4:2 FTS	V	20.2	1.36	6.77	1.81	0.805
13C2-6:2 FTS	V	20.0	3.31	16.6	2.31	1.002
13C2-8:2 FTS	V	20.0	7.10	35.4	3.16	1.240
13C8-PFOSA		10.0	6.94	69.4		1.170
D3-N-MeFOSA	V	10.0	0.499	4.99		1.348
D5-N-EtFOSA		10.0	0.879	8.79		1.384
D3-MeFOSAA		20.0	13.8	69.0		1.278
D5-EtFOSAA		20.0	17.1	85.4		1.301
d7-NMe-FOSE	V	100	1.96	1.95		1.332
d9-NEt-FOSE	NQ					
13C3-HFPO-DA	V	40.0	3.43	8.56	2.82	1.035

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits; NQ = data not quantifiable.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

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SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-15
Sample Collection:
09-May-2023

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L39314-14
Matrix:	TISSUE	**Sample Size:**	2.16 g (wet)
Sample Receipt Date:	10-May-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	14-Oct-2023 **Time:** 02:41:06	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC3L_407 S: 60**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 53
Concentration Units:	ng/g (wet weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	K J	0.918	0.594 (S)		1.000
PFPeA	ND		0.189 (S)		
PFHxA	K J	0.172	0.0979 (S)	8.04	1.000
PFHpA	ND		0.0926 (Q)		
PFOA	ND		0.0926 (Q)		
PFNA		1.31	0.0926 (Q)	2.58	
PFDA		0.962	0.0926 (Q)	2.42	1.001
PFUnA	B	0.752	0.0926 (Q)	4.10	1.000
PFDoA	J	0.164	0.0741 (Q)	7.93	1.000
PFTrDA	B J	0.328	0.0926 (Q)	2.49	0.951
PFTeDA	J	0.109	0.0926 (Q)	3.50	1.001
PFBS	ND		0.0926 (Q)		
PFPeS	ND		0.0931 (Q)		
PFHxS	K J	0.229	0.0926 (Q)	7.15	
PFHpS	ND		0.0926 (Q)		
PFOS		11.2	0.0926 (Q)	2.45	
PFNS	ND		0.0926 (Q)		
PFDS	ND		0.0926 (Q)		
PFDoS	ND		0.0926 (Q)		
4:2 FTS	ND		0.370 (Q)		
6:2 FTS	ND		0.333 (Q)		
8:2 FTS	ND		0.315 (Q)		
PFOSA	ND		0.0926 (Q)		
N-MeFOSA	ND		0.0955 (S)		
N-EtFOSA	ND		0.259 (Q)		
MeFOSAA	ND		0.0926 (Q)		
EtFOSAA	ND		0.0926 (Q)		
N-MeFOSE	ND		0.926 (Q)		
N-EtFOSE	NQ				
HFPO-DA	ND		0.370 (Q)		
ADONA	ND		0.370 (Q)		
9Cl-PF3ONS	ND		0.371 (Q)		
11Cl-PF3OUdS	ND		0.371 (Q)		
3:3 FTCA	ND H		0.370 (Q)		
5:3 FTCA	ND		2.31 (Q)		
7:3 FTCA	ND		2.31 (Q)		
PFEESA	ND		0.0926 (Q)		
PFMPA	ND		0.185 (Q)		
PFMBA	ND		0.0926 (Q)		

NFDHA	ND H	0.186 (S)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification; H = concentration is estimated; NQ = data not quantifiable.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_L39314-14_Form1A_FC3L_407S60_SJ3327366.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-15
Sample Collection:
09-May-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L39314-14
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.16 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	14-Oct-2023 **Time:** 02:41:06	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 60**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 53

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA	V	40.0	2.08	5.20		0.997
13C5-PFPeA	V	20.0	2.51	12.6		0.867
13C5-PFHxA	V	10.0	1.89	18.9	12.2	1.000
13C4-PFHpA	V	10.0	2.64	26.4		0.874
13C8-PFOA	V	10.0	3.67	36.7		1.000
13C9-PFNA		5.00	2.99	59.8		1.000
13C6-PFDA		5.00	3.51	70.3		0.999
13C7-PFUnA		5.00	4.01	80.3		1.045
13C2-PFDoA		5.00	3.57	71.5		1.086
13C2-PFTeDA		5.00	1.52	30.4		1.191
13C3-PFBS	V	10.0	4.24	42.3	2.73	0.765
13C3-PFHxS		10.0	6.95	69.4	2.32	1.000
13C8-PFOS		10.1	9.91	98.5	2.23	1.000
13C2-4:2 FTS	V	20.2	2.43	12.1	2.26	0.805
13C2-6:2 FTS	V	20.0	4.49	22.5	2.32	1.002
13C2-8:2 FTS		20.0	9.42	47.0	3.58	1.240
13C8-PFOSA		10.0	7.58	75.8		1.171
D3-N-MeFOSA	V	10.0	0.547	5.47		1.349
D5-N-EtFOSA		10.0	0.879	8.79		1.385
D3-MeFOSAA		20.0	18.0	89.8		1.278
D5-EtFOSAA		20.0	21.7	108		1.301
d7-NMe-FOSE	V	100	2.79	2.78		1.332
d9-NEt-FOSE	NQ					
13C3-HFPO-DA	V	40.0	4.89	12.2	2.88	1.035

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits; NQ = data not quantifiable.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Joannas Balauag_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_L39314-14_Form2_FC3L_407S60_SJ3327366.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
DCB23-8
Sample Collection:
09-May-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L39314-15
Matrix:	TISSUE	**Sample Size:**	2.44 g (wet)
Sample Receipt Date:	10-May-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	14-Oct-2023 **Time:** 02:54:44	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC3L_407 S: 61**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 53
Concentration Units:	ng/g (wet weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	K J	0.347	0.328 (Q)		0.993
PFPeA	ND		0.164 (Q)		
PFHxA	ND		0.0820 (Q)		
PFHpA	ND		0.0820 (Q)		
PFOA	ND		0.0820 (Q)		
PFNA		1.17	0.0820 (Q)	2.64	
PFDA		0.910	0.0820 (Q)	2.99	1.000
PFUnA	B	0.733	0.0820 (Q)	4.01	1.000
PFDoA	J	0.182	0.0656 (Q)	7.97	1.000
PFTrDA	B	0.447	0.0820 (Q)	3.03	0.951
PFTeDA	J	0.094	0.0820 (Q)	3.15	0.999
PFBS	ND		0.0820 (Q)		
PFPeS	ND		0.0824 (Q)		
PFHxS	K J	0.258	0.0820 (Q)	9.73	
PFHpS	ND		0.0820 (Q)		
PFOS		9.29	0.0820 (Q)	2.48	
PFNS	ND		0.0820 (Q)		
PFDS	ND		0.0820 (Q)		
PFDoS	ND		0.0820 (Q)		
4:2 FTS	ND		0.328 (Q)		
6:2 FTS	J	0.362	0.295 (Q)	0.38	1.002
8:2 FTS	ND		0.279 (Q)		
PFOSA	ND		0.0820 (Q)		
N-MeFOSA	ND		0.109 (S)		
N-EtFOSA	ND		0.230 (Q)		
MeFOSAA	ND		0.0820 (Q)		
EtFOSAA	ND		0.0820 (Q)		
N-MeFOSE	ND		0.820 (Q)		
N-EtFOSE	K	6.03	0.820 (Q)		
HFPO-DA	ND		0.328 (Q)		
ADONA	ND		0.328 (Q)		
9Cl-PF3ONS	ND		0.329 (Q)		
11Cl-PF3OUdS	ND		0.328 (Q)		
3:3 FTCA	ND H		0.328 (Q)		
5:3 FTCA	ND		2.05 (Q)		
7:3 FTCA	ND		2.05 (Q)		
PFEESA	ND		0.0820 (Q)		
PFMPA	ND		0.164 (Q)		
PFMBA	ND		0.0820 (Q)		

NFDHA	ND H	0.164 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

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Report Filename: PFC_FC_LC_PFAS_L39314-15_Form1A_FC3L_407S61_SJ3327367.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-8
Sample Collection:
09-May-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L39314-15
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.44 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	14-Oct-2023 **Time:** 02:54:44	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 61**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 53

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA	V	40.0	4.72	11.8		1.000
13C5-PFPeA	V	20.0	7.51	37.6		0.869
13C5-PFHxA		10.0	5.00	50.0	13.1	1.000
13C4-PFHpA		10.0	5.89	58.9		0.873
13C8-PFOA		10.0	7.04	70.4		1.000
13C9-PFNA		5.00	4.74	94.8		1.000
13C6-PFDA		5.00	4.63	92.5		0.999
13C7-PFUnA		5.00	4.40	87.9		1.045
13C2-PFDoA		5.00	3.76	75.3		1.087
13C2-PFTeDA		5.00	1.62	32.3		1.192
13C3-PFBS		10.0	7.16	71.4	2.65	0.766
13C3-PFHxS		10.0	9.39	93.8	2.37	1.000
13C8-PFOS		10.1	10.5	104	2.07	1.000
13C2-4:2 FTS	V	20.2	6.88	34.1	1.99	0.805
13C2-6:2 FTS		20.0	12.4	61.9	2.32	1.002
13C2-8:2 FTS		20.0	14.5	72.1	3.41	1.241
13C8-PFOSA		10.0	8.50	85.0		1.171
D3-N-MeFOSA	V	10.0	0.432	4.32		1.349
D5-N-EtFOSA		10.0	0.768	7.68		1.384
D3-MeFOSAA		20.0	19.5	97.6		1.279
D5-EtFOSAA		20.0	20.8	104		1.302
d7-NMe-FOSE	V	100	2.31	2.30		1.332
d9-NEt-FOSE	V	100	1.10	1.10		1.369
13C3-HFPO-DA	V	40.0	9.09	22.7	3.05	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Joannas Balauag_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_L39314-15_Form2_FC3L_407S61_SJ3327367.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
DCB23-11
Sample Collection:
09-May-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L39314-16
Matrix:	TISSUE	**Sample Size:**	2.07 g (wet)
Sample Receipt Date:	10-May-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	14-Oct-2023 **Time:** 03:08:21	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC3L_407 S: 62**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 53
Concentration Units:	ng/g (wet weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	K J	0.872	0.731 (S)		0.993
PFPeA	ND		0.323 (S)		
PFHxA	ND		0.208 (S)		
PFHpA	ND		0.133 (S)		
PFOA	ND		0.169 (S)		
PFNA		1.24	0.0966 (Q)	2.54	
PFDA		1.06	0.0966 (Q)	2.90	1.000
PFUnA	B	0.712	0.0966 (Q)	4.60	1.000
PFDoA	J	0.166	0.0773 (Q)	8.06	1.000
PFTrDA	B J	0.368	0.0966 (Q)	3.12	0.952
PFTeDA	ND		0.0966 (Q)		
PFBS	ND		0.0966 (Q)		
PFPeS	ND		0.0971 (Q)		
PFHxS	K J	0.233	0.0966 (Q)	8.07	
PFHpS	ND		0.0966 (Q)		
PFOS		9.39	0.0966 (Q)	2.42	
PFNS	ND		0.0966 (Q)		
PFDS	ND		0.0966 (Q)		
PFDoS	ND		0.0966 (Q)		
4:2 FTS	ND		0.386 (Q)		
6:2 FTS	J	0.388	0.377 (S)	0.24	1.002
8:2 FTS	ND		0.329 (Q)		
PFOSA	ND		0.0966 (Q)		
N-MeFOSA	ND		0.120 (S)		
N-EtFOSA	ND		0.271 (Q)		
MeFOSAA	ND		0.0966 (Q)		
EtFOSAA	ND		0.0966 (Q)		
N-MeFOSE	ND		0.966 (Q)		
N-EtFOSE	K	5.59	0.966 (Q)		
HFPO-DA	ND		0.386 (Q)		
ADONA	ND		0.386 (Q)		
9Cl-PF3ONS	ND		0.387 (Q)		
11Cl-PF3OUdS	ND		0.387 (Q)		
3:3 FTCA	ND H		0.386 (Q)		
5:3 FTCA	ND		2.42 (Q)		
7:3 FTCA	ND		2.42 (Q)		
PFEESA	ND		0.0966 (Q)		
PFMPA	ND		0.193 (Q)		
PFMBA	ND		0.0966 (Q)		

NFDHA	ND H	0.193 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

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Report Filename: PFC_FC_LC_PFAS_L39314-16_Form1A_FC3L_407S62_SJ3327368.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
DCB23-11
Sample Collection:
09-May-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L39314-16
Sample Receipt Date:	10-May-2023	**Sample Size:**	2.07 g (wet)
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	14-Oct-2023 **Time:** 03:08:21	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 62**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 53

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA	V	40.0	1.97	4.94		1.000
13C5-PFPeA	V	20.0	1.54	7.68		0.868
13C5-PFHxA	V	10.0	1.09	10.9	12.3	1.000
13C4-PFHpA	V	10.0	1.26	12.6		0.873
13C8-PFOA	V	10.0	1.76	17.6		0.999
13C9-PFNA	V	5.00	1.83	36.5		1.000
13C6-PFDA	V	5.00	2.47	49.5		1.000
13C7-PFUnA		5.00	3.38	67.7		1.045
13C2-PFDoA		5.00	2.85	56.9		1.087
13C2-PFTeDA		5.00	1.21	24.2		1.192
13C3-PFBS	V	10.0	2.53	25.2	2.77	0.765
13C3-PFHxS		10.0	5.30	52.9	2.52	1.000
13C8-PFOS		10.1	9.15	90.9	2.16	1.000
13C2-4:2 FTS	V	20.2	1.47	7.27	1.83	0.805
13C2-6:2 FTS	V	20.0	2.06	10.3	2.28	1.002
13C2-8:2 FTS	V	20.0	5.06	25.3	3.53	1.240
13C8-PFOSA		10.0	5.12	51.2		1.168
D3-N-MeFOSA	V	10.0	0.471	4.71		1.349
D5-N-EtFOSA		10.0	0.800	8.00		1.383
D3-MeFOSAA		20.0	11.1	55.3		1.278
D5-EtFOSAA		20.0	15.9	79.7		1.302
d7-NMe-FOSE	V	100	1.82	1.81		1.331
d9-NEt-FOSE	V	100	1.31	1.30		1.371
13C3-HFPO-DA	V	40.0	2.74	6.86	2.66	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Joannas Balauag_____

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Report Filename: PFC_FC_LC_PFAS_L39314-16_Form2_FC3L_407S62_SJ3327368.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	5123	**Lab Sample I.D.:**	WG86521-101
Matrix:	TISSUE	**Sample Size:**	2.00 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	13-Oct-2023 **Time:** 22:49:14	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC3L_407 S: 43**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 38
Concentration Units:	ng/g		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.400 (Q)		
PFPeA	ND		0.200 (Q)		
PFHxA	ND		0.100 (Q)		
PFHpA	ND		0.100 (Q)		
PFOA	ND		0.100 (Q)		
PFNA	ND		0.100 (Q)		
PFDA	ND		0.100 (Q)		
PFUnA	J	0.143	0.100 (Q)	5.81	1.001
PFDoA	ND		0.0800 (Q)		
PFTrDA	J	0.111	0.100 (Q)	2.89	0.952
PFTeDA	ND		0.100 (Q)		
PFBS	ND		0.100 (Q)		
PFPeS	ND		0.101 (Q)		
PFHxS	ND		0.100 (Q)		
PFHpS	ND		0.100 (Q)		
PFOS	K J	0.124	0.100 (Q)	4.02	
PFNS	ND		0.100 (Q)		
PFDS	ND		0.100 (Q)		
PFDoS	ND		0.100 (Q)		
4:2 FTS	ND		0.400 (Q)		
6:2 FTS	ND		0.360 (Q)		
8:2 FTS	ND		0.340 (Q)		
PFOSA	ND		0.100 (Q)		
N-MeFOSA	ND		0.100 (Q)		
N-EtFOSA	ND		0.280 (Q)		
MeFOSAA	ND		0.100 (Q)		
EtFOSAA	ND		0.100 (Q)		
N-MeFOSE	NQ				
N-EtFOSE	ND		1.00 (Q)		
HFPO-DA	ND		0.400 (Q)		
ADONA	ND		0.400 (Q)		
9Cl-PF3ONS	ND		0.401 (Q)		
11Cl-PF3OUdS	ND		0.401 (Q)		
3:3 FTCA	ND H		0.400 (Q)		
5:3 FTCA	ND		2.50 (Q)		
7:3 FTCA	ND		2.50 (Q)		
PFEESA	ND		0.100 (Q)		
PFMPA	ND		0.200 (Q)		
PFMBA	ND		0.100 (Q)		

NFDHA	ND H	0.200 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than limit of quantification; H = concentration is estimated; NQ = data not quantifiable.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

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Report Filename: PFC_FC_LC_PFAS_WG86521-101_Form1A_FC3L_407S43_SJ3327346.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	N/A
Matrix:	TISSUE	**Lab Sample I.D.:**	WG86521-101
Sample Receipt Date:	N/A	**Sample Size:**	2.00 g
Extraction Date:	10-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	13-Oct-2023 **Time:** 22:49:14	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC3L_407 S: 43**
Dilution Factor:	N/A	**Blank Data Filename:**	FC3L_407 S: 43
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC3L_407 S: 38

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	28.7	71.8		1.000
13C5-PFPeA		20.0	20.4	102		0.868
13C5-PFHxA		10.0	9.60	96.0	11.7	1.000
13C4-PFHpA		10.0	8.90	89.0		0.873
13C8-PFOA		10.0	9.18	91.8		1.000
13C9-PFNA		5.00	5.30	106		1.001
13C6-PFDA		5.00	4.85	97.0		1.000
13C7-PFUnA		5.00	4.52	90.3		1.045
13C2-PFDoA		5.00	4.06	81.1		1.085
13C2-PFTeDA		5.00	2.11	42.2		1.192
13C3-PFBS		10.0	9.31	93.0	2.56	0.765
13C3-PFHxS		10.0	10.3	102	2.51	0.999
13C8-PFOS		10.1	10.2	102	2.27	1.000
13C2-4:2 FTS		20.2	20.5	101	1.91	0.805
13C2-6:2 FTS		20.0	18.9	94.4	2.22	1.002
13C2-8:2 FTS		20.0	16.3	81.1	3.66	1.240
13C8-PFOSA		10.0	11.2	112		1.165
D3-N-MeFOSA	V	10.0	1.71	17.1		1.351
D5-N-EtFOSA		10.0	2.79	27.9		1.385
D3-MeFOSAA		20.0	22.8	114		1.278
D5-EtFOSAA		20.0	27.9	140		1.302
d7-NMe-FOSE	NQ					
d9-NEt-FOSE		100	11.8	11.8		1.370
13C3-HFPO-DA		40.0	29.5	73.7	3.15	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits; NQ = data not quantifiable.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Joannas Balauag_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 27-Oct-2023 11:53:21; Application: XMLTransformer-1.18.44;
Report Filename: PFC_FC_LC_PFAS_WG86521-101_Form2_FC3L_407S43_SJ3327346.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 8A

PERFLUORINATED ORGANICS ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Lab Sample I.D.:**	WG86521-102
Matrix:	TISSUE	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	13-Oct-2023 **Time:** 22:21:52	**Column ID:**	C18
Extract Volume (uL):	4000	**OPR Data Filename:**	**FC3L_407 S: 41**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 38

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 1 mL EXTRACT VOLUME.

COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
PFBA			20.0	19.3	96.5	1.003
PFPeA			10.0	9.16	91.6	1.000
PFHxA		4.48	5.00	4.36	87.3	1.000
PFHpA		2.12	5.00	4.90	98.0	1.000
PFOA		1.99	5.00	5.05	101	
PFNA		2.52	5.00	4.99	99.9	
PFDA		2.64	5.00	4.26	85.2	1.000
PFUnA		3.98	5.00	4.71	94.3	1.000
PFDoA		8.58	4.06	4.22	104	1.000
PFTrDA		2.82	5.00	4.73	94.6	0.952
PFTeDA		2.39	5.00	4.53	90.6	1.000
PFBS		2.62	5.00	4.49	89.8	1.000
PFPeS		2.30	5.00	4.58	91.6	0.864
PFHxS		2.45	5.00	3.89	77.9	
PFHpS		2.03	5.00	4.74	94.8	0.934
PFOS		2.50	5.00	4.59	91.8	
PFNS		2.39	5.00	4.15	82.9	1.044
PFDS		2.22	5.00	3.99	79.9	1.089
PFDoS		2.09	5.00	2.32	46.5	1.201
4:2 FTS		0.41	20.0	18.0	90.2	1.000
6:2 FTS		0.36	18.0	17.7	98.4	0.999
8:2 FTS		0.47	16.9	16.6	98.2	1.000
PFOSA			5.00	4.91	98.3	
N-MeFOSA		0.52	5.00	4.35	87.0	
N-EtFOSA		0.50	14.0	14.1	101	
MeFOSAA		2.14	5.00	4.36	87.1	
EtFOSAA		1.19	5.00	4.21	84.3	
N-MeFOSE	NQ					
N-EtFOSE			50.0	45.7	91.3	
HFPO-DA		2.95	20.0	18.3	91.6	1.000
ADONA		1.21	20.0	25.6	128	1.121
9Cl-PF3ONS		3.24	20.0	21.6	108	0.962
11Cl-PF3OUdS		3.07	20.0	18.3	91.3	1.048
3:3 FTCA	H	1.51	20.0	8.20	41.0	
5:3 FTCA		1.39	125	132	105	1.057

COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
7:3 FTCA		0.64	125	138	111	1.381
PFEESA		8.95	5.00	4.96	99.2	1.043
PFMPA			10.0	8.58	85.8	
PFMBA			5.00	5.08	102	1.061
NFDHA	H		10.0	5.52	55.2	

(1) Where applicable, custom lab flags have been used on this report; H = concentration is estimated; NQ = data not quantifiable.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: PFC_FC_LC_PFAS_WG86521-102_Form8A_SJ3327343.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 8B

PERFLUORINATED ORGANICS ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Lab Sample I.D.:**	WG86521-102
Matrix:	TISSUE	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	13-Oct-2023 **Time:** 22:21:52	**Column ID:**	C18
Extract Volume (uL):	4000	**OPR Data Filename:**	**FC3L_407 S: 41**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 38

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 1 mL EXTRACT VOLUME.

LABELED COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
13C4-PFBA			40.0	26.8	67.0	1.000
13C5-PFPeA			20.0	19.7	98.5	0.868
13C5-PFHxA		11.8	10.0	9.26	92.6	1.000
13C4-PFHpA			10.0	8.71	87.1	0.873
13C8-PFOA			10.0	8.94	89.4	1.000
13C9-PFNA			5.00	5.05	101	1.000
13C6-PFDA			5.00	4.65	92.9	1.000
13C7-PFUnA			5.00	4.32	86.3	1.045
13C2-PFDoA			5.00	3.70	74.0	1.086
13C2-PFTeDA			5.00	1.81	36.2	1.192
13C3-PFBS		2.79	10.0	9.43	94.1	0.765
13C3-PFHxS		2.62	10.0	10.7	107	1.000
13C8-PFOS		2.06	10.1	10.2	102	1.000
13C2-4:2 FTS		1.83	20.2	19.7	97.6	0.806
13C2-6:2 FTS		2.16	20.0	18.3	91.7	1.002
13C2-8:2 FTS		3.24	20.0	14.5	72.3	1.241
13C8-PFOSA			10.0	11.1	111	1.165
D3-N-MeFOSA			10.0	2.75	27.5	1.350
D5-N-EtFOSA			10.0	2.75	27.5	1.385
D3-MeFOSAA			20.0	21.3	106	1.279
D5-EtFOSAA			20.0	26.4	132	1.303
d7-NMe-FOSE	NQ					
d9-NEt-FOSE			100	12.8	12.7	1.370
13C3-HFPO-DA		3.00	40.0	28.3	70.6	1.036

(1) Where applicable, custom lab flags have been used on this report; NQ = data not quantifiable.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

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Report Filename: PFC_FC_LC_PFAS_WG86521-102_Form8B_SJ3327343.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 8A

PERFLUORINATED ORGANICS ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Lab Sample I.D.:**	WG86521-103
Matrix:	TISSUE	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	13-Oct-2023 **Time:** 22:08:14	**Column ID:**	C18
Extract Volume (uL):	4000	**OPR Data Filename:**	**FC3L_407 S: 40**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 38

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 1 mL EXTRACT VOLUME.

COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
PFBA			6.40	6.29	98.2	1.003
PFPeA			3.20	2.95	92.3	1.001
PFHxA		4.66	1.60	1.50	93.7	1.000
PFHpA		2.38	1.60	1.71	107	1.000
PFOA		2.03	1.60	1.70	106	
PFNA		2.68	1.60	1.60	100	
PFDA		3.20	1.60	1.42	88.7	1.000
PFUnA		4.34	1.60	1.71	107	1.000
PFDoA		8.89	1.30	1.51	117	1.000
PFTrDA		2.90	1.60	1.63	102	0.951
PFTeDA		2.71	1.60	1.57	98.3	1.000
PFBS		2.63	1.60	1.47	91.9	1.000
PFPeS		2.34	1.60	1.46	91.4	0.863
PFHxS		2.61	1.60	1.58	99.0	
PFHpS		1.96	1.60	1.49	93.3	0.934
PFOS		2.77	1.60	1.52	95.1	
PFNS		2.11	1.60	1.32	82.8	1.044
PFDS		2.45	1.60	1.34	83.6	1.089
PFDoS		2.20	1.60	0.747	46.7	1.201
4:2 FTS		0.42	6.40	5.90	92.2	1.000
6:2 FTS		0.39	5.75	7.04	123	1.001
8:2 FTS		0.49	5.42	5.51	102	1.000
PFOSA			1.60	1.71	107	
N-MeFOSA		0.53	1.60	1.49	92.9	
N-EtFOSA		0.49	4.48	4.13	92.2	
MeFOSAA		2.74	1.60	1.57	98.2	
EtFOSAA		1.09	1.60	1.42	88.9	
N-MeFOSE	NQ					
N-EtFOSE			16.0	15.7	98.2	
HFPO-DA		2.49	6.40	5.78	90.4	1.000
ADONA		1.21	6.40	8.11	127	1.122
9Cl-PF3ONS		3.08	6.40	6.54	102	0.963
11Cl-PF3OUdS		2.96	6.40	5.55	86.8	1.049
3:3 FTCA	H	1.49	6.40	2.89	45.2	
5:3 FTCA		1.35	40.0	42.4	106	1.058

COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
7:3 FTCA		0.65	40.0	45.6	114	1.383
PFEESA		8.90	1.60	1.63	102	1.044
PFMPA			3.20	2.93	91.7	
PFMBA			1.60	1.60	99.9	1.061
NFDHA	H		3.20	1.87	58.3	

(1) Where applicable, custom lab flags have been used on this report; H = concentration is estimated; NQ = data not quantifiable.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Joannas Balauag

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: PFC_FC_LC_PFAS_WG86521-103_Form8A_SJ3327341.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 8B

PERFLUORINATED ORGANICS ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Lab Sample I.D.:**	WG86521-103
Matrix:	TISSUE	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	10-Aug-2023	**Instrument ID:**	LCMS/MS
Analysis Date:	13-Oct-2023 **Time:** 22:08:14	**Column ID:**	C18
Extract Volume (uL):	4000	**OPR Data Filename:**	**FC3L_407 S: 40**
Injection Volume (uL):	2	**Blank Data Filename:**	FC3L_407 S: 43
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC3L_407 S: 38

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 1 mL EXTRACT VOLUME.

LABELED COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
13C4-PFBA			40.0	34.7	86.7	1.000
13C5-PFPeA			20.0	22.3	112	0.868
13C5-PFHxA		12.7	10.0	10.2	102	1.000
13C4-PFHpA			10.0	9.20	92.0	0.872
13C8-PFOA			10.0	9.22	92.2	0.999
13C9-PFNA			5.00	5.80	116	1.000
13C6-PFDA			5.00	5.16	103	1.000
13C7-PFUnA			5.00	5.02	100	1.045
13C2-PFDoA			5.00	4.12	82.4	1.086
13C2-PFTeDA			5.00	1.83	36.7	1.193
13C3-PFBS		2.62	10.0	10.1	101	0.764
13C3-PFHxS		2.40	10.0	11.0	110	0.999
13C8-PFOS		2.21	10.1	10.9	108	1.000
13C2-4:2 FTS		1.92	20.2	21.5	106	0.805
13C2-6:2 FTS		2.22	20.0	20.4	102	1.002
13C2-8:2 FTS		3.31	20.0	16.8	84.0	1.240
13C8-PFOSA			10.0	11.1	111	1.165
D3-N-MeFOSA			10.0	2.61	26.1	1.349
D5-N-EtFOSA			10.0	2.74	27.4	1.385
D3-MeFOSAA			20.0	23.3	116	1.279
D5-EtFOSAA			20.0	27.4	137	1.302
d7-NMe-FOSE	NQ					
d9-NEt-FOSE			100	14.3	14.3	1.370
13C3-HFPO-DA		3.16	40.0	31.7	79.1	1.036

(1) Where applicable, custom lab flags have been used on this report; NQ = data not quantifiable.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Joannas Balauag_____

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: PFC_FC_LC_PFAS_WG86521-103_Form8B_SJ3327341.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 3A
INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 01-Mar-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A

CS1 Data Filename: FC3L_107 S: 16

CS2 Data Filename: FC3L_107 S: 17

CS3 Data Filename: FC3L_107 S: 18

CS4 Data Filename: FC3L_107 S: 19

CS5 Data Filename: FC3L_107 S: 20

CS6 Data Filename: FC3L_107 S: 21

CS7 Data Filename: FC3L_107 S: 22

CS8 Data Filename: FC3L_107 S: 23

		RELATIVE RESPONSE (RR)										
COMPOUND	LAB FLAG [1]	CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	MEAN RR	CV (%RSD)[2]
PFBA			0.86	0.83	0.85	0.81	0.85	0.82	0.82	0.82	0.83	2.14
PFPeA			1.14	1.11	1.07	0.98	1.07	1.04	1.00	1.00	1.05	5.39
PFHxA			1.33	1.23	1.13	1.03	1.04	1.00	1.01	1.05	1.10	11.0
PFHpA			1.15	1.24	1.20	1.13	1.16	1.11	1.13	1.13	1.16	3.70
PFOA			1.47	1.32	1.34	1.34	1.26	1.29	1.28	1.27	1.32	5.22
PFNA			1.08	1.00	0.99	1.04	0.99	0.99	0.98	0.97	1.01	3.77
PFDA			0.83	0.74	0.70	0.66	0.74	0.67	0.70	0.68	0.71	7.38
PFUnA			0.78	0.76	0.77	0.70	0.75	0.71	0.70	0.70	0.73	4.69
PFDoA			1.18	1.14	1.11	1.12	1.17	1.09	1.07	1.02	1.11	4.78
PFTrDA			0.98	0.92	0.84	0.81	0.83	0.80	0.80	0.75	0.84	8.87
PFTeDA			0.87	0.83	0.77	0.75	0.78	0.76	0.74	0.68	0.77	7.62
PFBS			1.14	1.01	1.05	1.05	1.08	1.04	1.06	1.04	1.06	3.67
PFPeS			1.00	0.92	0.99	0.95	1.01	0.94	0.96	0.91	0.96	3.99
PFHxS			1.37	1.28	1.26	1.14	1.26	1.16	1.19	1.20	1.23	6.14
PFHpS			1.11	1.09	1.00	0.97	1.02	0.99	1.00	0.93	1.01	5.99
PFOS			1.25	1.14	1.12	1.02	1.11	1.17	1.10	1.06	1.12	6.16
PFNS			1.05	1.00	1.02	0.97	1.01	0.96	0.99	0.97	0.99	2.96
PFDS			0.93	0.97	0.92	0.89	0.94	0.93	0.95	0.94	0.94	2.43
PFDoS			0.84	0.82	0.86	0.79	0.86	0.84	0.87	0.87	0.85	3.31
4:2 FTS			0.53	0.50	0.49	0.45	0.49	0.47	0.45	0.42	0.47	7.27
6:2 FTS			0.51	0.46	0.48	0.43	0.46	0.44	0.43	0.40	0.45	7.25
8:2 FTS			0.35	0.30	0.32	0.30	0.32	0.30	0.30	0.25	0.31	9.70
PFOSA			0.97	0.96	0.93	0.89	0.92	0.90	0.90	0.91	0.92	3.33
N-MeFOSA			0.90	1.05	0.93	0.93	0.92	0.96	0.95	0.90	0.94	4.82
N-EtFOSA			1.15	1.14	1.08	1.10	1.18	1.10	1.18	1.13	1.13	3.25
MeFOSAA			0.87	0.93	1.00	0.91	0.94	0.88	0.86		0.91	5.56
EtFOSAA			0.77	0.75	0.68	0.75	0.78	0.73	0.74		0.74	4.16
N-MeFOSE			0.81	0.78	0.77	0.74	0.77	0.76	0.74	0.73	0.76	3.65
N-EtFOSE			1.08	1.03	1.03	0.99	1.04	1.02	1.01	0.98	1.02	3.19
HFPO-DA			1.02	0.96	0.96	0.89	0.97	0.92	0.91	0.87	0.94	5.20
ADONA			4.87	4.87	4.83	4.56	4.86	4.80	4.80	4.74	4.79	2.17
9Cl-PF3ONS			1.38	1.26	1.35	1.28	1.34	1.29	1.31	1.19	1.30	4.43
11Cl-PF3OUdS			0.76	0.73	0.75	0.71	0.78	0.74	0.77	0.71	0.74	3.36
3:3 FTCA			0.07	0.06	0.06	0.06	0.06	0.07	0.07	0.08	0.07	8.61
5:3 FTCA			0.18	0.16	0.17	0.17	0.17	0.17	0.18	0.21	0.18	7.83
7:3 FTCA			0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.12	0.10	7.99
PFEESA			2.86	2.57	2.60	2.50	2.56	2.51	2.57	2.87	2.63	5.64
PFMPA			1.62	1.60	1.57	1.47	1.56	1.54	1.51	1.59	1.56	3.24

COMPOUND	LAB FLAG [1]	RELATIVE RESPONSE (RR) CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	MEAN RR	CV (%RSD)[2]
PFMBA			2.14	2.14	2.16	2.06	2.17	2.09	2.14	2.30	2.15	3.37
NFDHA			0.09	0.09	0.09	0.08	0.09	0.09	0.08	0.08	0.09	5.65

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see SGS AXYS METHOD MLA-110 Rev 02

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Jordan Berends

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SGS AXYS METHOD MLA-110 Rev 02

Form 3B
INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 01-Mar-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A

CS1 Data Filename: FC3L_107 S: 16

CS2 Data Filename: FC3L_107 S: 17

CS3 Data Filename: FC3L_107 S: 18

CS4 Data Filename: FC3L_107 S: 19

CS5 Data Filename: FC3L_107 S: 20

CS6 Data Filename: FC3L_107 S: 21

CS7 Data Filename: FC3L_107 S: 22

CS8 Data Filename: FC3L_107 S: 23

		RELATIVE RESPONSE (RR)									
LABELED COMPOUND	LAB FLAG [1]	CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	MEAN RR	CV (%RSD)[2]
13C4-PFBA			1.07	1.11	1.08	1.05	1.08	1.09	1.09	1.07	1.08	1.60
13C5-PFPeA			0.93	0.95	0.93	0.92	0.94	0.93	0.95	0.90	0.93	1.71
13C5-PFHxA			0.65	0.70	0.66	0.64	0.69	0.66	0.66	0.63	0.66	3.33
13C4-PFHpA			3.41	3.65	3.45	3.36	3.21	3.53	3.36	3.31	3.41	3.96
13C8-PFOA			3.71	3.92	3.85	3.61	3.62	3.81	3.68	3.81	3.75	3.04
13C9-PFNA			1.02	1.04	1.03	1.05	1.06	1.05	1.04	1.02	1.04	1.56
13C6-PFDA			0.99	1.10	1.05	1.02	1.02	1.04	1.00	1.01	1.03	3.30
13C7-PFUnA			1.07	1.14	1.11	1.07	1.10	1.09	1.06	1.04	1.08	3.02
13C2-PFDoA			0.88	0.94	0.91	0.85	0.87	0.90	0.88	0.95	0.90	3.90
13C2-PFTeDA			0.92	0.98	0.98	0.94	0.98	0.96	0.96	1.06	0.97	4.24
13C3-PFBS			1.31	1.40	1.31	1.24	1.37	1.30	1.25	1.08	1.28	7.48
13C3-PFHxS			1.10	1.15	1.12	1.07	1.12	1.11	1.12	1.10	1.11	2.19
13C8-PFOS			1.04	1.03	1.05	1.06	1.05	1.04	0.99	1.05	1.04	1.93
13C2-4:2 FTS			1.22	1.17	1.10	1.15	1.11	1.01	0.95	0.92	1.08	9.94
13C2-6:2 FTS			1.00	1.00	0.94	0.97	0.98	0.93	0.97	1.01	0.98	2.97
13C2-8:2 FTS			1.49	1.45	1.42	1.44	1.43	1.34	1.33	1.40	1.41	3.76
13C8-PFOSA			1.72	1.76	1.77	1.72	1.77	1.75	1.73	1.93	1.77	3.87
D3-N-MeFOSA			0.24	0.26	0.27	0.26	0.27	0.25	0.25	0.28	0.26	5.17
D5-N-EtFOSA			0.25	0.26	0.26	0.25	0.25	0.26	0.24	0.26	0.25	3.36
D3-MeFOSAA			0.45	0.45	0.46	0.42	0.47	0.50	0.62		0.48	13.6
D5-EtFOSAA			0.40	0.40	0.39	0.39	0.42	0.43	0.52		0.42	10.7
d7-NMe-FOSE			2.21	2.19	2.26	2.22	2.24	2.17	2.19	2.37	2.23	2.77
d9-NEt-FOSE			1.85	1.84	1.90	1.88	1.88	1.83	1.80	1.95	1.87	2.49
13C3-HFPO-DA			0.44	0.46	0.45	0.44	0.45	0.44	0.43	0.41	0.44	3.38

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see SGS AXYS METHOD MLA-110 Rev 02.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Jordan Berends

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SGS AXYS METHOD MLA-110 Rev 02

Form 3C
LC MS/MS INITIAL CALIBRATION RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 01-Mar-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A
CS1 Data Filename: FC3L_107 S: 16
CS2 Data Filename: FC3L_107 S: 17
CS3 Data Filename: FC3L_107 S: 18
CS4 Data Filename: FC3L_107 S: 19
CS5 Data Filename: FC3L_107 S: 20
CS6 Data Filename: FC3L_107 S: 21
CS7 Data Filename: FC3L_107 S: 22
CS8 Data Filename: FC3L_107 S: 23

		RATIOS							
COMPOUND	LAB FLAG [1]	CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8
PFBA										
PFPeA										
PFHxA			5.24	5.95	5.71	5.10	5.29	5.21	5.37	5.23
PFHpA			2.11	2.24	2.38	2.36	2.23	2.23	2.23	2.21
PFOA			2.14	1.90	2.05	2.03	1.95	1.99	2.00	1.99
PFNA			2.97	2.71	2.79	2.82	2.69	2.84	2.83	2.78
PFDA			3.28	3.99	2.90	3.07	3.10	2.98	3.12	3.01
PFUnA			5.66	5.27	4.47	4.61	4.63	4.60	4.49	4.49
PFDoA			7.35	7.43	7.38	7.72	7.38	7.27	7.30	7.39
PFTrDA			3.39	3.56	3.13	3.19	3.16	3.16	3.17	3.20
PFTeDA			2.56	2.87	2.55	2.81	2.83	2.83	2.78	2.79
PFBS			2.64	2.75	2.72	2.70	2.75	2.74	2.76	2.72
PFPeS			2.35	2.06	2.47	2.30	2.27	2.33	2.37	2.34
PFHxS			2.33	2.29	2.49	2.42	2.61	2.44	2.50	2.45
PFHpS			2.38	2.02	2.09	2.03	2.15	2.08	2.09	2.07
PFOS			2.07	2.49	2.62	2.63	2.60	2.67	2.61	2.60
PFNS			2.39	2.19	2.34	2.41	2.27	2.28	2.24	2.30
PFDS			2.05	2.40	2.30	2.33	2.30	2.30	2.31	2.30
PFDoS			1.86	2.05	2.15	2.13	2.14	2.23	2.18	2.21
4:2 FTS			0.45	0.45	0.45	0.43	0.45	0.45	0.44	0.45
6:2 FTS			0.44	0.42	0.43	0.40	0.41	0.41	0.41	0.42
8:2 FTS			0.55	0.48	0.51	0.53	0.52	0.53	0.53	0.54
PFOSA										
N-MeFOSA			0.48	0.60	0.52	0.53	0.53	0.53	0.54	0.53
N-EtFOSA			0.49	0.53	0.49	0.51	0.52	0.53	0.54	0.53
MeFOSAA			1.36	2.00	2.51	2.02	1.92	1.89	1.91	
EtFOSAA			1.43	1.05	1.05	1.25	1.14	1.12	1.15	
N-MeFOSE										
N-EtFOSE										
HFPO-DA			2.92	2.68	2.91	2.82	2.91	2.81	2.89	2.83
ADONA			1.15	1.21	1.19	1.19	1.20	1.18	1.18	1.19
9Cl-PF3ONS			3.15	2.99	3.20	3.26	3.20	3.15	3.15	3.18
11Cl-PF3OUdS			3.16	3.03	3.18	3.12	3.25	3.11	3.16	3.14
3:3 FTCA			1.60	1.42	1.60	1.50	1.59	1.60	1.57	1.60
5:3 FTCA			1.37	1.31	1.40	1.40	1.39	1.40	1.41	1.41

COMPOUND	LAB FLAG [1]	RATIOS CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8
7:3 FTCA			0.62	0.67	0.65	0.68	0.66	0.64	0.66	0.66
PFEESA			7.86	9.04	8.42	8.79	8.42	8.33	8.40	8.78
PFMPA										
PFMBA										
NFDHA										

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Jordan Berends

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SGS AXYS METHOD MLA-110 Rev 02

Form 3D
LC MS/MS INITIAL CALIBRATION RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 01-Mar-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A
CS1 Data Filename: FC3L_107 S: 16
CS2 Data Filename: FC3L_107 S: 17
CS3 Data Filename: FC3L_107 S: 18
CS4 Data Filename: FC3L_107 S: 19
CS5 Data Filename: FC3L_107 S: 20
CS6 Data Filename: FC3L_107 S: 21
CS7 Data Filename: FC3L_107 S: 22
CS8 Data Filename: FC3L_107 S: 23

		RATIOS							
LABELED COMPOUND	LAB FLAG[1]	CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8
13C4-PFBA										
13C5-PFPeA										
13C5-PFHxA			14.8	14.6	14.9	13.9	14.9	15.4	16.1	14.7
13C4-PFHpA										
13C8-PFOA										
13C9-PFNA										
13C6-PFDA										
13C7-PFUnA										
13C2-PFDoA										
13C2-PFTeDA										
13C3-PFBS			2.83	2.71	2.68	2.63	2.82	2.82	2.70	2.77
13C3-PFHxS			2.45	2.41	2.44	2.36	2.39	2.49	2.50	2.50
13C8-PFOS			2.24	2.18	2.09	2.25	2.16	2.28	2.19	2.17
13C2-4:2 FTS			1.85	1.81	1.78	1.77	1.74	1.51	1.22	0.55
13C2-6:2 FTS			2.22	2.19	2.07	2.13	2.03	1.83	1.52	0.74
13C2-8:2 FTS			3.37	3.31	3.31	3.25	3.06	2.99	2.34	1.27
13C8-PFOSA										
D3-N-MeFOSA										
D5-N-EtFOSA										
D3-MeFOSAA										
D5-EtFOSAA										
d7-NMe-FOSE										
d9-NEt-FOSE										
13C3-HFPO-DA			2.93	2.85	2.85	2.92	2.92	2.87	2.94	3.04

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Jordan Berends

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Report Filename: GENERIC-SPECS_FC_LC_01-Mar-2023_FC3L__Form3D_GS105534.html; Workgroup: WG86521; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 4A
LC MS/MS CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	01-Mar-2023	**VER Data Filename:**	FC3L_407 S: 38
Instrument ID:	LCMS/MS	**Analysis Date:**	13-Oct-2023
LC Column ID:	C18	**Analysis Time:**	21:40:27

COMPOUND	LAB FLAG [1]	RRT	QUANT TRANSITION	RATIO	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
PFBA		1.003	213 >169		20.0	20.7	104
PFPeA		1.000	263 > 219		10.0	9.50	95.0
PFHxA		1.000	313 > 269	4.24	5.00	4.90	98.1
PFHpA		1.000	363 > 319	2.10	5.00	5.28	106
PFOA		1.000	413 > 369	2.01	5.00	5.24	105
PFNA		1.001	463 > 419	2.78	5.00	5.38	108
PFDA		1.000	513 > 469	2.74	5.00	4.45	89.0
PFUnA		1.000	563 > 519	4.24	5.00	4.78	95.6
PFDoA		1.000	613 > 569	6.61	4.06	4.08	101
PFTrDA		0.951	663 > 619	2.92	5.00	5.22	104
PFTeDA		1.000	713 > 669	2.62	5.00	4.91	98.2
PFBS		1.000	299 > 80	2.62	5.00	4.49	89.9
PFPeS		0.862	349 > 80	2.52	5.00	5.52	110
PFHxS			399 > 80	2.31	5.00	4.43	88.6
PFHpS		0.935	449 > 80	2.16	5.00	5.37	107
PFOS			499 > 80	2.52	5.00	4.64	92.8
PFNS		1.044	549 > 80	2.25	5.00	4.24	84.8
PFDS		1.089	599 > 80	2.24	5.00	4.73	94.6
PFDoS		1.202	699 > 80	2.12	5.00	4.30	86.0
4:2 FTS		1.000	327 > 307	0.42	20.0	19.7	98.3
6:2 FTS		1.001	427 > 407	0.40	18.0	20.8	116
8:2 FTS		1.000	527 > 507	0.48	17.0	17.2	101
PFOSA		1.000	498 > 78		5.00	5.33	107
N-MeFOSA		1.000	512 > 219	0.56	5.00	5.71	114
N-EtFOSA		1.001	526 > 219	0.53	14.0	15.3	109
MeFOSAA		1.001	570 > 419	2.05	5.00	4.93	98.6
EtFOSAA		1.001	584 > 419	1.00	5.00	4.54	90.9
N-MeFOSE		1.002	616 > 59		50.0	51.7	103
N-EtFOSE		1.002	630 > 59		50.0	51.1	102
HFPO-DA		1.001	285 > 169	2.97	20.0	21.4	107
ADONA		1.123	377 > 251	1.20	20.0	26.5	132
9Cl-PF3ONS		0.962	531 > 351	3.08	20.0	20.4	102
11Cl-PF3OUdS		1.049	631 > 451	2.97	20.0	20.1	101
3:3 FTCA			241 > 177	1.68	20.0	17.8	89.0
5:3 FTCA		1.058	341 > 237	1.40	125	122	97.3
7:3 FTCA		1.384	441 > 317	0.67	125	109	86.9
PFEESA		1.043	315 > 135	8.94	5.00	5.20	104
PFMPA			229 > 85		10.0	9.52	95.2
PFMBA		1.060	279 > 85		5.00	5.24	105
NFDHA			295 > 201		10.0	7.16	71.6

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Joannas Balauag_____

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SGS AXYS METHOD MLA-110 Rev 02

Form 4B
LC MS/MS CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	01-Mar-2023	**VER Data Filename:**	FC3L_407 S: 38
Instrument ID:	LCMS/MS	**Analysis Date:**	13-Oct-2023
LC Column ID:	C18	**Analysis Time:**	21:40:27

LABELED COMPOUND	LAB FLAG [1]	RRT	QUANT TRANSITION	RATIO	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
13C4-PFBA		1.000	217 > 172		40.0	38.1	95.3
13C5-PFPeA		0.870	268 > 223		20.0	21.5	108
13C5-PFHxA		1.000	318 > 273	12.5	10.0	9.32	93.2
13C4-PFHpA		0.872	367 > 322		10.0	9.45	94.5
13C8-PFOA		1.000	421 > 376		10.0	9.88	98.8
13C9-PFNA		1.000	472 > 427		5.00	5.23	105
13C6-PFDA		1.000	519 > 474		5.00	5.11	102
13C7-PFUnA		1.044	570 > 525		5.00	4.78	95.7
13C2-PFDoA		1.086	615 > 570		5.00	4.50	90.0
13C2-PFTeDA		1.193	715 > 670		5.00	4.01	80.2
13C3-PFBS		0.765	302 > 80	2.75	10.0	11.0	110
13C3-PFHxS		1.001	402 > 80	2.45	10.0	10.6	106
13C8-PFOS		1.000	507 > 80	2.21	10.1	11.3	112
13C2-4:2 FTS		0.805	329 > 81	1.81	20.2	22.1	110
13C2-6:2 FTS		1.002	429 > 81	2.11	20.0	20.0	99.9
13C2-8:2 FTS		1.242	529 > 81	3.52	20.0	16.7	83.5
13C8-PFOSA		1.159	506 > 78		10.0	11.8	118
D3-N-MeFOSA		1.348	515 > 219		10.0	10.3	103
D5-N-EtFOSA		1.383	531 > 219		10.0	9.02	90.2
D3-MeFOSAA		1.280	573 > 419		20.0	19.9	99.3
D5-EtFOSAA		1.303	589 > 419		20.0	20.2	101
d7-NMe-FOSE		1.332	623 > 59		100	114	113
d9-NEt-FOSE		1.367	639 > 59		100	109	109
13C3-HFPO-DA		1.035	287 > 169	2.99	40.0	31.6	79.0

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Joannas Balauag_____

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SGS AXYS METHOD MLA-110 Rev 02

Form 4A
LC MS/MS CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	01-Mar-2023	**VER Data Filename:**	FC3L_407 S: 53
Instrument ID:	LCMS/MS	**Analysis Date:**	14-Oct-2023
LC Column ID:	C18	**Analysis Time:**	01:05:44

COMPOUND	LAB FLAG [1]	RRT	QUANT TRANSITION	RATIO	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
PFBA		1.003	213 >169		20.0	20.7	104
PFPeA		1.001	263 > 219		10.0	9.26	92.6
PFHxA		1.000	313 > 269	4.17	5.00	4.69	93.8
PFHpA		1.000	363 > 319	2.17	5.00	5.35	107
PFOA		1.000	413 > 369	2.07	5.00	5.43	109
PFNA		1.001	463 > 419	2.72	5.00	5.17	103
PFDA		1.001	513 > 469	2.90	5.00	4.57	91.4
PFUnA		1.000	563 > 519	4.12	5.00	4.85	97.1
PFDoA		1.000	613 > 569	7.78	4.06	4.66	115
PFTrDA		0.952	663 > 619	3.03	5.00	5.35	107
PFTeDA		1.001	713 > 669	2.51	5.00	5.07	101
PFBS		1.000	299 > 80	2.60	5.00	4.65	93.0
PFPeS		0.863	349 > 80	2.30	5.00	5.23	105
PFHxS			399 > 80	2.30	5.00	4.39	87.7
PFHpS		0.936	449 > 80	2.05	5.00	5.27	105
PFOS			499 > 80	2.40	5.00	4.48	89.6
PFNS		1.045	549 > 80	2.30	5.00	4.33	86.7
PFDS		1.090	599 > 80	2.33	5.00	4.76	95.2
PFDoS		1.203	699 > 80	2.22	5.00	4.50	90.0
4:2 FTS		1.000	327 > 307	0.42	20.0	18.6	92.8
6:2 FTS		1.000	427 > 407	0.40	18.0	20.0	111
8:2 FTS		1.000	527 > 507	0.49	17.0	17.8	105
PFOSA		1.001	498 > 78		5.00	5.20	104
N-MeFOSA		1.000	512 > 219	0.59	5.00	5.94	119
N-EtFOSA		1.001	526 > 219	0.52	14.0	14.3	102
MeFOSAA		1.001	570 > 419	1.72	5.00	4.60	92.0
EtFOSAA		1.001	584 > 419	1.33	5.00	5.34	107
N-MeFOSE		1.002	616 > 59		50.0	52.0	104
N-EtFOSE		1.002	630 > 59		50.0	50.1	100
HFPO-DA		1.000	285 > 169	2.85	20.0	19.9	99.6
ADONA		1.122	377 > 251	1.17	20.0	25.9	130
9Cl-PF3ONS		0.961	531 > 351	3.26	20.0	20.4	102
11Cl-PF3OUdS		1.049	631 > 451	3.16	20.0	20.3	101
3:3 FTCA			241 > 177	1.65	20.0	16.6	82.8
5:3 FTCA		1.059	341 > 237	1.40	125	122	97.5
7:3 FTCA		1.383	441 > 317	0.64	125	104	82.9
PFEESA		1.044	315 > 135	8.85	5.00	5.09	102
PFMPA			229 > 85		10.0	9.12	91.2
PFMBA		1.061	279 > 85		5.00	4.83	96.6
NFDHA			295 > 201		10.0	7.63	76.3

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Joannas Balauag_____

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SGS AXYS METHOD MLA-110 Rev 02

Form 4B
LC MS/MS CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	01-Mar-2023	**VER Data Filename:**	FC3L_407 S: 53
Instrument ID:	LCMS/MS	**Analysis Date:**	14-Oct-2023
LC Column ID:	C18	**Analysis Time:**	01:05:44

LABELED COMPOUND	LAB FLAG [1]	RRT	QUANT TRANSITION	RATIO	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
13C4-PFBA		1.000	217 > 172		40.0	38.0	95.1
13C5-PFPeA		0.869	268 > 223		20.0	22.5	113
13C5-PFHxA		1.000	318 > 273	12.3	10.0	9.44	94.4
13C4-PFHpA		0.873	367 > 322		10.0	9.42	94.2
13C8-PFOA		1.000	421 > 376		10.0	9.45	94.5
13C9-PFNA		1.000	472 > 427		5.00	5.43	109
13C6-PFDA		0.999	519 > 474		5.00	4.97	99.4
13C7-PFUnA		1.045	570 > 525		5.00	4.84	96.8
13C2-PFDoA		1.087	615 > 570		5.00	4.40	88.1
13C2-PFTeDA		1.193	715 > 670		5.00	4.21	84.2
13C3-PFBS		0.765	302 > 80	2.72	10.0	10.6	106
13C3-PFHxS		1.000	402 > 80	2.36	10.0	10.5	105
13C8-PFOS		0.999	507 > 80	2.19	10.1	11.1	111
13C2-4:2 FTS		0.805	329 > 81	1.92	20.2	24.7	122
13C2-6:2 FTS		1.002	429 > 81	2.18	20.0	20.7	104
13C2-8:2 FTS		1.240	529 > 81	3.37	20.0	15.9	79.5
13C8-PFOSA		1.159	506 > 78		10.0	17.6	176
D3-N-MeFOSA		1.348	515 > 219		10.0	10.7	107
D5-N-EtFOSA		1.383	531 > 219		10.0	10.3	103
D3-MeFOSAA		1.278	573 > 419		20.0	20.0	99.9
D5-EtFOSAA		1.302	589 > 419		20.0	19.9	99.3
d7-NMe-FOSE		1.332	623 > 59		100	130	130
d9-NEt-FOSE		1.368	639 > 59		100	154	154
13C3-HFPO-DA		1.036	287 > 169	2.99	40.0	31.6	79.0

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Joannas Balauag_____

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Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids													Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
BFR	BTBPE	SGS AXYS MLA-033	MLA-033					Y											Y						Y													
BFR	DBDPE	SGS AXYS MLA-033	MLA-033					Y											Y						Y													
BFR	HBB	SGS AXYS MLA-033	MLA-033					Y											Y						Y													
BFR	PBEB	SGS AXYS MLA-033	MLA-033					Y											Y						Y													
Bisphenols	Bisphenol A	SGS AXYS MLA-113	MLA-113					Y																	Y													
Bisphenols	Bisphenol AF	SGS AXYS MLA-113	MLA-113					Y																	Y													
Bisphenols	Bisphenol B	SGS AXYS MLA-113	MLA-113					Y																	Y													
Bisphenols	Bisphenol E	SGS AXYS MLA-113	MLA-113					Y																	Y													
Bisphenols	Bisphenol F	SGS AXYS MLA-113	MLA-113					Y																	Y													
Bisphenols	Bisphenol S	SGS AXYS MLA-113	MLA-113					Y																	Y													
BPA and MPE	4,4'-dihydroxy-2,2-diphenylpropane (Bisphenol A) (BPA)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-(2-ethyl-5-oxohexyl) phthalate (MEOHP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-(3-carboxypropyl) phthalate (MCPP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-2-ethylhexyl phthalate (MEHP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-benzyl phthalate (MBzP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-butyl phthalate (MBP) (n + iso)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-cyclohexyl phthalate (MCHP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-ethyl phthalate (MEP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-iso-nonyl phthalate (MiNP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-methyl phthalate (MMP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-(2-ethyl-5-carboxypentyl) phthalate (MECPP)	SGS AXYS MLA-059	MLA-059																																		
OC Pesticides	"Organochlorine Pesticides and PCBs" category (CA only)	EPA 608	MLA-007																																		
OC Pesticides		EPA 625	MLA-007																																		
OC Pesticides	"Organochlorine Pesticides" category (CA only)	EPA 8081B	MLA-007																																		
OC Pesticides	"Pesticides" category (CA only)	EPA 8270E	MLA-007																																		
OC Pesticides	2,4'-DDD	EPA 625	MLA-007																											Y							
OC Pesticides		EPA 8270E	MLA-007							Y						Y																					
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	2,4'-DDE	EPA 625	MLA-007																											Y							
OC Pesticides		EPA 8270E	MLA-007							Y						Y																					
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	2,4'-DDT	EPA 625	MLA-007																											Y							
OC Pesticides		EPA 8270E	MLA-007							Y						Y																					
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	4,4'-DDD	EPA 625	MLA-007																											Y	Y	Y		Y		Y	
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	4,4'-DDE	EPA 625	MLA-007																											Y	Y	Y		Y		Y	
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	4,4'-DDT	EPA 625	MLA-007																											Y	Y	Y		Y		Y	
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Aldrin	EPA 625	MLA-007																											Y	Y	Y		Y		Y	
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
				CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Alpha-HCH	EPA 625	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Beta-HCH	EPA 625	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Chlordane, technical	EPA 8270E	MLA-007							Y	Y			Y	Y															Y	Y			Y		Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007							Y																				Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228																											Y								
OC Pesticides	cis-Chlordane (alpha-Chlordane)	EPA 8270E	MLA-007							Y	Y			Y		Y														Y	Y			Y				
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	cis-Nonachlor	EPA 8270E	MLA-007							Y						Y														Y								
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Delta-HCH	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Dieldrin	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Endosulphan I	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Endosulphan II	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Endosulphan sulphate	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Endrin	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Endrin aldehyde	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								

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				Serum	Solids												Tissue and Tissue Flora												Urine	Water	Water, Non-Potable											AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y															Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Endrin ketone	EPA 8081B	MLA-007						Y	Y				Y		Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Gamma-HCH (Lindane)	EPA 625	MLA-007																										Y	Y	Y			Y		Y			
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Heptachlor	EPA 625	MLA-007																										Y	Y	Y			Y		Y			
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Heptachlor epoxide	EPA 608	MLA-007																										Y	Y	Y			Y		Y			
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Hexachlorobenzene	EPA 1625	MLA-007																										Y	Y				Y					
OC Pesticides		EPA 8270E	MLA-007							Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y						Y						Y				Y	Y				Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228							Y					Y	Y				Y	Y			Y						Y							Y	Y		
OC Pesticides	Methoxychlor	EPA 608	MLA-007																											Y					Y		Y			
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Mirex	EPA 8270E	MLA-007							Y				Y		Y														Y	Y			Y		Y			
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Oxychlordane	EPA 8270E	MLA-007							Y																													
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Toxaphene	EPA 8270E	MLA-007																																			
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y												Y					Y														
OC Pesticides	trans-Chlordane (gamma-Chlordane)	EPA 8270E	MLA-007							Y	Y			Y		Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	trans-Nonachlor	EPA 8270E	MLA-007							Y						Y														Y										
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y										Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
PAH	"Extractable Organics" category (CA only)	EPA 8270E	MLA-021						Y																													
PAH	"Semi-volatile Organic Compounds" category (CA only)	EPA 1625	MLA-021																																			
PAH	1,2,6-Trimethylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y														
PAH	1,2-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y														
PAH	1,4,6,7-Tetramethylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y														
PAH	1,7-Dimethylfluorene	SGS AXYS MLA-021	MLA-021					Y																	Y														

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				Serum	Solids													Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PAH	1,7-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	1,8-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	1-Methylchrysene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	1-Methylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	1-Methylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2,3,5-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2,3,6-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2,4-Dimethyldibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2,6-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2-Methylanthracene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2-Methylfluorene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2-Methylnaphthalene	EPA 8270E	MLA-021							Y				Y						Y										Y									
PAH		SGS AXYS MLA-021	MLA-021					Y							Y	Y			Y	Y			Y		Y					Y						Y		
PAH	2-Methylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	3,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	3-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	3-Methylfluoranthene/ Benzo(a)fluorene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	3-Methylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	5,9-Dimethylchrysene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	5/6-Methylchrysenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	7-Methylbenzo(a)pyrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	9/4-Methylphenanthrenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	Acenaphthene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Acenaphthylene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Anthracene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Benz[a]anthracene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Benzo[a]pyrene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Benzo[b]fluoranthene	EPA 1625	MLA-021																										Y	Y	Y			Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Benzo[e]pyrene	SGS AXYS MLA-021	MLA-021					Y												Y					Y													
PAH	Benzo[ghi]perylene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Benzo[j/k]fluoranthenes	SGS AXYS MLA-021	MLA-021					Y												Y					Y													
PAH	Benzo[k]fluoranthene	EPA 1625	MLA-021																										Y	Y	Y			Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y							Y																	
PAH		SGS AXYS MLA-021	MLA-021							Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Biphenyl	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Acenaphthenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Benz(a)anthracenes/chrysenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Biphenyls	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Dibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Fluorenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Naphthalenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Biphenyls	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Dibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Fluorenes	SGS AXYS MLA-021	MLA-021					Y																	Y													

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				Serum	Solids														Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PAH	C2-Naphthalenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C2-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C3-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C3-Dibenzothiophene	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C3-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C3-Fluorenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C3-Naphthalenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C3-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C4-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C4-Dibenzothiophene	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C4-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C4-Naphthalenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C4-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	Chrysene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021				Y		Y						Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Dibenzo[a,h]anthracene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021				Y		Y						Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Dibenzothiophene	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	Fluoranthene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021				Y		Y						Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Fluorene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021				Y		Y						Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Indeno[1,2,3-cd]pyrene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021							Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021				Y		Y						Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Naphthalene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021				Y		Y						Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Perylene	SGS AXYS MLA-021	MLA-021				Y													Y					Y													
PAH	Phenanthrene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021				Y		Y						Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Pyrene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021							Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021				Y		Y						Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Retene	SGS AXYS MLA-021	MLA-021				Y																		Y													
PBDPE	BDE 10 2,6-dibromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 100 2,2',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 105 2,3,3',4,4'-pentabromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 11 3,3'-dibromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 116 2,3,4,5,6-pentabromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 119 2,3',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 12 3,4-dibromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 126 3,3',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 13 3,4'-dibromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 140 2,2',3,4,4',6'-hexabromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 15 4,4'-dibromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 153 2,2',4,4',5,5'-hexabromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 154 2,2',4,4',5',6-hexabromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													

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SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
				CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PBDPE	BDE 155 2,2',4,4',6,6'-hexabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 166 2,3,4,4',5,6-hexabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 17 2,2',4-tribromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 181 2,2',3,4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 183 2,2',3,4,4',5',6-heptabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 190 2,3,3',4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 206 2,2',3,3',4,4',5,5',6-nonabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 207 2,2',3,3',4,4',5,6,6'-nonabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 208 2,2',3,3',4,5,5',6,6'-nonabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 209 Decabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 25 2,3',4-tribromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 28 2,4,4'-tribromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 30 2,4,6-tribromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 33 2',3,4-tribromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 35 3,3',4-tribromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 37 3,4,4'-tribromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 47 2,2',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 49 2,2',4,5'-tetrabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 66 2,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 7 2,4-dibromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 75 2,4,4',6-tetrabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 77 3,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 8 2,4'-dibromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 85 2,2',3,4,4'-pentabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PBDPE	BDE 99 2,2',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y														
PCB Aroclors	"Organochlorine Pesticides and PCBs" category (CA only)	EPA 625	MLA-007																																		
PCB Aroclors	"PCBs" category (CA only)	EPA 8270E	MLA-007						Y																												
PCB Aroclors	PCB Aroclor 1016	EPA 1668	MLA-010							Y	Y																				Y	Y					
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y	
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																						
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y							
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y					Y						Y							
PCB Aroclors	PCB Aroclor 1016/1242	EPA 8270E	MLA-007																																		
PCB Aroclors	PCB Aroclor 1221	EPA 1668	MLA-010							Y	Y																				Y	Y					
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y	
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																						
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y							
PCB Aroclors		SGS AXYS MLA-007	MLA-007						Y	Y									Y					Y						Y							
PCB Aroclors	PCB Aroclor 1232	EPA 1668	MLA-010							Y	Y																				Y	Y					
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y	
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																						

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids												Tissue and Tissue Flora						Urine	Water	Water, Non-Potable										AFFF	
				CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																			Y									
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y									
PCB Aroclors	PCB Aroclor 1242	EPA 1668	MLA-010							Y	Y																			Y	Y								
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y			
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																								
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y									
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y									
PCB Aroclors	PCB Aroclor 1248	EPA 1668	MLA-010							Y	Y																			Y	Y								
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y			
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																								
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y									
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y									
PCB Aroclors	PCB Aroclor 1254	EPA 1668	MLA-010							Y	Y																			Y	Y								
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y			
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																								
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y									
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y									
PCB Aroclors	PCB Aroclor 1260	EPA 1668	MLA-010							Y	Y																			Y	Y								
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y			
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																								
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y									
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y									
PCB Aroclors	PCB Aroclor 1268	SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners	PCB 1 2-Chlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y						Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210						Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908								Y					Y	Y				Y			Y							Y						Y	Y	
PCB congeners		EPA 1628	MLA-908								Y										Y										Y								
PCB congeners	PCB 10 2,6-Dichlorobiphenyl	EPA 1668	MLA-010								Y			Y	Y	Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210						Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908								Y					Y	Y				Y			Y							Y						Y	Y	
PCB congeners		EPA 1628	MLA-908								Y										Y										Y								
PCB congeners	PCB 100 2,2',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010								Y			Y	Y	Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210						Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908								Y					Y	Y				Y			Y							Y						Y	Y	
PCB congeners		EPA 1628	MLA-908								Y										Y										Y								
PCB congeners	PCB 101 2,2',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010								Y			Y	Y	Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210						Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908								Y					Y	Y				Y			Y							Y						Y	Y	
PCB congeners		EPA 1628	MLA-908								Y										Y										Y								
PCB congeners	PCB 101/90/89	EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners	PCB 102 2,2',4,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010								Y			Y	Y	Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210						Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908								Y					Y	Y				Y			Y							Y						Y	Y	
PCB congeners		EPA 1628	MLA-908								Y										Y										Y								
PCB congeners	PCB 103 2,2',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010								Y			Y	Y	Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210						Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908								Y					Y	Y				Y			Y							Y						Y	Y	
PCB congeners		EPA 1628	MLA-908								Y										Y										Y								
PCB congeners	PCB 104 2,2',4,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010								Y			Y	Y	Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210						Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908								Y					Y	Y				Y			Y							Y						Y	Y	
PCB congeners		EPA 1628	MLA-908								Y										Y										Y								
PCB congeners	PCB 105 2,3,3',4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010								Y			Y	Y	Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y					Y		Y									Y	Y					Y					Y								

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				Serum	Solids												Tissue and Tissue Flora												Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS						CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y									Y						Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y													Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y															Y									
PCB congeners	PCB 105/127	EPA 8270E	MLA-007																																								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y											Y													
PCB congeners	PCB 106 2,3,3',4,5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y													Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y									Y						Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y													Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y															Y									
PCB congeners	PCB 107 2,3,3',4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y													Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y									Y						Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y													Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y															Y									
PCB congeners	PCB 107/109	EPA 8270E	MLA-007																																								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y											Y													
PCB congeners	PCB 108 2,3,3',4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y													Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y									Y						Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y													Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y															Y									
PCB congeners	PCB 109 2,3,3',4,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y													Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y									Y						Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y													Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y															Y									
PCB congeners	PCB 11 3,3'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y													Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																								
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y									Y						Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y													Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y															Y									
PCB congeners	PCB 110 2,3,3',4',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y													Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																								
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y											Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y									Y						Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y													Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y															Y									
PCB congeners	PCB 111 2,3,3',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y													Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y									Y						Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y													Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y															Y									
PCB congeners	PCB 111/117	EPA 8270E	MLA-007																																								
PCB congeners	PCB 112 2,3,3',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y													Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																								
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y									Y						Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y													Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y															Y									
PCB congeners	PCB 113 2,3,3',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y													Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																								
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y									Y						Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y													Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y															Y									
PCB congeners	PCB 114 2,3,4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y													Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																								
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y											Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y									Y						Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y													Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y															Y									
PCB congeners	PCB 115 2,3,4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y													Y	Y		Y	Y	Y	Y	Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 116 2,3,4,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 117 2,3,4',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 118 2,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 118/106	EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 119 2,3',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 12 3,4-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 12/13	EPA 8270E	MLA-007																																			
PCB congeners	PCB 120 2,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 121 2,3',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 122 2,3,3',4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 123 2,3',4,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y					Y			Y							Y						Y			
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 124 2,3',4',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 125 2,3',4',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 126 3,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 127 3,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 128 2,2',3,3',4,4'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 129 2,2',3,3',4,5-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 13 3,4'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 130 2,2',3,3',4,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 131 2,2',3,3',4,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 131/142	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners	PCB 132 2,2',3,3',4,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 132/168	EPA 8270E	MLA-007																																				
PCB congeners	PCB 133 2,2',3,3',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 134 2,2',3,3',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 134/143	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															

Accreditation Scope

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				Serum	Solids											Tissue and Tissue Flora							Urine		Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners	PCB 135 2,2',3,3',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 136 2,2',3,3',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 137 2,2',3,4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 138 2,2',3,4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 139 2,2',3,4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 14 3,5-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 140 2,2',3,4,4',6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 141 2,2',3,4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 142 2,2',3,4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 143 2,2',3,4,5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 144 2,2',3,4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										

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SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue and Tissue Flora						Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners	PCB 144/135	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners	PCB 145 2,2',3,4,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 146 2,2',3,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 147 2,2',3,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 148 2,2',3,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 149 2,2',3,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 149/139	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners	PCB 15 4,4'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 150 2,2',3,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 151 2,2',3,5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 152 2,2',3,5,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 153 2,2',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			

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				Serum	Solids												Tissue and Tissue Flora							Urine		Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 154 2,2',4,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 155 2,2',4,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 156 2,3,3',4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																		
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 157 2,3,3',4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 158 2,3,3',4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 158/160	EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners	PCB 159 2,3,3',4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007																							Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 16 2,2',3-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 16/32	EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners	PCB 160 2,3,3',4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 161 2,3,3',4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 162 2,3,3',4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	

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				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y								
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 163 2,3,3',4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 164 2,3,3',4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 165 2,3,3',5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 166 2,3,4,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 167 2,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 168 2,3',4,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 169 3,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y																			
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 17 2,2',4-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 170 2,2',3,3',4,4',5-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																	
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 170/190	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners	PCB 171 2,2',3,3',4,4',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 172 2,2',3,3',4,5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								

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				Serum	Solids												Tissue and Tissue Flora							Urine		Water, Non-Potable											AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y								
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 172/192	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 173 2,2',3,3',4,5,6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 174 2,2',3,3',4,5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 174/181	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 175 2,2',3,3',4,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 176 2,2',3,3',4,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 177 2,2',3,3',4,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 178 2,2',3,3',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 179 2,2',3,3',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 18 2,2',5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 180 2,2',3,4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	

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				Serum	Solids											Tissue and Tissue Flora							Urine		Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 181 2,2',3,4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 182 2,2',3,4,4',5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 183 2,2',3,4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 184 2,2',3,4,4',6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 185 2,2',3,4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 186 2,2',3,4,5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 187 2,2',3,4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 187/182	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 188 2,2',3,4',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 189 2,3,3',4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 19 2,2',6-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids												Tissue and Tissue Flora												Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners	PCB 190 2,3,3',4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 191 2,3,3',4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 192 2,3,3',4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 193 2,3,3',4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 194 2,2',3,3',4,4',5,5'-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																				
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 195 2,2',3,3',4,4',5,6-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 196 2,2',3,3',4,4',5,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 196/203	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners	PCB 197 2,2',3,3',4,4',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y								Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 198 2,2',3,3',4,5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 199 2,2',3,3',4,5,5',6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y								Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 2 3-Chlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 20 2,3,3'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 200 2,2',3,3',4,5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 201 2,2',3,3',4,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 202 2,2',3,3',5,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 203 2,2',3,4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 204 2,2',3,4,4',5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 205 2,3,3',4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 206 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 207 2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 208 2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									

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SGS AXYS Analytical Services Ltd.
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				Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y												
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 209 Decachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 21 2,3,4-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 22 2,3,4'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 23 2,3,5-Trichlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 23/34	EPA 8270E	MLA-007																																			
PCB congeners	PCB 24 2,3,6-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 24/27	EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y														
PCB congeners	PCB 25 2,3',4-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 26 2,3',5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 27 2,3',6-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 28 2,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 29 2,4,5-Trichlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	

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				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 3 4-Chlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 30 2,4,6-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 31 2,4',5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 32 2,4',6-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 33 2,3',4'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 33/20/21	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners	PCB 34 2,3',5'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 35 3,3',4-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 36 3,3',5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 37 3,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 38 3,4,5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 39 3,4',5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									

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				Serum	Solids												Tissue and Tissue Flora												Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners	PCB 4 2,2'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 4/10	EPA 8270E	MLA-007																																					
PCB congeners	PCB 40 2,2',3,3'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 41 2,2',3,4-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 41/71/64/68	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 42/59	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners	PCB 43 2,2',3,5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 44 2,2',3,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 45 2,2',3,6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 46 2,2',3,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 47 2,2',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 47/48/75	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners	PCB 48 2,2',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 49 2,2',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids												Tissue and Tissue Flora							Urine		Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 49/43	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007																Y						Y														
PCB congeners	PCB 5 2,3-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 50 2,2',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 51 2,2',4,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 52 2,2',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 52/73	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 53 2,2',5,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 54 2,2',6,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 55 2,3,3',4-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 56 2,3,3',4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 56/60	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 57 2,3,3',5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 58 2,3,3',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue and Tissue Flora						Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 59 2,3,3',6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 6 2,3'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 60 2,3,4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 61 2,3,4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 62 2,3,4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 62/65	EPA 8270E	MLA-007																																				
PCB congeners	PCB 63 2,3,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 64 2,3,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 65 2,3,5,6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y				Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y	Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 66/80	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 67 2,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 68 2,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 69 2,3',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		

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SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids											Tissue and Tissue Flora							Urine		Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y								
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 7 2,4-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 7/9	EPA 8270E	MLA-007																																		
PCB congeners	PCB 70 2,3',4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 70/76	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y												
PCB congeners	PCB 71 2,3',4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 72 2,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 73 2,3',5',6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 74 2,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																	
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 74/61	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y												
PCB congeners	PCB 75 2,4,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 76 2,3',4',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 77 3,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y												
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 78 3,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 79 3,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y								

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				Serum	Solids												Tissue and Tissue Flora						Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y						Y		Y								Y					Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y							
PCB congeners	PCB 8 2,4'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 8/5	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 80 3,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 81 3,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 82 2,2',3,3',4-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 83 2,2',3,3',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 83/108	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 84 2,2',3,3',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y					Y										Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 85 2,2',3,4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 85/120	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 86 2,2',3,4,5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 87 2,2',3,4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 87/115/116	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 88 2,2',3,4,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 88/121	EPA 8270E	MLA-007																																				
PCB congeners	PCB 89 2,2',3,4,6'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable												AFFF	
				CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 9 2,5-Dichlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 90 2,2',3,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 91 2,2',3,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 92 2,2',3,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 93 2,2',3,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 94 2,2',3,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 95 2,2',3,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 95/93	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 96 2,2',3,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 97 2,2',3,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 97/86	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 98 2,2',3,4',6'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 98/102	EPA 8270E	MLA-007																																				
PCB congeners	PCB 99 2,2',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB congeners, total	EPA 1668	MLA-010											Y																				Y					

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SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue and Tissue Flora						Urine	Water	Water, Non-Potable											AFFF	
				CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners	PCBs, as congeners	EPA 1668	MLA-010																Y																		
PCB congeners		SGS AXYS MLA-010	MLA-010																Y																		
PCB congeners		SGS AXYS MLA-210	MLA-210						Y										Y										Y								
PCB congeners		SGS AXYS MLA-908	MLA-908						Y										Y										Y								
PCB congeners	Total Dichlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners	Total Heptachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners	Total Hexachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners	Total Monochlorobiphenyls	SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners	Total Nonachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners	Total Octachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners	Total Pentachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners	Total Polychlorinated biphenyls	SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners	Total Tetrachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners	Total Trichlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCDDF	"Dioxins and Dibenzofurans" category (CA only)	EPA 1613	MLA-017																																		
PCDDF		EPA 8290A	MLA-017																																		
PCDDF	1,2,3,4,6,7,8-HpCDD	EPA 1613	MLA-017		Y				Y						Y				Y						Y				Y				Y		Y	Y	
PCDDF		EPA 8290A	MLA-017		Y				Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y				
PCDDF		SGS AXYS MLA-017	MLA-017	Y			Y		Y									Y	Y				Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217				Y		Y					Y					Y		Y	Y		Y		Y			Y				Y		Y	Y	
PCDDF		ATM 16130	MLA-217						Y										Y										Y								
PCDDF	1,2,3,4,6,7,8-HpCDF	EPA 1613	MLA-017		Y				Y						Y				Y						Y				Y				Y		Y	Y	
PCDDF		EPA 8290A	MLA-017		Y				Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y				
PCDDF		SGS AXYS MLA-017	MLA-017	Y			Y		Y									Y	Y				Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217				Y		Y					Y					Y		Y	Y		Y		Y			Y				Y		Y	Y	
PCDDF		ATM 16130	MLA-217						Y										Y										Y								
PCDDF	1,2,3,4,7,8,9-HpCDF	EPA 1613	MLA-017		Y				Y						Y				Y						Y				Y				Y		Y	Y	
PCDDF		EPA 8290A	MLA-017		Y				Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y				
PCDDF		SGS AXYS MLA-017	MLA-017	Y			Y		Y									Y	Y				Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217				Y		Y					Y					Y		Y	Y		Y		Y			Y				Y		Y	Y	
PCDDF		ATM 16130	MLA-217						Y										Y										Y								
PCDDF	1,2,3,4,7,8-HxCDD	EPA 1613	MLA-017		Y				Y						Y				Y						Y				Y				Y		Y	Y	
PCDDF		EPA 8290A	MLA-017		Y				Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y				
PCDDF		SGS AXYS MLA-017	MLA-017	Y			Y		Y									Y	Y				Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217				Y		Y					Y					Y		Y	Y		Y		Y			Y				Y		Y	Y	
PCDDF		ATM 16130	MLA-217						Y										Y										Y								
PCDDF	1,2,3,4,7,8-HxCDF	EPA 1613	MLA-017		Y				Y						Y				Y						Y				Y				Y		Y	Y	
PCDDF		EPA 8290A	MLA-017		Y				Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y				
PCDDF		SGS AXYS MLA-017	MLA-017	Y			Y		Y									Y	Y				Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217				Y		Y					Y					Y		Y	Y		Y		Y			Y				Y		Y	Y	
PCDDF		ATM 16130	MLA-217						Y										Y										Y								

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCDDF	1,2,3,6,7,8-HxCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y					Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y				Y				Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	1,2,3,6,7,8-HxCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y					Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y				Y				Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	1,2,3,7,8,9-HxCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y					Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y				Y				Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	1,2,3,7,8,9-HxCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y					Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y				Y				Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	1,2,3,7,8-PeCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y					Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y				Y				Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	1,2,3,7,8-PeCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y					Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y				Y				Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	2,3,4,6,7,8-HxCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y					Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y				Y				Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	2,3,4,7,8-PeCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y					Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y				Y				Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	2,3,7,8-TCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y					Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y				Y				Y		Y	Y	
PCDDF	2,3,7,8-TCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y					Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y				Y				Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	OCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y					Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y				Y				Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	OCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y					Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y				Y				Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	Total HpCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y								
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y				Y	Y		Y	Y		Y	Y				Y						Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	Total HpCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y								
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y				Y	Y		Y	Y		Y	Y				Y						Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	Total HxCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y								
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y				Y	Y		Y	Y		Y	Y				Y						Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	Total HxCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y							

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				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable											AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y						Y		
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y				Y	Y		Y	Y		Y	Y				Y					Y		Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	Total PCDD	EPA 1613	MLA-017		Y																					Y												
PCDDF		EPA 8290A	MLA-017		Y																					Y												
PCDDF	Total PCDD/F	EPA 1613	MLA-017		Y																					Y												
PCDDF		EPA 8290A	MLA-017		Y																					Y												
PCDDF	Total PCDF	EPA 1613	MLA-017		Y																					Y												
PCDDF		EPA 8290A	MLA-017		Y																					Y												
PCDDF	Total PeCDD	EPA 1613	MLA-017		Y					Y										Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y						Y		
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y					Y		Y	Y			Y				Y					Y		Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	Total PeCDF	EPA 1613	MLA-017		Y					Y										Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y						Y		
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y					Y		Y	Y			Y				Y					Y		Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	Total TCDD	EPA 1613	MLA-017		Y					Y										Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y						Y		
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y					Y		Y	Y			Y				Y					Y		Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	Total TCDF	EPA 1613	MLA-017		Y					Y										Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y						Y		
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y					Y		Y	Y			Y				Y					Y		Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PFAS	"Per- and Polyfluorinated Alkyl Substances (PFAS)" category (CA only)	DoD QSM Version 5,1 (or new	MLA-110																																			
PFAS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonate (11Cl-PF3OUdS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y										Y	Y									Y	Y								Y	Y
PFAS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonate (11Cl-PF3OUdS)	SGS AXYS MLA-110	MLA-110	Y				Y											Y						Y												
PFAS	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	SGS AXYS MLA-110	MLA-110			Y				Y						Y	Y			Y							Y			Y						Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y									Y	Y								Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y			Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y			Y					Y	Y
PFAS	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	SGS AXYS MLA-110	MLA-110			Y				Y		Y				Y	Y			Y	Y						Y				Y					Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y									Y	Y								Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110		Y	Y	Y			Y		Y	Y			Y	Y	Y		Y	Y	Y	Y				Y	Y			Y		Y	Y		Y	Y
PFAS	4,8-dioxa-3H-perfluorononanoate (ADONA)	SGS AXYS MLA-110	MLA-110			Y	Y										Y	Y									Y	Y								Y	Y
PFAS		DoD QSM Version 5,3	MLA-110			Y											Y										Y										Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y											Y										Y										Y	
PFAS		EPA 1633 draft	MLA-110			Y											Y										Y										Y	
PFAS	4:2 Fluorotelomersulfonate (4:2 FTS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y				Y			Y	Y		Y						Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y			Y		Y	Y			Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y			Y		Y	Y		Y	Y
PFAS	6:2 Fluorotelomersulfonate (6:2 FTS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y				Y			Y	Y		Y						Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y			Y		Y	Y		Y	Y
PFAS	8:2 Fluorotelomersulfonate (8:2 FTS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y				Y			Y	Y		Y						Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y			Y		Y	Y		Y	Y
PFAS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonate (9Cl-PF3ONS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y										Y	Y									Y	Y								Y	Y
PFAS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonate (9Cl-PF3ONS)	SGS AXYS MLA-110	MLA-110	Y				Y											Y						Y												
PFAS	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	SGS AXYS MLA-110	MLA-110			Y				Y						Y	Y			Y							Y			Y						Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y			Y		Y	Y		Y	Y
PFAS	Dodecafluoro-3H-4,8-dioxanonanoate (NaDONA)	SGS AXYS MLA-110	MLA-110	Y				Y											Y						Y												
PFAS		EPA 1633 draft	MLA-110									Y										Y										Y						
PFAS	Hexafluoropropylene oxide dimer acid (HFPO-DA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y								Y	Y			Y				Y		Y										Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y			Y		Y	Y		Y	Y
PFAS	Hexafluoropropylene oxide dimer acid, anion and acid (HFPO-DA)	SGS AXYS MLA-110	MLA-110			Y	Y										Y	Y									Y	Y								Y	Y
PFAS	Hexaflurorpropylene oxide dimer acid (HFPO-DA)	SGS AXYS MLA-110	MLA-110	Y						Y		Y								Y	Y									Y		Y						
PFAS	N-Ethylperfluorooctane sulfonamide (EtFOSAm)	SGS AXYS MLA-110	MLA-110							Y										Y										Y								
PFAS		DoD QSM Version 5,3	MLA-110						Y																					Y								
PFAS		DoD QSM Version 5,4	MLA-110						Y																					Y								

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				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable											AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
		EPA 1633 draft										Y									Y											Y						
PFAS	N-Ethylperfluorooctanesulfonamide (N-EtFOSA)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y							Y	Y	Y	Y						Y			Y	Y								Y	Y	Y
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y										Y									Y	Y											Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y																				Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y					Y	Y	Y	Y	Y					Y	Y	Y	Y		Y							Y	Y	Y
PFAS	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	Y
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y			Y							Y									Y	Y			Y								Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y							Y	Y									Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y		Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y			Y	Y			Y	Y	Y
PFAS	N-Ethylperfluorooctanesulfonamidoethanol (N-EtFOSE)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y							Y									Y	Y		Y									Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y							Y	Y									Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y			Y				Y	Y	Y
PFAS	N-Methylperfluorooctanesulfonamide (N-MeFOSA)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	Y
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y			Y							Y									Y	Y		Y									Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y							Y	Y									Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y			Y				Y	Y	Y
PFAS	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y							Y									Y	Y		Y									Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y							Y	Y									Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y		Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y			Y	Y			Y	Y	Y
PFAS	N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y							Y									Y	Y		Y									Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y							Y	Y									Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y			Y				Y	Y	Y
PFAS	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-060	MLA-060																																			
PFAS		SGS AXYS MLA-041	MLA-041																																			
PFAS		SGS AXYS MLA-043	MLA-043																																			
PFAS		SGS AXYS MLA-042	MLA-042	Y																																		
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y			Y	Y					Y		Y			Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y		Y						Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y		Y		Y	Y	Y	Y					Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorobutanoate (PFBA)	SGS AXYS MLA-060	MLA-060																																			
PFAS		SGS AXYS MLA-041	MLA-041																																			
PFAS		SGS AXYS MLA-043	MLA-043																																			
PFAS		SGS AXYS MLA-042	MLA-042	Y																																		
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y			Y	Y					Y		Y			Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y		Y						Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y		Y		Y	Y	Y	Y					Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y			Y	Y					Y		Y			Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y		Y						Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y		Y		Y	Y	Y	Y					Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorodecanoate (PFDA)	SGS AXYS MLA-060	MLA-060																																			
PFAS		SGS AXYS MLA-041	MLA-041																																			
PFAS		SGS AXYS MLA-043	MLA-043																																			
PFAS		SGS AXYS MLA-042	MLA-042	Y																																		
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y		Y	Y					Y		Y			Y						Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y								Y	Y		Y						Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y		Y		Y	Y	Y	Y					Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y					Y		Y			Y						Y	Y	Y
PFAS		DoD QSM Version 5.3	MLA-110			Y											Y										Y										Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y										Y	Y									Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y			Y		Y	Y	Y	Y					Y	Y	Y	Y		Y		Y				Y	Y	Y
PFAS	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-060	MLA-060																																			
PFAS		SGS AXYS MLA-041	MLA-041																																			
PFAS		SGS AXYS MLA-043	MLA-043																																			
PFAS		SGS AXYS MLA-042	MLA-042	Y																																		
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y			Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y		Y						Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y		Y		Y	Y	Y	Y					Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y			Y						Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y								Y	Y		Y						Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y		Y		Y	Y	Y	Y					Y	Y	Y	Y		Y		Y	Y			Y	Y	Y

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				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable												AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PFAS	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y									Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y								Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y	Y		Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y				Y	Y	Y
PFAS	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y									Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y								Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y	Y		Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y				Y	Y	Y
PFAS	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y									Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y								Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y	Y		Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y				Y	Y	Y
PFAS	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y									Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y								Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y	Y		Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y				Y	Y	Y
PFAS	Perfluorononanoate (PFNA)	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y									Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y								Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y	Y		Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y				Y	Y	Y
PFAS	Perfluorooctanesulfonamide (PFOSA), a.k.a. FOSA	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y									Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y								Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y	Y		Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y				Y	Y	Y
PFAS	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y									Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y								Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y	Y		Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y				Y	Y	Y
PFAS		DoD AFFF01 Rev 1.0	MLA-110										Y																					Y				Y	Y
PFAS	Perfluorooctanoate (PFOA)	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y									Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y								Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y	Y		Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y				Y	Y	Y
PFAS		DoD AFFF01 Rev 1.0	MLA-110																																		Y	Y
PFAS	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y									Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y								Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y	Y		Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y				Y	Y	Y
PFAS	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		

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				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y				Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y							Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y				Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y							Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y				Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y							Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y				Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y							Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	4,4,5,5,6,6,6-heptafluorohexanoic acid (3:3 FTCA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y				Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y										Y	Y							Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y										Y	Y								Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	2H,2H,3H,3H-perfluorooctanoic acid (5:3 FTCA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y				Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y										Y	Y							Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y										Y	Y								Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	2H,2H,3H,3H-perfluorodecanoic acid (7:3 FTCA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y				Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y										Y	Y							Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y										Y	Y								Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluoro-3-methoxypropanoic acid (PFMPA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y				Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y										Y	Y							Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y										Y	Y								Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluoro-4-methoxybutanoic acid (PFMBA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y				Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y										Y	Y							Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y										Y	Y								Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y				Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y										Y	Y							Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y										Y	Y								Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y				Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y										Y	Y							Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y										Y	Y								Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PPCP	1,7-Dimethylxanthine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	10-hydroxy-amitriptyline	SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	2-hydroxy-ibuprofen	SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	4-Epianhydrochlortetracycline (EACTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	4-Epianhydrotetracycline (EATC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	4-Epichlortetracycline (ECTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	4-Epioxytetracycline (EOTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	4-Epitetracycline (ETC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	Acetaminophen	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	Albuterol	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	Alprazolam	SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	Amitriptyline	SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	Amlodipine	SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	Amphetamine	SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	Anhydrochlortetracycline (ACTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	Anhydrotetracycline (ATC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													

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				Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PPCP	Atenolol	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Atorvastatin	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Azithromycin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Benzoylecgonine	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Benztropine	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Betamethasone	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Bisphenol A	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Caffeine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Carbadox	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Carbamazepine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Cefotaxime	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Chlortetracycline (CTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Cimetidine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Ciprofloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Clarithromycin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Clinafloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Clonidine	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Cloxacillin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Cocaine	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Codeine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Cotinine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	DEET (N,N-diethyl-m-toluamide)	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Dehydronifedipine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Demeclocycline	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Desmethyldiltiazem	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Diazepam	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Digoxigenin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Digoxin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Diltiazem	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Diphenhydramine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Doxycycline	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Enalapril	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Enrofloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Erythromycin	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Erythromycin anydrate	EPA 1694	MLA-075								Y																				Y						
PPCP	Flumequine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Fluocinonide	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Fluoxetine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Fluticasone propionate	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Furosemide	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Gemfibrozil	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Glipizide	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Glyburide	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Hydrochlorothiazide	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Hydrocodone	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Hydrocortisone	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Ibuprofen	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Isochlortetracycline (ICTC)	EPA 1694	MLA-075								Y																				Y						

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Lincomycin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Lomefloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Meprobamate	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Metformin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Methylprednisolone	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Metoprolol	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Miconazole	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Minocycline	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Naproxen	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Norfloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Norfluoxetine	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Norgestimate	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Norverapamil	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Ofloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Ormetoprim	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Oxacillin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Oxolinic acid	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Oxycodone	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Oxytetracycline (OTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Paroxetine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Penicillin G	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Penicillin V	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Prednisolone	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Prednisone	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Promethazine	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Propoxyphene	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Propranolol	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Ranitidine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Roxithromycin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sarafloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sertraline	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Simvastatin	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfachloropyridazine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfadiazine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfadimethoxine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfamerazine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfamethazine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfamethizole	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfamethoxazole	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfanilamide	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfathiazole	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Tetracycline (TC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Theophylline	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Thiabendazole	EPA 1694	MLA-075								Y																				Y						

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Trenbolone	SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Trenbolone acetate	SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Triamterene	SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Triclocarban	EPA 1694	MLA-075								Y																					Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Triclosan	EPA 1694	MLA-075								Y																					Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Trimethoprim	EPA 1694	MLA-075								Y																					Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Tylosin	EPA 1694	MLA-075								Y																					Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Valsartan	SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Verapamil	SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Virginiamycin	EPA 1694	MLA-075								Y																					Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Warfarin	EPA 1694	MLA-075								Y																					Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
TOP	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorobutanoate (PFBA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorodecanoate (PFDA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorononanoate (PFNA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorooctanoate (PFOA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
Note *	Analysis of pesticides and PCBs in non-potable water samples by SGS AXYS method MLA-007, with the exception of NPDES or State permitted discharges and Stormwater applications, may fall within the scope of Washington State Department of Ecology solids matrix accreditation, subject to approval of the Ecology Project Manager.																																				
Note **	PFAS by LC-MS/MS compliant with US DoD QSM 5.3 table B-15 and US DoD QSM 5.4 table B-24																																				

Legend

Y	Accreditation scope
AFFF	Aqueous film forming foam
BFR	Brominated flame retardants (non-PBDPE)
BPA and mPE	Bisphenol A and mono-Phthalate Esters
OC Pesticides	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PBDPE	Polybrominated diphenylethers
PCB	Polychlorinated Biphenyls
PCDDF	Polychlorinated dibenzodioxins/furans
PFAS	Per- and Polyfluoroalkyl Substances
PPCP	Pharmaceutical and Personal Care Products
TOP	Total Oxidizable Precursors
California WB	California Water Boards, Lab ID 2911
Florida DOH	Florida Department of Health, Lab ID E871007, (NELAC Standard)
Pennsylvania DEP	Pennsylvania Department of Environmental Protection
Minnesota DOH	Minnesota Department of Health, Lab ID 232-999-430, (NELAC Standard)
New Jersey DEP	New Jersey Department of Environmental Protection, Lab ID CANA005, (NELAC Standard)
New York DOH	New York Department of Health, Lab ID 11674, (NELAC Standard)
Washington DE	Washington Department of Ecology, Lab ID C404
Virginia DGS	Virginia Department of General Services, Division of Consolidated Laboratory Services, Lab ID 460224, (NELAC Standard)
Alaska DEC	Alaska Department of Environmental Conservation, Contaminated Sites Laboratory Approval 17-014
Maine DOH	Maine Center for Disease Control and Prevention, Department of Health and Human Services, Lab ID CN00003

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
				CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025

ANAB DoD — ANSI National Accreditation Board, certificate ADE-1861, (US DoD QSM 5.3 and 5.4 Standard)

CALA — Canadian Association for Laboratory Accreditation Inc., Lab ID A2637, (ISO/IEC 17025:2017 Standard)

SGS AXYS

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Sidney, BC, Canada V8L5X2

TEL: (250) 655-5800
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SGS AXYS Client No.: 5123

Client Address: SGS Orlando
4405 Vineland Rd, Suite C-15
Orlando, FL, US,

The SGS AXYS contact for these data is Ivona Zysk.

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BATCH SUMMARY

Batch ID: WG88238	***Date:*** 16-Feb-2024
Analysis Type: Per- and Polyfluoroalkyl Substances (PFAS)	***Matrix Type:*** Tissue

BATCH MAKEUP

Contract: 5123

Samples:

L40022-1	LS 1
L40022-2	LS 2
L40022-3	LS 3
L40022-4	LS 4
L40022-5	LS 5
L40022-6	LS 6
L40022-7	LS 7
L40022-8	LS 8
L40022-9	LS 9
L40022-10	LS 10
L40022-11	LS 11
L40022-12	LS 12
L40022-13	LS 13
L40022-14	LS 14
L40022-15	LS 15
L40022-16	LS 16

Blank:
WG88238-101

Reference or Spike:
WG88238-102
WG88238-103

Duplicate:
WG88238-104

Comments:

1. Data are considered final.
2. For the on-going calibration verification solution injections (FC4L_027 S:15 and FC4L_027 S:29), the percent recoveries for the target analyte ADONA and surrogate compounds 13C8-PFOSA, 13C2-4:2 FTS, d3-MeFOSAA, d5-EtFOSAA, d7-N-MeFOSE and d9-N-EtFOSE were above the upper SGS AXYS method limit (130%). Other data was not considered to be affected.
3. Data are not blank corrected. Blank data should be taken into consideration when evaluating sample data.
4. Blank data should be evaluated against specifications using the same blank sample size as the size of the client samples.
5. For the OPR and low level OPR samples (SGS AXYS IDs: WG88238-102 and -103), the percent recoveries for the target analytes ADONA and N-EtFOSE were above the upper method limits and were flagged with an 'N'. Where the same compound was detected in another sample, the result may be similarly affected.
6. For the LS 5, LS 12 and LS 15 samples (SGS AXYS IDs: L40022-5, -12 and -15), the percent recovery for the surrogate compound d7-N-MeFOSE was below 1%. The results for both d7-N-MeFOSE and the related target analyte N-MeFOSE were deemed to be not quantifiable and were flagged as 'NQ'. In all other cases, where the percent recovery for a surrogate compound did not meet the method criteria limit, the result was flagged with a 'V'. As the isotope dilution method of quantification produces data that is recovery corrected, these variances from method criteria were deemed to not affect the quantification of the target analytes. Percent surrogate recoveries are used as general method performance indicator only.

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February 2017

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

5123
~~L34022~~

SGS - ORLANDO JOB # :

PAGE 1 OF 2

SGS - ORLANDO Quote #	SKIFF #

Client / Reporting Information	Project Information
Company Name: NDDEQ PFAS	Project Name: NDDEQ PFAS
Address: 4201 Normandy St	Street 4201 Normandy St
City: Bismarck State: ND Zip: 58503	City Bismarck State ND
Project Contact: S Suggs Email: SSuggs@nd.gov	Project #
Phone #: 701-328-6409	Fax #
Sampler(s) Name(s) (Printed) Sampler 1: Sampler 2:	Client Purchase Order #

Analytical Information: MLA-10

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	CONTAINER INFORMATION MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LAB USE ONLY
L40022-1	LS 1	8/25/23		SS	T											
L40022-2	LS 2	8/25/23			T											
L40022-3	LS 3	8/25/23			T											
L40022-4	LS 4															
L40022-5	LS 5															
L40022-6	LS 6															
L40022-7	LS 7															
L40022-8	LS 8															
L40022-9	LS 9															
L40022-10	LS 10															
L40022-11	LS 11															
L40022-12	LS 12															

Turnaround Time (Business days)	Data Deliverable Information	Comments / Remarks
10 Day (Business) Approved By: / Date:	☐ COMMERCIAL "A" (RESULTS ONLY)	
7 Day	☐ COMMERCIAL "B" (RESULTS PLUS QC)	
5 Day	☐ REDT1 (EPA LEVEL 3)	
3 Day *RUSH*	☐ FULLT1 (EPA LEVEL 4)	
2 Day *RUSH*	☐ EDD'S	
1 Day *RUSH*		
Other		
Rush T/A Data Available VIA Email or Lablink		

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 SS	8/28/23	2 Fed Ex	3	8/29/23 9:52	4 Ashley Owens
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 4.7°C.

http://www.sgs.com/en/terms-and-conditions

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

5123
L34022
SGS - ORLANDO JOB # :

PAGE 2 OF 2

SGS - ORLANDO Quote #	SKIFF #

Client / Reporting Information	Project Information
Company Name: NDDEQ PFAS	Project Name: NDDEQ PFAS
Address: 4201 Normandy St	Street 4201 Normandy St
City: Bismarck State: ND Zip: 58503	City Bismarck State ND
Project Contact: S Suggs Email: Ssuggs@nd.gov	Project #
Phone #: ~~701~~ 701-328-6409	Fax #
Sampler(s) Name(s) (Printed) Sampler 1: Sampler 2:	Client Purchase Order #

Analytical Information: MLA-10

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	CONTAINER INFORMATION MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LAB USE ONLY
L40022-13	LS 13				I											
L40022-14	LS 14				I											
L40022-15	LS 15				I											
L40022-16	LS 16				I											

Turnaround Time (Business days)	Data Deliverable Information	Comments / Remarks
10 Day (Business) Approved By: / Date:	☐ COMMERCIAL "A" (RESULTS ONLY)	
7 Day	☐ COMMERCIAL "B" (RESULTS PLUS QC)	
5 Day	☐ REDT1 (EPA LEVEL 3)	
3 Day *RUSH*	☐ FULLT1 (EPA LEVEL 4)	
2 Day *RUSH*	☐ EDD'S	
1 Day *RUSH*		
Other		
Rush T/A Data Available VIA Email or Lablink		

Sample Custody must be documented below each time samples change possession, including courier delivery. 9:52

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 SS	8/28/23	2 FedEx	3	8/29/23	4 ashley powell
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
LS 1
Sample Collection:
25-Aug-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-1
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.06 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 17:50:22	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 21**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng/g (wet weight basis)	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.388 (Q)		
PFPeA	ND		0.194 (Q)		
PFHxA	ND		0.0971 (Q)		
PFHpA	ND		0.0971 (Q)		
PFOA	ND		0.0971 (Q)		
PFNA		0.630	0.0971 (Q)	2.92	
PFDA	J	0.250	0.0971 (Q)	2.52	1.000
PFUnA	J	0.174	0.0971 (Q)	4.68	0.999
PFDoA	ND		0.0777 (Q)		
PFTrDA	ND		0.0971 (Q)		
PFTeDA	ND		0.0971 (Q)		
PFBS	ND		0.0971 (Q)		
PFPeS	ND		0.0976 (Q)		
PFHxS	ND		0.0971 (Q)		
PFHpS	ND		0.0971 (Q)		
PFOS		2.88	0.0971 (Q)	2.46	
PFNS	ND		0.0971 (Q)		
PFDS	ND		0.0971 (Q)		
PFDoS	ND		0.0971 (Q)		
4:2 FTS	ND		0.388 (Q)		
6:2 FTS	ND		0.350 (Q)		
8:2 FTS	ND		0.330 (Q)		
PFOSA	ND		0.0971 (Q)		
N-MeFOSA	ND		0.0971 (Q)		
N-EtFOSA	ND		0.272 (Q)		
MeFOSAA	ND		0.0971 (Q)		
EtFOSAA	ND		0.0971 (Q)		
N-MeFOSE	ND		0.971 (Q)		
N-EtFOSE	ND		0.971 (Q)		
HFPO-DA	ND		0.388 (Q)		
ADONA	ND		0.388 (Q)		
9Cl-PF3ONS	ND		0.389 (Q)		
11Cl-PF3OUdS	ND		0.389 (Q)		
3:3 FTCA	ND H		0.388 (Q)		
5:3 FTCA	ND		2.43 (Q)		
7:3 FTCA	ND		2.43 (Q)		
PFEESA	ND		0.0971 (Q)		
PFMPA	ND		0.194 (Q)		
PFMBA	ND		0.0971 (Q)		

NFDHA	ND H	0.194 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-1_Form1A_FC4L_027S21_SJ3384104.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
LS 1
Sample Collection:
25-Aug-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-1
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.06 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 17:50:22	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 21**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	21.9	54.9		0.996
13C5-PFPeA		20.0	18.1	90.5		0.853
13C5-PFHxA		10.0	9.50	95.0	12.4	1.000
13C4-PFHpA		10.0	9.15	91.5		0.878
13C8-PFOA		10.0	8.99	89.9		1.001
13C9-PFNA		5.00	5.24	105		1.000
13C6-PFDA		5.00	4.91	98.3		1.000
13C7-PFUnA		5.00	4.71	94.1		1.043
13C2-PFDoA		5.00	3.35	67.1		1.079
13C2-PFTeDA		5.00	1.01	20.2		1.174
13C3-PFBS		10.0	9.49	94.8	2.75	0.770
13C3-PFHxS		10.0	9.68	96.7	2.38	1.000
13C8-PFOS		10.1	10.5	104	2.19	1.000
13C2-4:2 FTS		20.2	20.5	102	1.93	0.812
13C2-6:2 FTS		20.0	19.3	96.5	2.42	1.002
13C2-8:2 FTS		20.0	22.0	110	3.37	1.266
13C8-PFOSA		10.0	8.00	80.0		1.168
D3-N-MeFOSA	V	10.0	1.42	14.2		1.347
D5-N-EtFOSA		10.0	1.42	14.2		1.381
D3-MeFOSAA		20.0	22.7	114		1.304
D5-EtFOSAA		20.0	25.8	129		1.327
d7-NMe-FOSE	V	100	1.12	1.12		1.332
d9-NEt-FOSE		100	5.13	5.13		1.366
13C3-HFPO-DA		40.0	26.3	65.9	3.19	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

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SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
LS 2
Sample Collection:
25-Aug-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-2
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.05 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 18:03:43	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 22**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng/g (wet weight basis)	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.390 (Q)		
PFPeA	ND		0.195 (Q)		
PFHxA	ND		0.0976 (Q)		
PFHpA	ND		0.0976 (Q)		
PFOA	ND		0.0976 (Q)		
PFNA		0.779	0.0976 (Q)	2.98	
PFDA		0.486	0.0976 (Q)	2.99	1.000
PFUnA	J	0.349	0.0976 (Q)	3.74	1.000
PFDoA	J	0.111	0.0780 (Q)	7.33	0.999
PFTrDA	J	0.167	0.0976 (Q)	3.52	0.956
PFTeDA	ND		0.0976 (Q)		
PFBS	ND		0.0976 (Q)		
PFPeS	ND		0.0980 (Q)		
PFHxS	ND		0.0976 (Q)		
PFHpS	ND		0.0976 (Q)		
PFOS		3.79	0.0976 (Q)	2.53	
PFNS	ND		0.0976 (Q)		
PFDS	ND		0.0976 (Q)		
PFDoS	ND		0.0976 (Q)		
4:2 FTS	ND		0.390 (Q)		
6:2 FTS	ND		0.351 (Q)		
8:2 FTS	ND		0.332 (Q)		
PFOSA	ND		0.0976 (Q)		
N-MeFOSA	ND		0.0976 (Q)		
N-EtFOSA	ND		0.273 (Q)		
MeFOSAA	ND		0.0976 (Q)		
EtFOSAA	ND		0.0976 (Q)		
N-MeFOSE	ND		0.976 (Q)		
N-EtFOSE	J	2.03	0.976 (Q)		
HFPO-DA	ND		0.390 (Q)		
ADONA	ND		0.390 (Q)		
9Cl-PF3ONS	ND		0.391 (Q)		
11Cl-PF3OUdS	ND		0.391 (Q)		
3:3 FTCA	ND H		0.390 (Q)		
5:3 FTCA	ND		2.44 (Q)		
7:3 FTCA	ND		2.44 (Q)		
PFEESA	ND		0.0976 (Q)		
PFMPA	ND		0.195 (Q)		
PFMBA	ND		0.0976 (Q)		

NFDHA	ND H	0.195 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

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Report Filename: PFC_FC_LC_PFAS_L40022-2_Form1A_FC4L_027S22_SJ3384105.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
LS 2
Sample Collection:
25-Aug-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-2
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.05 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 18:03:43	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 22**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	37.3	93.3		1.000
13C5-PFPeA		20.0	21.0	105		0.854
13C5-PFHxA		10.0	9.24	92.4	12.5	1.000
13C4-PFHpA		10.0	8.80	88.0		0.878
13C8-PFOA		10.0	8.95	89.5		1.000
13C9-PFNA		5.00	5.46	109		0.999
13C6-PFDA		5.00	4.79	95.8		1.000
13C7-PFUnA		5.00	4.77	95.4		1.043
13C2-PFDoA		5.00	4.23	84.6		1.079
13C2-PFTeDA		5.00	1.32	26.3		1.174
13C3-PFBS		10.0	9.05	90.3	2.75	0.771
13C3-PFHxS		10.0	9.20	91.8	2.36	1.000
13C8-PFOS		10.1	9.86	98.0	2.13	1.000
13C2-4:2 FTS		20.2	20.2	100	1.97	0.813
13C2-6:2 FTS		20.0	19.0	95.0	2.34	1.002
13C2-8:2 FTS		20.0	22.0	110	3.34	1.266
13C8-PFOSA		10.0	9.19	91.9		1.167
D3-N-MeFOSA	V	10.0	1.43	14.3		1.346
D5-N-EtFOSA		10.0	1.38	13.8		1.381
D3-MeFOSAA		20.0	21.9	109		1.304
D5-EtFOSAA		20.0	25.0	125		1.327
d7-NMe-FOSE	V	100	1.11	1.10		1.329
d9-NEt-FOSE	V	100	3.89	3.89		1.366
13C3-HFPO-DA		40.0	24.5	61.4	2.94	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

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SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
LS 3
Sample Collection:
25-Aug-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L40022-3
Matrix:	TISSUE	**Sample Size:**	2.07 g (wet)
Sample Receipt Date:	29-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	15-Jan-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	06-Feb-2024 **Time:** 18:17:21	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_027 S: 23**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_027 S: 20
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_027 S: 15
Concentration Units:	ng/g (wet weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.386 (Q)		
PFPeA	ND		0.193 (Q)		
PFHxA	ND		0.0966 (Q)		
PFHpA	ND		0.0966 (Q)		
PFOA	ND		0.0966 (Q)		
PFNA		0.439	0.0966 (Q)	2.94	
PFDA	J	0.177	0.0966 (Q)	2.35	1.000
PFUnA	J	0.136	0.0966 (Q)	3.28	1.000
PFDoA	ND		0.0773 (Q)		
PFTrDA	J	0.106	0.0966 (Q)	3.13	0.956
PFTeDA	ND		0.0966 (Q)		
PFBS	ND		0.0966 (Q)		
PFPeS	ND		0.0971 (Q)		
PFHxS	ND		0.0966 (Q)		
PFHpS	ND		0.0966 (Q)		
PFOS		1.95	0.0966 (Q)	2.61	
PFNS	ND		0.0966 (Q)		
PFDS	ND		0.0966 (Q)		
PFDoS	ND		0.0966 (Q)		
4:2 FTS	ND		0.386 (Q)		
6:2 FTS	ND		0.348 (Q)		
8:2 FTS	ND		0.329 (Q)		
PFOSA	ND		0.0966 (Q)		
N-MeFOSA	ND		0.0966 (Q)		
N-EtFOSA	ND		0.271 (Q)		
MeFOSAA	ND		0.0966 (Q)		
EtFOSAA	ND		0.0966 (Q)		
N-MeFOSE	ND		0.966 (Q)		
N-EtFOSE	ND		0.966 (Q)		
HFPO-DA	ND		0.386 (Q)		
ADONA	ND		0.386 (Q)		
9Cl-PF3ONS	ND		0.387 (Q)		
11Cl-PF3OUdS	ND		0.387 (Q)		
3:3 FTCA	ND H		0.386 (Q)		
5:3 FTCA	ND		2.42 (Q)		
7:3 FTCA	ND		2.42 (Q)		
PFEESA	ND		0.0966 (Q)		
PFMPA	ND		0.193 (Q)		
PFMBA	ND		0.0966 (Q)		

NFDHA	ND H	0.193 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-3_Form1A_FC4L_027S23_SJ3384106.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
LS 3
Sample Collection:
25-Aug-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-3
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.07 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 18:17:21	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 23**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA	V	40.0	15.5	38.7		0.996
13C5-PFPeA		20.0	14.0	69.8		0.854
13C5-PFHxA		10.0	7.66	76.6	12.3	1.000
13C4-PFHpA		10.0	8.10	81.0		0.878
13C8-PFOA		10.0	8.20	82.0		1.000
13C9-PFNA		5.00	4.97	99.4		1.000
13C6-PFDA		5.00	4.91	98.2		1.000
13C7-PFUnA		5.00	4.84	96.8		1.043
13C2-PFDoA		5.00	4.24	84.8		1.079
13C2-PFTeDA		5.00	1.63	32.6		1.174
13C3-PFBS		10.0	8.10	80.8	2.69	0.770
13C3-PFHxS		10.0	9.11	91.0	2.48	0.999
13C8-PFOS		10.1	9.71	96.5	2.16	0.999
13C2-4:2 FTS		20.2	14.6	72.5	1.93	0.812
13C2-6:2 FTS		20.0	16.1	80.6	2.32	1.002
13C2-8:2 FTS		20.0	21.0	105	3.28	1.266
13C8-PFOSA		10.0	8.22	82.2		1.171
D3-N-MeFOSA	V	10.0	0.776	7.76		1.347
D5-N-EtFOSA		10.0	0.715	7.15		1.382
D3-MeFOSAA		20.0	22.9	115		1.304
D5-EtFOSAA		20.0	24.8	124		1.327
d7-NMe-FOSE	V	100	2.83	2.82		1.329
d9-NEt-FOSE		100	5.50	5.50		1.366
13C3-HFPO-DA		40.0	17.7	44.3	3.01	1.034

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Andrew Porat_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-3_Form2_FC4L_027S23_SJ3384106.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
LS 4
Sample Collection:
25-Aug-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-4
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.00 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 18:30:42	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 24**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng/g (wet weight basis)	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.400 (Q)		
PFPeA	ND		0.200 (Q)		
PFHxA	ND		0.100 (Q)		
PFHpA	ND		0.100 (Q)		
PFOA	ND		0.100 (Q)		
PFNA		0.907	0.100 (Q)	2.88	
PFDA	J	0.302	0.100 (Q)	3.62	1.000
PFUnA	J	0.153	0.100 (Q)	4.22	1.000
PFDoA	ND		0.0800 (Q)		
PFTrDA	J	0.133	0.100 (Q)	3.93	0.955
PFTeDA	ND		0.100 (Q)		
PFBS	ND		0.100 (Q)		
PFPeS	ND		0.101 (Q)		
PFHxS	ND		0.100 (Q)		
PFHpS	ND		0.100 (Q)		
PFOS		3.10	0.100 (Q)	2.53	
PFNS	ND		0.100 (Q)		
PFDS	ND		0.100 (Q)		
PFDoS	ND		0.100 (Q)		
4:2 FTS	ND		0.400 (Q)		
6:2 FTS	ND		0.360 (Q)		
8:2 FTS	ND		0.340 (Q)		
PFOSA	ND		0.100 (Q)		
N-MeFOSA	ND		0.100 (Q)		
N-EtFOSA	ND		0.280 (Q)		
MeFOSAA	ND		0.100 (Q)		
EtFOSAA	ND		0.100 (Q)		
N-MeFOSE	ND		1.00 (Q)		
N-EtFOSE	J	2.45	1.00 (Q)		
HFPO-DA	ND		0.400 (Q)		
ADONA	ND		0.400 (Q)		
9Cl-PF3ONS	ND		0.401 (Q)		
11Cl-PF3OUdS	ND		0.401 (Q)		
3:3 FTCA	ND H		0.400 (Q)		
5:3 FTCA	ND		2.50 (Q)		
7:3 FTCA	ND		2.50 (Q)		
PFEESA	ND		0.100 (Q)		
PFMPA	ND		0.200 (Q)		
PFMBA	ND		0.100 (Q)		

NFDHA	ND H	0.200 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-4_Form1A_FC4L_027S24_SJ3384107.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
LS 4
Sample Collection:
25-Aug-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-4
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.00 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 18:30:42	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 24**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	37.1	92.7		0.996
13C5-PFPeA		20.0	20.5	102		0.854
13C5-PFHxA		10.0	9.52	95.2	12.0	1.000
13C4-PFHpA		10.0	9.29	92.9		0.878
13C8-PFOA		10.0	9.45	94.5		1.000
13C9-PFNA		5.00	5.35	107		1.000
13C6-PFDA		5.00	5.10	102		0.999
13C7-PFUnA		5.00	4.90	98.0		1.043
13C2-PFDoA		5.00	4.34	86.7		1.079
13C2-PFTeDA		5.00	1.29	25.7		1.174
13C3-PFBS		10.0	9.50	94.8	2.68	0.771
13C3-PFHxS		10.0	9.98	99.7	2.34	1.001
13C8-PFOS		10.1	10.2	102	2.06	1.000
13C2-4:2 FTS		20.2	19.5	96.8	1.95	0.813
13C2-6:2 FTS		20.0	18.7	93.5	2.26	1.002
13C2-8:2 FTS		20.0	21.0	105	3.40	1.266
13C8-PFOSA		10.0	8.60	86.0		1.168
D3-N-MeFOSA	V	10.0	1.34	13.4		1.348
D5-N-EtFOSA		10.0	1.55	15.5		1.383
D3-MeFOSAA		20.0	22.2	111		1.304
D5-EtFOSAA		20.0	24.7	123		1.327
d7-NMe-FOSE	V	100	1.02	1.02		1.330
d9-NEt-FOSE	V	100	4.28	4.28		1.367
13C3-HFPO-DA		40.0	26.8	66.9	3.14	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Andrew Porat_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-4_Form2_FC4L_027S24_SJ3384107.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
LS 5
Sample Collection:
25-Aug-2023

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L40022-5
Matrix:	TISSUE	**Sample Size:**	2.08 g (wet)
Sample Receipt Date:	29-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	15-Jan-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	06-Feb-2024 **Time:** 18:44:20	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_027 S: 25**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_027 S: 20
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_027 S: 15
Concentration Units:	ng/g (wet weight basis)		

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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.385 (Q)		
PFPeA	ND		0.192 (Q)		
PFHxA	ND		0.0962 (Q)		
PFHpA	ND		0.0962 (Q)		
PFOA	ND		0.0962 (Q)		
PFNA		0.611	0.0962 (Q)	2.68	
PFDA	J	0.382	0.0962 (Q)	2.64	1.000
PFUnA	J	0.299	0.0962 (Q)	3.93	0.999
PFDoA	ND		0.0769 (Q)		
PFTrDA	J	0.142	0.0962 (Q)	2.89	0.955
PFTeDA	ND		0.0962 (Q)		
PFBS	ND		0.0962 (Q)		
PFPeS	ND		0.0966 (Q)		
PFHxS	ND		0.0962 (Q)		
PFHpS	ND		0.0962 (Q)		
PFOS		3.40	0.0962 (Q)	2.42	
PFNS	ND		0.0962 (Q)		
PFDS	ND		0.0962 (Q)		
PFDoS	ND		0.0962 (Q)		
4:2 FTS	ND		0.385 (Q)		
6:2 FTS	ND		0.346 (Q)		
8:2 FTS	ND		0.327 (Q)		
PFOSA	ND		0.0962 (Q)		
N-MeFOSA	ND		0.0962 (Q)		
N-EtFOSA	ND		0.269 (Q)		
MeFOSAA	ND		0.0962 (Q)		
EtFOSAA	ND		0.0962 (Q)		
N-MeFOSE	NQ				
N-EtFOSE	J	2.09	0.962 (Q)		
HFPO-DA	ND		0.385 (Q)		
ADONA	ND		0.385 (Q)		
9Cl-PF3ONS	ND		0.386 (Q)		
11Cl-PF3OUdS	ND		0.385 (Q)		
3:3 FTCA	ND H		0.385 (Q)		
5:3 FTCA	ND		2.40 (Q)		
7:3 FTCA	ND		2.40 (Q)		
PFEESA	ND		0.0962 (Q)		
PFMPA	ND		0.192 (Q)		
PFMBA	ND		0.0962 (Q)		

NFDHA	ND H	0.192 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; J = concentration less than limit of quantification; H = concentration is estimated; NQ = data not quantifiable.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-5_Form1A_FC4L_027S25_SJ3384108.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
LS 5
Sample Collection:
25-Aug-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-5
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.08 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 18:44:20	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 25**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	34.8	87.1		0.996
13C5-PFPeA		20.0	18.3	91.3		0.854
13C5-PFHxA		10.0	8.96	89.6	11.3	1.000
13C4-PFHpA		10.0	8.63	86.3		0.878
13C8-PFOA		10.0	8.63	86.3		1.000
13C9-PFNA		5.00	5.05	101		0.999
13C6-PFDA		5.00	4.79	95.7		1.000
13C7-PFUnA		5.00	4.83	96.6		1.043
13C2-PFDoA		5.00	4.03	80.7		1.078
13C2-PFTeDA		5.00	1.19	23.8		1.174
13C3-PFBS		10.0	8.81	87.9	2.66	0.771
13C3-PFHxS		10.0	9.24	92.3	2.43	1.000
13C8-PFOS		10.1	9.90	98.4	2.07	1.000
13C2-4:2 FTS		20.2	19.9	98.7	1.91	0.813
13C2-6:2 FTS		20.0	17.9	89.6	2.29	1.002
13C2-8:2 FTS		20.0	21.2	106	3.33	1.267
13C8-PFOSA		10.0	8.10	81.0		1.168
D3-N-MeFOSA	V	10.0	1.26	12.6		1.347
D5-N-EtFOSA		10.0	1.48	14.8		1.382
D3-MeFOSAA		20.0	21.0	105		1.305
D5-EtFOSAA		20.0	24.1	121		1.328
d7-NMe-FOSE	NQ					
d9-NEt-FOSE	V	100	3.52	3.52		1.367
13C3-HFPO-DA		40.0	22.2	55.4	3.07	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits; NQ = data not quantifiable.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Andrew Porat_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-5_Form2_FC4L_027S25_SJ3384108.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
LS 6
Sample Collection:
25-Aug-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-6
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.01 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 18:57:49	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 26**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng/g (wet weight basis)	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.398 (Q)		
PFPeA	ND		0.199 (Q)		
PFHxA	ND		0.0995 (Q)		
PFHpA	ND		0.0995 (Q)		
PFOA	ND		0.0995 (Q)		
PFNA		0.691	0.0995 (Q)	2.36	
PFDA	J	0.308	0.0995 (Q)	3.06	1.001
PFUnA	J	0.229	0.0995 (Q)	3.71	1.001
PFDoA	ND		0.0796 (Q)		
PFTrDA	J	0.194	0.0995 (Q)	4.63	0.956
PFTeDA	ND		0.0995 (Q)		
PFBS	ND		0.0995 (Q)		
PFPeS	ND		0.100 (Q)		
PFHxS	ND		0.0995 (Q)		
PFHpS	ND		0.0995 (Q)		
PFOS		3.17	0.0995 (Q)	2.35	
PFNS	ND		0.0995 (Q)		
PFDS	ND		0.0995 (Q)		
PFDoS	ND		0.0995 (Q)		
4:2 FTS	ND		0.398 (Q)		
6:2 FTS	ND		0.358 (Q)		
8:2 FTS	ND		0.338 (Q)		
PFOSA	ND		0.0995 (Q)		
N-MeFOSA	ND		0.0995 (Q)		
N-EtFOSA	ND		0.279 (Q)		
MeFOSAA	ND		0.0995 (Q)		
EtFOSAA	ND		0.0995 (Q)		
N-MeFOSE	ND		0.995 (Q)		
N-EtFOSE	J	1.21	0.995 (Q)		
HFPO-DA	ND		0.398 (Q)		
ADONA	ND		0.398 (Q)		
9Cl-PF3ONS	ND		0.399 (Q)		
11Cl-PF3OUdS	ND		0.399 (Q)		
3:3 FTCA	ND H		0.398 (Q)		
5:3 FTCA	ND		2.49 (Q)		
7:3 FTCA	ND		2.49 (Q)		
PFEESA	ND		0.0995 (Q)		
PFMPA	ND		0.199 (Q)		
PFMBA	ND		0.0995 (Q)		

NFDHA	ND H	0.199 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-6_Form1A_FC4L_027S26_SJ3384109.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
LS 6
Sample Collection:
25-Aug-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-6
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.01 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 18:57:49	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 26**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

This page is part of a total report that contains information necessary for accreditation compliance.
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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	27.8	69.5		1.000
13C5-PFPeA		20.0	18.7	93.6		0.854
13C5-PFHxA		10.0	9.30	93.0	11.3	1.000
13C4-PFHpA		10.0	9.57	95.7		0.877
13C8-PFOA		10.0	9.80	98.0		0.999
13C9-PFNA		5.00	5.82	116		1.000
13C6-PFDA		5.00	5.12	102		1.000
13C7-PFUnA		5.00	5.03	101		1.043
13C2-PFDoA		5.00	4.43	88.5		1.079
13C2-PFTeDA		5.00	1.35	27.0		1.174
13C3-PFBS		10.0	8.62	86.0	2.80	0.771
13C3-PFHxS		10.0	9.20	91.8	2.38	1.000
13C8-PFOS		10.1	10.6	105	2.18	1.000
13C2-4:2 FTS		20.2	17.4	86.1	1.92	0.812
13C2-6:2 FTS		20.0	19.2	96.3	2.30	1.002
13C2-8:2 FTS		20.0	20.2	101	3.35	1.266
13C8-PFOSA		10.0	9.11	91.1		1.171
D3-N-MeFOSA	V	10.0	1.36	13.6		1.348
D5-N-EtFOSA		10.0	1.78	17.8		1.383
D3-MeFOSAA		20.0	20.8	104		1.303
D5-EtFOSAA		20.0	23.1	115		1.327
d7-NMe-FOSE	V	100	2.15	2.15		1.330
d9-NEt-FOSE	V	100	4.98	4.98		1.367
13C3-HFPO-DA		40.0	25.8	64.5	3.09	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

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Report Filename: PFC_FC_LC_PFAS_L40022-6_Form2_FC4L_027S26_SJ3384109.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
LS 7
Sample Collection:
25-Aug-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-7
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.04 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 19:11:18	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 27**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng/g (wet weight basis)	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.392 (Q)		
PFPeA	ND		0.196 (Q)		
PFHxA	ND		0.0980 (Q)		
PFHpA	ND		0.0980 (Q)		
PFOA	ND		0.0980 (Q)		
PFNA		0.515	0.0980 (Q)	3.18	
PFDA	J	0.212	0.0980 (Q)	3.59	1.000
PFUnA	J	0.157	0.0980 (Q)	4.44	0.999
PFDoA	ND		0.0784 (Q)		
PFTrDA	J	0.129	0.0980 (Q)	4.01	0.954
PFTeDA	ND		0.0980 (Q)		
PFBS	ND		0.0980 (Q)		
PFPeS	ND		0.0985 (Q)		
PFHxS	ND		0.0980 (Q)		
PFHpS	ND		0.0980 (Q)		
PFOS		2.28	0.0980 (Q)	2.70	
PFNS	ND		0.0980 (Q)		
PFDS	ND		0.0980 (Q)		
PFDoS	ND		0.0980 (Q)		
4:2 FTS	ND		0.392 (Q)		
6:2 FTS	ND		0.353 (Q)		
8:2 FTS	ND		0.333 (Q)		
PFOSA	ND		0.0980 (Q)		
N-MeFOSA	ND		0.0980 (Q)		
N-EtFOSA	ND		0.275 (Q)		
MeFOSAA	ND		0.0980 (Q)		
EtFOSAA	ND		0.0980 (Q)		
N-MeFOSE	ND		0.980 (Q)		
N-EtFOSE	J	1.37	0.980 (Q)		
HFPO-DA	ND		0.392 (Q)		
ADONA	ND		0.392 (Q)		
9Cl-PF3ONS	ND		0.393 (Q)		
11Cl-PF3OUdS	ND		0.393 (Q)		
3:3 FTCA	ND H		0.392 (Q)		
5:3 FTCA	ND		2.45 (Q)		
7:3 FTCA	ND		2.45 (Q)		
PFEESA	ND		0.0980 (Q)		
PFMPA	ND		0.196 (Q)		
PFMBA	ND		0.0980 (Q)		

NFDHA	ND H	0.196 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

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SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
LS 7
Sample Collection:
25-Aug-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-7
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.04 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 19:11:18	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 27**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	35.3	88.2		1.000
13C5-PFPeA		20.0	18.8	94.0		0.856
13C5-PFHxA		10.0	8.79	87.9	11.9	1.000
13C4-PFHpA		10.0	8.41	84.1		0.878
13C8-PFOA		10.0	8.52	85.2		1.000
13C9-PFNA		5.00	5.00	100		0.999
13C6-PFDA		5.00	4.43	88.6		0.999
13C7-PFUnA		5.00	4.25	85.0		1.043
13C2-PFDoA		5.00	3.36	67.2		1.079
13C2-PFTeDA		5.00	1.32	26.5		1.174
13C3-PFBS		10.0	8.49	84.7	2.61	0.771
13C3-PFHxS		10.0	8.96	89.5	2.32	1.000
13C8-PFOS		10.1	9.25	92.0	2.18	1.000
13C2-4:2 FTS		20.2	19.4	96.0	1.99	0.813
13C2-6:2 FTS		20.0	17.3	86.3	2.27	1.002
13C2-8:2 FTS		20.0	20.8	104	3.37	1.267
13C8-PFOSA		10.0	7.18	71.8		1.169
D3-N-MeFOSA	V	10.0	1.29	12.9		1.348
D5-N-EtFOSA		10.0	1.47	14.7		1.382
D3-MeFOSAA		20.0	18.7	93.4		1.305
D5-EtFOSAA		20.0	20.8	104		1.328
d7-NMe-FOSE	V	100	1.12	1.12		1.330
d9-NEt-FOSE	V	100	3.84	3.84		1.367
13C3-HFPO-DA		40.0	21.1	52.7	3.17	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

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SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
LS 8
Sample Collection:
25-Aug-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L40022-8
Matrix:	TISSUE	**Sample Size:**	2.02 g (wet)
Sample Receipt Date:	29-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	15-Jan-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	06-Feb-2024 **Time:** 19:24:48	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_027 S: 28**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_027 S: 20
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_027 S: 15
Concentration Units:	ng/g (wet weight basis)		

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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.396 (Q)		
PFPeA	ND		0.198 (Q)		
PFHxA	ND		0.0990 (Q)		
PFHpA	ND		0.0990 (Q)		
PFOA	ND		0.0990 (Q)		
PFNA		1.32	0.0990 (Q)	2.71	
PFDA		0.512	0.0990 (Q)	2.66	1.000
PFUnA	J	0.267	0.0990 (Q)	4.74	1.000
PFDoA	ND		0.0792 (Q)		
PFTrDA	J	0.148	0.0990 (Q)	2.73	0.955
PFTeDA	ND		0.0990 (Q)		
PFBS	ND		0.0990 (Q)		
PFPeS	ND		0.0995 (Q)		
PFHxS	ND		0.0990 (Q)		
PFHpS	ND		0.0990 (Q)		
PFOS		5.75	0.0990 (Q)	2.45	
PFNS	ND		0.0990 (Q)		
PFDS	ND		0.0990 (Q)		
PFDoS	ND		0.0990 (Q)		
4:2 FTS	ND		0.396 (Q)		
6:2 FTS	ND		0.356 (Q)		
8:2 FTS	ND		0.337 (Q)		
PFOSA	ND		0.0990 (Q)		
N-MeFOSA	ND		0.0990 (Q)		
N-EtFOSA	ND		0.277 (Q)		
MeFOSAA	ND		0.0990 (Q)		
EtFOSAA	ND		0.0990 (Q)		
N-MeFOSE	ND		0.990 (Q)		
N-EtFOSE	ND		0.990 (Q)		
HFPO-DA	ND		0.396 (Q)		
ADONA	ND		0.396 (Q)		
9Cl-PF3ONS	ND		0.397 (Q)		
11Cl-PF3OUdS	ND		0.397 (Q)		
3:3 FTCA	ND H		0.396 (Q)		
5:3 FTCA	ND		2.48 (Q)		
7:3 FTCA	ND		2.48 (Q)		
PFEESA	ND		0.0990 (Q)		
PFMPA	ND		0.198 (Q)		
PFMBA	ND		0.0990 (Q)		

NFDHA	ND H	0.198 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

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Signed: Andrew Porat

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SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
LS 8
Sample Collection:
25-Aug-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-8
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.02 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 19:24:48	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 28**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	36.3	90.8		1.000
13C5-PFPeA		20.0	18.3	91.4		0.854
13C5-PFHxA		10.0	9.03	90.3	11.0	1.000
13C4-PFHpA		10.0	8.57	85.7		0.877
13C8-PFOA		10.0	8.80	88.0		0.999
13C9-PFNA		5.00	5.11	102		1.000
13C6-PFDA		5.00	4.42	88.5		1.000
13C7-PFUnA		5.00	3.90	78.0		1.043
13C2-PFDoA		5.00	2.91	58.2		1.079
13C2-PFTeDA		5.00	1.12	22.4		1.176
13C3-PFBS		10.0	8.69	86.7	2.61	0.770
13C3-PFHxS		10.0	9.19	91.8	2.30	0.999
13C8-PFOS		10.1	9.16	91.1	2.12	0.999
13C2-4:2 FTS		20.2	21.9	109	1.91	0.812
13C2-6:2 FTS		20.0	18.9	94.4	2.42	1.001
13C2-8:2 FTS		20.0	21.4	107	3.16	1.266
13C8-PFOSA		10.0	7.38	73.8		1.163
D3-N-MeFOSA	V	10.0	1.82	18.2		1.347
D5-N-EtFOSA		10.0	2.51	25.1		1.382
D3-MeFOSAA		20.0	19.3	96.4		1.304
D5-EtFOSAA		20.0	20.4	102		1.327
d7-NMe-FOSE		100	14.7	14.6		1.330
d9-NEt-FOSE		100	7.71	7.70		1.368
13C3-HFPO-DA		40.0	24.3	60.8	3.02	1.034

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

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SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
LS 9
Sample Collection:
25-Aug-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L40022-9 (A)
Matrix:	TISSUE	**Sample Size:**	2.06 g (wet)
Sample Receipt Date:	29-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	15-Jan-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	06-Feb-2024 **Time:** 20:19:17	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_027 S: 32**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_027 S: 20
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_027 S: 29
Concentration Units:	ng/g (wet weight basis)		

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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.388 (Q)		
PFPeA	ND		0.194 (Q)		
PFHxA	ND		0.0971 (Q)		
PFHpA	ND		0.0971 (Q)		
PFOA	ND		0.0971 (Q)		
PFNA		0.928	0.0971 (Q)	2.94	
PFDA		0.443	0.0971 (Q)	3.23	1.000
PFUnA	J	0.301	0.0971 (Q)	3.71	1.000
PFDoA	ND		0.0777 (Q)		
PFTrDA	J	0.098	0.0971 (Q)	1.62	0.953
PFTeDA	ND		0.0971 (Q)		
PFBS	ND		0.0971 (Q)		
PFPeS	ND		0.0976 (Q)		
PFHxS	ND		0.0971 (Q)		
PFHpS	ND		0.0971 (Q)		
PFOS		3.93	0.0971 (Q)	2.41	
PFNS	ND		0.0971 (Q)		
PFDS	ND		0.0971 (Q)		
PFDoS	ND		0.0971 (Q)		
4:2 FTS	ND		0.388 (Q)		
6:2 FTS	ND		0.350 (Q)		
8:2 FTS	ND		0.330 (Q)		
PFOSA	ND		0.0971 (Q)		
N-MeFOSA	ND		0.0971 (Q)		
N-EtFOSA	ND		0.272 (Q)		
MeFOSAA	ND		0.0971 (Q)		
EtFOSAA	ND		0.0971 (Q)		
N-MeFOSE	ND		0.971 (Q)		
N-EtFOSE	ND		0.971 (Q)		
HFPO-DA	ND		0.388 (Q)		
ADONA	ND		0.388 (Q)		
9Cl-PF3ONS	ND		0.389 (Q)		
11Cl-PF3OUdS	ND		0.389 (Q)		
3:3 FTCA	ND H		0.388 (Q)		
5:3 FTCA	ND		2.43 (Q)		
7:3 FTCA	ND		2.43 (Q)		
PFEESA	ND		0.0971 (Q)		
PFMPA	ND		0.194 (Q)		
PFMBA	ND		0.0971 (Q)		

NFDHA	ND H	0.194 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-9_Form1A_FC4L_027S32_SJ3384117.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
LS 9
Sample Collection:
25-Aug-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-9 (A)
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.06 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 20:19:17	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 32**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 29

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	38.6	96.5		1.000
13C5-PFPeA		20.0	21.4	107		0.855
13C5-PFHxA		10.0	9.77	97.7	11.6	1.000
13C4-PFHpA		10.0	9.36	93.6		0.878
13C8-PFOA		10.0	8.98	89.8		0.999
13C9-PFNA		5.00	5.47	109		1.000
13C6-PFDA		5.00	4.51	90.2		1.000
13C7-PFUnA		5.00	4.47	89.3		1.043
13C2-PFDoA		5.00	3.77	75.3		1.079
13C2-PFTeDA		5.00	1.58	31.6		1.175
13C3-PFBS		10.0	8.78	87.6	2.73	0.771
13C3-PFHxS		10.0	9.43	94.1	2.49	1.000
13C8-PFOS		10.1	10.4	103	2.18	1.000
13C2-4:2 FTS		20.2	18.4	91.1	1.85	0.813
13C2-6:2 FTS		20.0	18.9	94.5	2.24	1.001
13C2-8:2 FTS		20.0	20.3	101	3.40	1.268
13C8-PFOSA		10.0	8.84	88.4		1.168
D3-N-MeFOSA	V	10.0	1.89	18.9		1.348
D5-N-EtFOSA		10.0	2.21	22.1		1.382
D3-MeFOSAA		20.0	18.8	93.9		1.305
D5-EtFOSAA		20.0	20.0	99.9		1.329
d7-NMe-FOSE	V	100	1.44	1.44		1.330
d9-NEt-FOSE		100	6.39	6.39		1.367
13C3-HFPO-DA		40.0	17.6	44.1	3.21	1.034

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Andrew Porat_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-9_Form2_FC4L_027S32_SJ3384117.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
LS 9 (Duplicate)
Sample Collection:
25-Aug-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	WG88238-104 (DUP L40022-9)
Matrix:	TISSUE	**Sample Size:**	2.04 g (wet)
Sample Receipt Date:	29-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	15-Jan-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	06-Feb-2024 **Time:** 20:05:24	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_027 S: 31**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_027 S: 20
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_027 S: 29
Concentration Units:	ng/g (wet weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.392 (Q)		
PFPeA	ND		0.196 (Q)		
PFHxA	ND		0.0980 (Q)		
PFHpA	ND		0.0980 (Q)		
PFOA	ND		0.0980 (Q)		
PFNA		1.15	0.0980 (Q)	3.06	
PFDA		0.463	0.0980 (Q)	2.42	1.000
PFUnA		0.394	0.0980 (Q)	4.72	1.000
PFDoA	J	0.116	0.0784 (Q)	9.04	1.000
PFTrDA	J	0.196	0.0980 (Q)	3.05	0.956
PFTeDA	ND		0.0980 (Q)		
PFBS	ND		0.0980 (Q)		
PFPeS	ND		0.0985 (Q)		
PFHxS	J	0.124	0.0980 (Q)	2.82	
PFHpS	ND		0.0980 (Q)		
PFOS		4.33	0.0980 (Q)	2.42	
PFNS	ND		0.0980 (Q)		
PFDS	ND		0.0980 (Q)		
PFDoS	ND		0.0980 (Q)		
4:2 FTS	ND		0.392 (Q)		
6:2 FTS	ND		0.353 (Q)		
8:2 FTS	ND		0.333 (Q)		
PFOSA	ND		0.0980 (Q)		
N-MeFOSA	ND		0.0980 (Q)		
N-EtFOSA	ND		0.275 (Q)		
MeFOSAA	ND		0.0980 (Q)		
EtFOSAA	ND		0.0980 (Q)		
N-MeFOSE	ND		0.980 (Q)		
N-EtFOSE	ND		0.980 (Q)		
HFPO-DA	ND		0.392 (Q)		
ADONA	ND		0.392 (Q)		
9Cl-PF3ONS	ND		0.393 (Q)		
11Cl-PF3OUdS	ND		0.393 (Q)		
3:3 FTCA	ND H		0.392 (Q)		
5:3 FTCA	ND		2.45 (Q)		
7:3 FTCA	ND		2.45 (Q)		
PFEESA	ND		0.0980 (Q)		
PFMPA	ND		0.196 (Q)		
PFMBA	ND		0.0980 (Q)		

NFDHA	ND H	0.196 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_WG88238-104_Form1A_FC4L_027S31_SJ3384116.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
LS 9 (Duplicate)
Sample Collection:
25-Aug-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	WG88238-104 (DUP L40022-9)
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.04 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 20:05:24	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 31**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 29

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	37.1	92.8		0.997
13C5-PFPeA		20.0	20.8	104		0.857
13C5-PFHxA		10.0	9.69	96.9	12.9	1.000
13C4-PFHpA		10.0	9.03	90.3		0.879
13C8-PFOA		10.0	8.75	87.5		1.001
13C9-PFNA		5.00	4.36	87.3		1.000
13C6-PFDA		5.00	3.57	71.5		1.000
13C7-PFUnA		5.00	3.40	68.1		1.043
13C2-PFDoA		5.00	3.14	62.8		1.079
13C2-PFTeDA		5.00	2.75	55.0		1.174
13C3-PFBS		10.0	9.18	91.6	2.70	0.771
13C3-PFHxS		10.0	9.73	97.2	2.39	1.000
13C8-PFOS		10.1	7.78	77.3	2.10	0.999
13C2-4:2 FTS		20.2	24.6	122	1.96	0.813
13C2-6:2 FTS		20.0	19.5	97.5	2.44	1.002
13C2-8:2 FTS		20.0	16.0	79.7	3.48	1.267
13C8-PFOSA		10.0	9.40	94.0		1.167
D3-N-MeFOSA		10.0	2.98	29.8		1.347
D5-N-EtFOSA		10.0	1.54	15.4		1.382
D3-MeFOSAA		20.0	16.8	83.8		1.305
D5-EtFOSAA		20.0	17.4	86.8		1.328
d7-NMe-FOSE		100	5.61	5.59		1.329
d9-NEt-FOSE		100	18.4	18.3		1.366
13C3-HFPO-DA		40.0	18.4	46.1	3.07	1.034

(1) Where applicable, custom lab flags have been used on this report.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_WG88238-104_Form2_FC4L_027S31_SJ3384116.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

PERFLUORINATED ORGANICS ANALYSIS REPORT
RELATIVE PERCENT DIFFERENCE

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No. NDDEQ

Contract No.: 5123

Client ID: LS 9

Concentration Units: ng/g (wet weight basis)

COMPOUND	L40022-9 (A)		WG88238-104		MEAN	RELATIVE PERCENT DIFFERENCE
	LAB FLAG [1]	CONC. FOUND	LAB FLAG [1]	CONC. FOUND		
PFBA	ND		ND			
PFPeA	ND		ND			
PFHxA	ND		ND			
PFHpA	ND		ND			
PFOA	ND		ND			
PFNA		0.928		1.15	1.04	21.2
PFDA		0.443		0.463	0.453	4.43
PFUnA	J	0.301		0.394	0.348	26.7
PFDoA	ND		J	0.116		
PFTrDA	J	0.098	J	0.196	0.147	66.6
PFTeDA	ND		ND			
PFBS	ND		ND			
PFPeS	ND		ND			
PFHxS	ND		J	0.124		
PFHpS	ND		ND			
PFOS		3.93		4.33	4.13	9.74
PFNS	ND		ND			
PFDS	ND		ND			
PFDoS	ND		ND			
4:2 FTS	ND		ND			
6:2 FTS	ND		ND			
8:2 FTS	ND		ND			
PFOSA	ND		ND			
N-MeFOSA	ND		ND			
N-EtFOSA	ND		ND			
MeFOSAA	ND		ND			
EtFOSAA	ND		ND			
N-MeFOSE	ND		ND			
N-EtFOSE	ND		ND			
HFPO-DA	ND		ND			
ADONA	ND		ND			
9Cl-PF3ONS	ND		ND			
11Cl-PF3OUdS	ND		ND			
3:3 FTCA	ND H		ND H			
5:3 FTCA	ND		ND			
7:3 FTCA	ND		ND			
PFEESA	ND		ND			
PFMPA	ND		ND			
PFMBA	ND		ND			
NFDHA	ND H		ND H			

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; J = concentration less than limit of quantification; H = concentration is estimated.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.
Signed: Andrew Porat

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: RPD.xsl; Created: 16-Feb-2024 10:30:24; Application: XMLTransformer-1.18.48;
Report Filename: RPD_FC_LC_PFAS-RPD_WG88238-104_L40022-9_.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
LS 10
Sample Collection:
25-Aug-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L40022-10
Matrix:	TISSUE	**Sample Size:**	2.01 g (wet)
Sample Receipt Date:	29-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	15-Jan-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	06-Feb-2024 **Time:** 20:32:46	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_027 S: 33**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_027 S: 20
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_027 S: 29
Concentration Units:	ng/g (wet weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.398 (Q)		
PFPeA	ND		0.199 (Q)		
PFHxA	ND		0.0995 (Q)		
PFHpA	ND		0.0995 (Q)		
PFOA	ND		0.0995 (Q)		
PFNA		0.847	0.0995 (Q)	2.35	
PFDA	J	0.281	0.0995 (Q)	2.12	1.000
PFUnA	J	0.184	0.0995 (Q)	4.12	0.999
PFDoA	ND		0.0796 (Q)		
PFTrDA	J	0.167	0.0995 (Q)	3.17	0.955
PFTeDA	ND		0.0995 (Q)		
PFBS	ND		0.0995 (Q)		
PFPeS	ND		0.100 (Q)		
PFHxS	ND		0.0995 (Q)		
PFHpS	ND		0.0995 (Q)		
PFOS		3.12	0.0995 (Q)	2.52	
PFNS	ND		0.0995 (Q)		
PFDS	ND		0.0995 (Q)		
PFDoS	ND		0.0995 (Q)		
4:2 FTS	ND		0.398 (Q)		
6:2 FTS	ND		0.358 (Q)		
8:2 FTS	ND		0.338 (Q)		
PFOSA	ND		0.0995 (Q)		
N-MeFOSA	ND		0.0995 (Q)		
N-EtFOSA	ND		0.279 (Q)		
MeFOSAA	ND		0.0995 (Q)		
EtFOSAA	ND		0.0995 (Q)		
N-MeFOSE	ND		0.995 (Q)		
N-EtFOSE	J	1.20	0.995 (Q)		
HFPO-DA	ND		0.398 (Q)		
ADONA	ND		0.398 (Q)		
9Cl-PF3ONS	ND		0.399 (Q)		
11Cl-PF3OUdS	ND		0.399 (Q)		
3:3 FTCA	ND H		0.398 (Q)		
5:3 FTCA	ND		2.49 (Q)		
7:3 FTCA	ND		2.49 (Q)		
PFEESA	ND		0.0995 (Q)		
PFMPA	ND		0.199 (Q)		
PFMBA	ND		0.0995 (Q)		

NFDHA	ND H	0.199 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-10_Form1A_FC4L_027S33_SJ3384118.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
LS 10
Sample Collection:
25-Aug-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-10
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.01 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 20:32:46	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 33**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 29

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	32.9	82.3		0.996
13C5-PFPeA		20.0	17.1	85.6		0.854
13C5-PFHxA		10.0	9.45	94.5	11.6	1.000
13C4-PFHpA		10.0	9.11	91.1		0.878
13C8-PFOA		10.0	8.91	89.1		1.000
13C9-PFNA		5.00	5.12	102		1.000
13C6-PFDA		5.00	4.72	94.4		0.999
13C7-PFUnA		5.00	4.81	96.2		1.043
13C2-PFDoA		5.00	4.22	84.4		1.079
13C2-PFTeDA		5.00	1.38	27.6		1.174
13C3-PFBS		10.0	8.69	86.7	2.69	0.771
13C3-PFHxS		10.0	9.41	94.0	2.51	1.000
13C8-PFOS		10.1	10.1	100	2.19	1.000
13C2-4:2 FTS		20.2	17.0	84.2	1.98	0.813
13C2-6:2 FTS		20.0	18.8	93.9	2.39	1.002
13C2-8:2 FTS		20.0	19.8	98.9	3.33	1.268
13C8-PFOSA		10.0	7.81	78.1		1.171
D3-N-MeFOSA	V	10.0	1.30	13.0		1.348
D5-N-EtFOSA		10.0	1.89	18.9		1.383
D3-MeFOSAA		20.0	20.9	105		1.305
D5-EtFOSAA		20.0	22.4	112		1.329
d7-NMe-FOSE	V	100	1.70	1.70		1.331
d9-NEt-FOSE		100	5.12	5.11		1.367
13C3-HFPO-DA		40.0	23.2	57.9	3.11	1.035

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Andrew Porat_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-10_Form2_FC4L_027S33_SJ3384118.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
LS 11
Sample Collection:
25-Aug-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L40022-11
Matrix:	TISSUE	**Sample Size:**	2.05 g (wet)
Sample Receipt Date:	29-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	15-Jan-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	06-Feb-2024 **Time:** 20:46:24	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_027 S: 34**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_027 S: 20
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_027 S: 29
Concentration Units:	ng/g (wet weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.390 (Q)		
PFPeA	ND		0.195 (Q)		
PFHxA	ND		0.0976 (Q)		
PFHpA	ND		0.0976 (Q)		
PFOA	ND		0.0976 (Q)		
PFNA		0.935	0.0976 (Q)	2.83	
PFDA	J	0.265	0.0976 (Q)	2.88	1.000
PFUnA	J	0.174	0.0976 (Q)	3.12	1.000
PFDoA	ND		0.0780 (Q)		
PFTrDA	J	0.167	0.0976 (Q)	3.71	0.956
PFTeDA	ND		0.0976 (Q)		
PFBS	ND		0.0976 (Q)		
PFPeS	ND		0.0980 (Q)		
PFHxS	ND		0.0976 (Q)		
PFHpS	ND		0.0976 (Q)		
PFOS		2.90	0.0976 (Q)	2.44	
PFNS	ND		0.0976 (Q)		
PFDS	ND		0.0976 (Q)		
PFDoS	ND		0.0976 (Q)		
4:2 FTS	ND		0.390 (Q)		
6:2 FTS	K J	0.355	0.351 (Q)	0.41	1.002
8:2 FTS	ND		0.332 (Q)		
PFOSA	ND		0.0976 (Q)		
N-MeFOSA	ND		0.0976 (Q)		
N-EtFOSA	ND		0.273 (Q)		
MeFOSAA	ND		0.0976 (Q)		
EtFOSAA	ND		0.0976 (Q)		
N-MeFOSE	NQ				
N-EtFOSE	ND		0.976 (Q)		
HFPO-DA	ND		0.390 (Q)		
ADONA	ND		0.390 (Q)		
9Cl-PF3ONS	ND		0.391 (Q)		
11Cl-PF3OUdS	ND		0.391 (Q)		
3:3 FTCA	ND H		0.390 (Q)		
5:3 FTCA	ND		2.44 (Q)		
7:3 FTCA	ND		2.44 (Q)		
PFEESA	ND		0.0976 (Q)		
PFMPA	ND		0.195 (Q)		
PFMBA	ND		0.0976 (Q)		

NFDHA	ND H	0.195 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than limit of quantification; H = concentration is estimated; NQ = data not quantifiable.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-11_Form1A_FC4L_027S34_SJ3384119.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
LS 11
Sample Collection:
25-Aug-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-11
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.05 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 20:46:24	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 34**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 29

This page is part of a total report that contains information necessary for accreditation compliance.
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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	37.7	94.2		0.996
13C5-PFPeA		20.0	20.2	101		0.856
13C5-PFHxA		10.0	9.69	96.9	11.6	1.001
13C4-PFHpA		10.0	9.34	93.4		0.878
13C8-PFOA		10.0	9.39	93.9		0.999
13C9-PFNA		5.00	5.54	111		1.000
13C6-PFDA		5.00	4.83	96.6		0.999
13C7-PFUnA		5.00	4.89	97.7		1.042
13C2-PFDoA		5.00	4.03	80.6		1.078
13C2-PFTeDA		5.00	1.37	27.4		1.174
13C3-PFBS		10.0	8.92	89.0	2.77	0.771
13C3-PFHxS		10.0	9.23	92.2	2.33	1.000
13C8-PFOS		10.1	9.98	99.2	2.19	1.000
13C2-4:2 FTS		20.2	20.2	100	1.85	0.813
13C2-6:2 FTS		20.0	18.6	92.8	2.37	1.002
13C2-8:2 FTS		20.0	23.7	118	3.40	1.267
13C8-PFOSA		10.0	7.32	73.2		1.168
D3-N-MeFOSA	V	10.0	1.75	17.5		1.347
D5-N-EtFOSA		10.0	2.13	21.3		1.382
D3-MeFOSAA		20.0	23.1	116		1.304
D5-EtFOSAA		20.0	26.1	130		1.328
d7-NMe-FOSE	NQ					
d9-NEt-FOSE		100	5.30	5.30		1.367
13C3-HFPO-DA		40.0	27.1	67.8	3.02	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits; NQ = data not quantifiable.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Andrew Porat_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-11_Form2_FC4L_027S34_SJ3384119.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
LS 12
Sample Collection:
25-Aug-2023

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L40022-12
Matrix:	TISSUE	**Sample Size:**	2.06 g (wet)
Sample Receipt Date:	29-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	15-Jan-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	06-Feb-2024 **Time:** 20:59:53	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_027 S: 35**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_027 S: 20
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_027 S: 29
Concentration Units:	ng/g (wet weight basis)		

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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.388 (Q)		
PFPeA	ND		0.194 (Q)		
PFHxA	ND		0.0971 (Q)		
PFHpA	ND		0.0971 (Q)		
PFOA	ND		0.0971 (Q)		
PFNA		1.04	0.0971 (Q)	2.64	
PFDA		0.553	0.0971 (Q)	2.56	0.999
PFUnA		0.489	0.0971 (Q)	4.21	1.000
PFDoA	ND		0.0777 (Q)		
PFTrDA	J	0.219	0.0971 (Q)	2.83	0.956
PFTeDA	ND		0.0971 (Q)		
PFBS	ND		0.0971 (Q)		
PFPeS	ND		0.0976 (Q)		
PFHxS	J	0.131	0.0971 (Q)	3.06	
PFHpS	ND		0.0971 (Q)		
PFOS		5.68	0.0971 (Q)	2.44	
PFNS	ND		0.0971 (Q)		
PFDS	ND		0.0971 (Q)		
PFDoS	ND		0.0971 (Q)		
4:2 FTS	ND		0.388 (Q)		
6:2 FTS	ND		0.350 (Q)		
8:2 FTS	ND		0.330 (Q)		
PFOSA	ND		0.0971 (Q)		
N-MeFOSA	ND		0.0971 (Q)		
N-EtFOSA	ND		0.272 (Q)		
MeFOSAA	ND		0.0971 (Q)		
EtFOSAA	ND		0.0971 (Q)		
N-MeFOSE	ND		0.971 (Q)		
N-EtFOSE	J	1.10	0.971 (Q)		
HFPO-DA	ND		0.388 (Q)		
ADONA	ND		0.388 (Q)		
9Cl-PF3ONS	ND		0.389 (Q)		
11Cl-PF3OUdS	ND		0.389 (Q)		
3:3 FTCA	ND H		0.388 (Q)		
5:3 FTCA	ND		2.43 (Q)		
7:3 FTCA	ND		2.43 (Q)		
PFEESA	ND		0.0971 (Q)		
PFMPA	ND		0.194 (Q)		
PFMBA	ND		0.0971 (Q)		

NFDHA	ND H	0.194 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-12_Form1A_FC4L_027S35_SJ3384120.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
LS 12
Sample Collection:
25-Aug-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-12
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.06 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 20:59:53	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 35**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 29

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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	38.8	97.0		0.996
13C5-PFPeA		20.0	21.5	107		0.854
13C5-PFHxA		10.0	9.90	99.0	12.8	1.000
13C4-PFHpA		10.0	9.38	93.8		0.879
13C8-PFOA		10.0	9.35	93.5		1.000
13C9-PFNA		5.00	5.19	104		1.000
13C6-PFDA		5.00	4.76	95.2		1.000
13C7-PFUnA		5.00	4.37	87.4		1.043
13C2-PFDoA		5.00	3.42	68.5		1.079
13C2-PFTeDA		5.00	1.29	25.8		1.174
13C3-PFBS		10.0	9.50	94.9	2.60	0.771
13C3-PFHxS		10.0	10.1	101	2.49	1.000
13C8-PFOS		10.1	10.2	102	2.07	0.999
13C2-4:2 FTS		20.2	18.4	91.4	1.97	0.813
13C2-6:2 FTS		20.0	19.4	97.1	2.36	1.002
13C2-8:2 FTS		20.0	19.2	95.6	3.32	1.267
13C8-PFOSA		10.0	8.77	87.7		1.165
D3-N-MeFOSA	V	10.0	1.68	16.8		1.348
D5-N-EtFOSA		10.0	2.28	22.8		1.382
D3-MeFOSAA		20.0	17.9	89.3		1.305
D5-EtFOSAA		20.0	19.6	97.8		1.328
d7-NMe-FOSE	V	100	0.972	0.968		1.330
d9-NEt-FOSE		100	5.96	5.96		1.366
13C3-HFPO-DA		40.0	22.0	55.1	2.91	1.034

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Andrew Porat_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-12_Form2_FC4L_027S35_SJ3384120.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
LS 13
Sample Collection:
25-Aug-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L40022-13
Matrix:	TISSUE	**Sample Size:**	2.07 g (wet)
Sample Receipt Date:	29-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	15-Jan-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	06-Feb-2024 **Time:** 21:13:23	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_027 S: 36**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_027 S: 20
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_027 S: 29
Concentration Units:	ng/g (wet weight basis)		

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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.386 (Q)		
PFPeA	ND		0.193 (Q)		
PFHxA	ND		0.0966 (Q)		
PFHpA	ND		0.0966 (Q)		
PFOA	ND		0.0966 (Q)		
PFNA		0.602	0.0966 (Q)	2.66	
PFDA	J	0.185	0.0966 (Q)	3.44	1.000
PFUnA	J	0.098	0.0966 (Q)	2.43	1.000
PFDoA	ND		0.0773 (Q)		
PFTrDA	ND		0.0966 (Q)		
PFTeDA	ND		0.0966 (Q)		
PFBS	ND		0.0966 (Q)		
PFPeS	ND		0.0971 (Q)		
PFHxS	ND		0.0966 (Q)		
PFHpS	ND		0.0966 (Q)		
PFOS		1.98	0.0966 (Q)	2.29	
PFNS	ND		0.0966 (Q)		
PFDS	ND		0.0966 (Q)		
PFDoS	ND		0.0966 (Q)		
4:2 FTS	ND		0.386 (Q)		
6:2 FTS	ND		0.348 (Q)		
8:2 FTS	ND		0.329 (Q)		
PFOSA	ND		0.0966 (Q)		
N-MeFOSA	ND		0.0966 (Q)		
N-EtFOSA	ND		0.271 (Q)		
MeFOSAA	ND		0.0966 (Q)		
EtFOSAA	ND		0.0966 (Q)		
N-MeFOSE	ND		0.966 (Q)		
N-EtFOSE	ND		0.966 (Q)		
HFPO-DA	ND		0.386 (Q)		
ADONA	ND		0.386 (Q)		
9Cl-PF3ONS	ND		0.387 (Q)		
11Cl-PF3OUdS	ND		0.387 (Q)		
3:3 FTCA	ND H		0.386 (Q)		
5:3 FTCA	ND		2.42 (Q)		
7:3 FTCA	ND		2.42 (Q)		
PFEESA	ND		0.0966 (Q)		
PFMPA	ND		0.193 (Q)		
PFMBA	ND		0.0966 (Q)		

NFDHA	ND H	0.193 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-13_Form1A_FC4L_027S36_SJ3384121.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
LS 13
Sample Collection:
25-Aug-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-13
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.07 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 21:13:23	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 36**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 29

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	33.6	83.9		1.000
13C5-PFPeA		20.0	17.3	86.5		0.855
13C5-PFHxA		10.0	9.75	97.5	10.9	1.000
13C4-PFHpA		10.0	8.92	89.2		0.878
13C8-PFOA		10.0	8.84	88.4		1.000
13C9-PFNA		5.00	5.33	107		1.000
13C6-PFDA		5.00	4.75	95.0		0.999
13C7-PFUnA		5.00	4.54	90.8		1.043
13C2-PFDoA		5.00	3.60	72.1		1.079
13C2-PFTeDA		5.00	1.08	21.7		1.174
13C3-PFBS		10.0	8.97	89.5	2.72	0.771
13C3-PFHxS		10.0	9.79	97.7	2.31	0.999
13C8-PFOS		10.1	10.4	103	2.19	1.000
13C2-4:2 FTS		20.2	15.0	74.3	1.88	0.813
13C2-6:2 FTS		20.0	19.2	96.0	2.39	1.002
13C2-8:2 FTS		20.0	16.8	84.0	3.38	1.267
13C8-PFOSA		10.0	8.55	85.5		1.166
D3-N-MeFOSA		10.0	2.29	22.9		1.348
D5-N-EtFOSA		10.0	2.73	27.3		1.382
D3-MeFOSAA		20.0	16.9	84.3		1.305
D5-EtFOSAA		20.0	18.1	90.7		1.328
d7-NMe-FOSE	V	100	2.67	2.66		1.333
d9-NEt-FOSE		100	7.51	7.50		1.367
13C3-HFPO-DA		40.0	28.5	71.3	3.11	1.035

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Andrew Porat_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-13_Form2_FC4L_027S36_SJ3384121.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
LS 14
Sample Collection:
25-Aug-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L40022-14
Matrix:	TISSUE	**Sample Size:**	2.05 g (wet)
Sample Receipt Date:	29-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	15-Jan-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	06-Feb-2024 **Time:** 21:26:52	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_027 S: 37**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_027 S: 20
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_027 S: 29
Concentration Units:	ng/g (wet weight basis)		

This page is part of a total report that contains information necessary for accreditation compliance.
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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.390 (Q)		
PFPeA	ND		0.195 (Q)		
PFHxA	ND		0.0976 (Q)		
PFHpA	ND		0.0976 (Q)		
PFOA	ND		0.0976 (Q)		
PFNA		0.896	0.0976 (Q)	3.01	
PFDA	J	0.377	0.0976 (Q)	2.67	1.000
PFUnA	J	0.230	0.0976 (Q)	3.56	1.000
PFDoA	ND		0.0780 (Q)		
PFTrDA	J	0.211	0.0976 (Q)	2.93	0.955
PFTeDA	ND		0.0976 (Q)		
PFBS	ND		0.0976 (Q)		
PFPeS	ND		0.0980 (Q)		
PFHxS	ND		0.0976 (Q)		
PFHpS	ND		0.0976 (Q)		
PFOS		3.61	0.0976 (Q)	2.51	
PFNS	ND		0.0976 (Q)		
PFDS	ND		0.0976 (Q)		
PFDoS	ND		0.0976 (Q)		
4:2 FTS	ND		0.390 (Q)		
6:2 FTS	ND		0.351 (Q)		
8:2 FTS	ND		0.332 (Q)		
PFOSA	ND		0.0976 (Q)		
N-MeFOSA	ND		0.0976 (Q)		
N-EtFOSA	ND		0.273 (Q)		
MeFOSAA	ND		0.0976 (Q)		
EtFOSAA	ND		0.0976 (Q)		
N-MeFOSE	ND		0.976 (Q)		
N-EtFOSE	ND		0.976 (Q)		
HFPO-DA	ND		0.390 (Q)		
ADONA	ND		0.390 (Q)		
9Cl-PF3ONS	ND		0.391 (Q)		
11Cl-PF3OUdS	ND		0.391 (Q)		
3:3 FTCA	ND H		0.390 (Q)		
5:3 FTCA	ND		2.44 (Q)		
7:3 FTCA	ND		2.44 (Q)		
PFEESA	ND		0.0976 (Q)		
PFMPA	ND		0.195 (Q)		
PFMBA	ND		0.0976 (Q)		

NFDHA	ND H	0.195 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-14_Form1A_FC4L_027S37_SJ3384122.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
LS 14
Sample Collection:
25-Aug-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-14
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.05 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 21:26:52	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 37**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 29

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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	34.8	86.9		0.996
13C5-PFPeA		20.0	21.5	107		0.856
13C5-PFHxA		10.0	10.4	104	13.0	1.000
13C4-PFHpA		10.0	9.35	93.5		0.879
13C8-PFOA		10.0	9.33	93.3		1.000
13C9-PFNA		5.00	6.07	121		1.000
13C6-PFDA		5.00	5.12	102		1.000
13C7-PFUnA		5.00	5.16	103		1.044
13C2-PFDoA		5.00	4.68	93.6		1.080
13C2-PFTeDA		5.00	1.76	35.2		1.175
13C3-PFBS		10.0	8.84	88.2	2.76	0.772
13C3-PFHxS		10.0	9.12	91.0	2.27	1.000
13C8-PFOS		10.1	10.8	108	2.19	1.000
13C2-4:2 FTS		20.2	17.7	87.6	1.89	0.813
13C2-6:2 FTS		20.0	19.4	97.1	2.42	1.002
13C2-8:2 FTS		20.0	20.2	101	3.42	1.268
13C8-PFOSA		10.0	9.63	96.3		1.173
D3-N-MeFOSA	V	10.0	0.797	7.97		1.348
D5-N-EtFOSA		10.0	0.952	9.52		1.383
D3-MeFOSAA		20.0	20.2	101		1.306
D5-EtFOSAA		20.0	22.5	113		1.329
d7-NMe-FOSE		100	5.48	5.46		1.331
d9-NEt-FOSE		100	7.16	7.15		1.368
13C3-HFPO-DA		40.0	27.7	69.2	3.05	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Andrew Porat_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-14_Form2_FC4L_027S37_SJ3384122.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
LS 15
Sample Collection:
25-Aug-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-15
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.01 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 21:40:21	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 38**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng/g (wet weight basis)	**Cal. Ver. Data Filename:**	FC4L_027 S: 29

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.398 (Q)		
PFPeA	ND		0.199 (Q)		
PFHxA	ND		0.0995 (Q)		
PFHpA	ND		0.0995 (Q)		
PFOA	ND		0.0995 (Q)		
PFNA		2.47	0.0995 (Q)	2.80	
PFDA		0.681	0.0995 (Q)	2.63	1.000
PFUnA		0.469	0.0995 (Q)	4.52	1.000
PFDoA	K J	0.121	0.0796 (Q)	18.4	1.000
PFTrDA	ND		0.0995 (Q)		
PFTeDA	ND		0.0995 (Q)		
PFBS	ND		0.0995 (Q)		
PFPeS	ND		0.100 (Q)		
PFHxS	J	0.204	0.0995 (Q)	2.46	
PFHpS	ND		0.0995 (Q)		
PFOS		6.80	0.0995 (Q)	2.42	
PFNS	ND		0.0995 (Q)		
PFDS	ND		0.0995 (Q)		
PFDoS	ND		0.0995 (Q)		
4:2 FTS	ND		0.398 (Q)		
6:2 FTS	ND		0.358 (Q)		
8:2 FTS	ND		0.338 (Q)		
PFOSA	ND		0.0995 (Q)		
N-MeFOSA	ND		0.0995 (Q)		
N-EtFOSA	ND		0.279 (Q)		
MeFOSAA	ND		0.0995 (Q)		
EtFOSAA	ND		0.0995 (Q)		
N-MeFOSE	ND		0.995 (Q)		
N-EtFOSE	J	1.85	0.995 (Q)		
HFPO-DA	ND		0.398 (Q)		
ADONA	ND		0.398 (Q)		
9Cl-PF3ONS	ND		0.399 (Q)		
11Cl-PF3OUdS	ND		0.399 (Q)		
3:3 FTCA	ND H		0.398 (Q)		
5:3 FTCA	ND		2.49 (Q)		
7:3 FTCA	ND		2.49 (Q)		
PFEESA	ND		0.0995 (Q)		
PFMPA	ND		0.199 (Q)		
PFMBA	ND		0.0995 (Q)		

NFDHA	ND H	0.199 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than limit of quantification; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48; Report Filename: PFC_FC_LC_PFAS_L40022-15_Form1A_FC4L_027S38_SJ3384123.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
LS 15
Sample Collection:
25-Aug-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-15
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.01 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 21:40:21	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 38**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 29

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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	33.9	84.6		1.000
13C5-PFPeA		20.0	18.3	91.7		0.854
13C5-PFHxA		10.0	8.85	88.5	11.8	1.000
13C4-PFHpA		10.0	8.19	81.9		0.878
13C8-PFOA		10.0	8.22	82.2		1.000
13C9-PFNA		5.00	5.07	101		1.001
13C6-PFDA		5.00	4.71	94.3		1.000
13C7-PFUnA		5.00	4.00	80.1		1.043
13C2-PFDoA		5.00	2.67	53.4		1.079
13C2-PFTeDA	V	5.00	0.633	12.7		1.175
13C3-PFBS		10.0	8.50	84.9	2.58	0.771
13C3-PFHxS		10.0	9.18	91.6	2.33	0.999
13C8-PFOS		10.1	9.61	95.5	2.27	1.000
13C2-4:2 FTS		20.2	18.6	92.4	1.84	0.813
13C2-6:2 FTS		20.0	18.2	91.2	2.36	1.002
13C2-8:2 FTS		20.0	19.0	94.7	3.33	1.268
13C8-PFOSA		10.0	9.77	97.7		1.161
D3-N-MeFOSA		10.0	2.01	20.1		1.346
D5-N-EtFOSA		10.0	1.70	17.0		1.382
D3-MeFOSAA		20.0	20.0	100		1.306
D5-EtFOSAA		20.0	20.9	105		1.329
d7-NMe-FOSE	V	100	0.780	0.778		1.330
d9-NEt-FOSE	V	100	3.49	3.49		1.366
13C3-HFPO-DA		40.0	22.8	57.1	3.03	1.034

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Andrew Porat_____

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Report Filename: PFC_FC_LC_PFAS_L40022-15_Form2_FC4L_027S38_SJ3384123.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
LS 16
Sample Collection:
25-Aug-2023

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ		
Contract No.:	5123	**Lab Sample I.D.:**	L40022-16
Matrix:	TISSUE	**Sample Size:**	2.02 g (wet)
Sample Receipt Date:	29-Aug-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	15-Jan-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	06-Feb-2024 **Time:** 21:53:50	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_027 S: 39**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_027 S: 20
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_027 S: 29
Concentration Units:	ng/g (wet weight basis)		

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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.396 (Q)		
PFPeA	ND		0.198 (Q)		
PFHxA	ND		0.0990 (Q)		
PFHpA	ND		0.0990 (Q)		
PFOA	ND		0.0990 (Q)		
PFNA		0.831	0.0990 (Q)	2.91	
PFDA	J	0.259	0.0990 (Q)	4.43	1.000
PFUnA	J	0.160	0.0990 (Q)	4.24	1.000
PFDoA	ND		0.0792 (Q)		
PFTrDA	ND		0.0990 (Q)		
PFTeDA	ND		0.0990 (Q)		
PFBS	ND		0.0990 (Q)		
PFPeS	ND		0.0995 (Q)		
PFHxS	ND		0.0990 (Q)		
PFHpS	ND		0.0990 (Q)		
PFOS		2.90	0.0990 (Q)	2.35	
PFNS	ND		0.0990 (Q)		
PFDS	ND		0.0990 (Q)		
PFDoS	ND		0.0990 (Q)		
4:2 FTS	ND		0.396 (Q)		
6:2 FTS	K J	0.384	0.356 (Q)	0.35	1.002
8:2 FTS	ND		0.337 (Q)		
PFOSA	ND		0.0990 (Q)		
N-MeFOSA	ND		0.0990 (Q)		
N-EtFOSA	ND		0.277 (Q)		
MeFOSAA	ND		0.0990 (Q)		
EtFOSAA	ND		0.0990 (Q)		
N-MeFOSE	NQ				
N-EtFOSE	ND		0.990 (Q)		
HFPO-DA	ND		0.396 (Q)		
ADONA	ND		0.396 (Q)		
9Cl-PF3ONS	ND		0.397 (Q)		
11Cl-PF3OUdS	ND		0.397 (Q)		
3:3 FTCA	ND H		0.520 (S)		
5:3 FTCA	ND		2.48 (Q)		
7:3 FTCA	ND		2.48 (Q)		
PFEESA	ND		0.0990 (Q)		
PFMPA	ND		0.198 (Q)		
PFMBA	ND		0.0990 (Q)		

NFDHA	ND H	0.198 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than limit of quantification; H = concentration is estimated; NQ = data not quantifiable.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-16_Form1A_FC4L_027S39_SJ3384124.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
LS 16
Sample Collection:
25-Aug-2023

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ
Matrix:	TISSUE	**Lab Sample I.D.:**	L40022-16
Sample Receipt Date:	29-Aug-2023	**Sample Size:**	2.02 g (wet)
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 21:53:50	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 39**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 29

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA	V	40.0	3.97	9.93		1.000
13C5-PFPeA	V	20.0	7.00	35.0		0.856
13C5-PFHxA	V	10.0	4.60	46.0	12.7	1.000
13C4-PFHpA		10.0	5.36	53.6		0.878
13C8-PFOA		10.0	5.78	57.8		0.999
13C9-PFNA		5.00	4.13	82.6		1.000
13C6-PFDA		5.00	3.96	79.1		1.000
13C7-PFUnA		5.00	4.17	83.5		1.043
13C2-PFDoA		5.00	3.54	70.8		1.079
13C2-PFTeDA		5.00	1.16	23.2		1.174
13C3-PFBS		10.0	6.22	62.1	2.70	0.771
13C3-PFHxS		10.0	7.99	79.8	2.43	1.000
13C8-PFOS		10.1	8.81	87.6	2.16	1.000
13C2-4:2 FTS	V	20.2	9.74	48.3	1.92	0.813
13C2-6:2 FTS		20.0	10.8	54.2	2.39	1.001
13C2-8:2 FTS		20.0	19.5	97.1	3.33	1.266
13C8-PFOSA		10.0	6.84	68.4		1.169
D3-N-MeFOSA	V	10.0	1.05	10.5		1.348
D5-N-EtFOSA		10.0	0.813	8.13		1.382
D3-MeFOSAA		20.0	23.0	115		1.304
D5-EtFOSAA		20.0	26.6	133		1.327
d7-NMe-FOSE	NQ					
d9-NEt-FOSE		100	6.09	6.08		1.366
13C3-HFPO-DA	V	40.0	13.7	34.3	3.03	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits; NQ = data not quantifiable.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Andrew Porat_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40022-16_Form2_FC4L_027S39_SJ3384124.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	5123	**Lab Sample I.D.:**	WG88238-101
Matrix:	TISSUE	**Sample Size:**	2.00 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	15-Jan-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	06-Feb-2024 **Time:** 17:36:37	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_027 S: 20**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_027 S: 20
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_027 S: 15
Concentration Units:	ng/g		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		0.400 (Q)		
PFPeA	ND		0.200 (Q)		
PFHxA	ND		0.100 (Q)		
PFHpA	ND		0.100 (Q)		
PFOA	ND		0.100 (Q)		
PFNA	ND		0.100 (Q)		
PFDA	ND		0.100 (Q)		
PFUnA	ND		0.100 (Q)		
PFDoA	ND		0.0800 (Q)		
PFTrDA	ND		0.100 (Q)		
PFTeDA	ND		0.100 (Q)		
PFBS	ND		0.100 (Q)		
PFPeS	ND		0.101 (Q)		
PFHxS	ND		0.100 (Q)		
PFHpS	ND		0.100 (Q)		
PFOS	ND		0.100 (Q)		
PFNS	ND		0.100 (Q)		
PFDS	ND		0.100 (Q)		
PFDoS	ND		0.100 (Q)		
4:2 FTS	ND		0.400 (Q)		
6:2 FTS	ND		0.360 (Q)		
8:2 FTS	ND		0.340 (Q)		
PFOSA	ND		0.100 (Q)		
N-MeFOSA	ND		0.100 (Q)		
N-EtFOSA	ND		0.280 (Q)		
MeFOSAA	ND		0.100 (Q)		
EtFOSAA	ND		0.100 (Q)		
N-MeFOSE	ND		1.00 (Q)		
N-EtFOSE	ND		1.00 (Q)		
HFPO-DA	ND		0.400 (Q)		
ADONA	ND		0.400 (Q)		
9Cl-PF3ONS	ND		0.401 (Q)		
11Cl-PF3OUdS	ND		0.401 (Q)		
3:3 FTCA	ND H		0.400 (Q)		
5:3 FTCA	ND		2.50 (Q)		
7:3 FTCA	ND		2.50 (Q)		
PFEESA	ND		0.100 (Q)		
PFMPA	ND		0.200 (Q)		
PFMBA	ND		0.100 (Q)		

NFDHA	ND H	0.200 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; H = concentration is estimated.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_WG88238-101_Form1A_FC4L_027S20_SJ3384102.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	N/A
Matrix:	TISSUE	**Lab Sample I.D.:**	WG88238-101
Sample Receipt Date:	N/A	**Sample Size:**	2.00 g
Extraction Date:	15-Jan-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	06-Feb-2024 **Time:** 17:36:37	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_027 S: 20**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_027 S: 20
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	36.4	90.9		0.996
13C5-PFPeA		20.0	19.5	97.5		0.856
13C5-PFHxA		10.0	9.03	90.3	13.1	1.000
13C4-PFHpA		10.0	8.76	87.6		0.878
13C8-PFOA		10.0	8.53	85.3		1.000
13C9-PFNA		5.00	5.14	103		1.000
13C6-PFDA		5.00	4.33	86.6		1.000
13C7-PFUnA		5.00	4.02	80.3		1.043
13C2-PFDoA		5.00	3.53	70.6		1.079
13C2-PFTeDA		5.00	3.27	65.3		1.174
13C3-PFBS		10.0	9.11	91.0	2.69	0.770
13C3-PFHxS		10.0	9.62	96.1	2.49	1.001
13C8-PFOS		10.1	9.52	94.6	2.21	1.000
13C2-4:2 FTS		20.2	24.9	124	1.90	0.811
13C2-6:2 FTS		20.0	18.0	90.0	2.29	1.002
13C2-8:2 FTS		20.0	16.8	83.7	3.53	1.265
13C8-PFOSA		10.0	10.9	109		1.160
D3-N-MeFOSA		10.0	5.78	57.8		1.346
D5-N-EtFOSA		10.0	3.51	35.1		1.380
D3-MeFOSAA		20.0	24.3	121		1.303
D5-EtFOSAA	V	20.0	33.2	166		1.326
d7-NMe-FOSE		100	5.15	5.14		1.329
d9-NEt-FOSE		100	12.4	12.4		1.367
13C3-HFPO-DA		40.0	27.3	68.4	3.07	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Andrew Porat_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_WG88238-101_Form2_FC4L_027S20_SJ3384102.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 8A

PERFLUORINATED ORGANICS ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Lab Sample I.D.:**	WG88238-102
Matrix:	TISSUE	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	15-Jan-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	06-Feb-2024 **Time:** 17:09:22	**Column ID:**	C18
Extract Volume (uL):	4000	**OPR Data Filename:**	**FC4L_027 S: 18**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_027 S: 20
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 1 mL EXTRACT VOLUME.

COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
PFBA			20.0	21.5	108	1.004
PFPeA			10.0	10.2	102	1.000
PFHxA		4.16	5.00	4.79	95.7	1.000
PFHpA		2.18	5.00	5.52	110	1.000
PFOA		2.05	5.00	5.63	113	
PFNA		2.72	5.00	5.49	110	
PFDA		2.79	5.00	5.07	101	1.001
PFUnA		3.96	5.00	5.33	107	1.000
PFDoA		7.54	4.06	4.44	109	1.000
PFTrDA		3.32	5.00	5.44	109	0.956
PFTeDA		2.42	5.00	4.76	95.3	1.001
PFBS		2.54	5.00	5.06	101	1.000
PFPeS		2.34	5.00	5.66	113	0.867
PFHxS		2.61	5.00	5.39	108	
PFHpS		2.10	5.00	5.42	108	0.938
PFOS		2.49	5.00	5.21	104	
PFNS		2.40	5.00	4.77	95.4	1.041
PFDS		2.30	5.00	4.65	92.9	1.081
PFDoS		2.34	5.00	3.87	77.4	1.184
4:2 FTS		0.39	20.0	18.9	94.6	0.999
6:2 FTS		0.38	18.0	19.6	109	1.000
8:2 FTS		0.49	16.9	18.5	109	0.999
PFOSA			5.00	5.55	111	
N-MeFOSA		0.51	5.00	4.45	89.0	
N-EtFOSA		0.48	14.0	12.5	89.1	
MeFOSAA		2.11	5.00	4.98	99.6	
EtFOSAA		1.00	5.00	4.33	86.5	
N-MeFOSE			50.0	58.1	116	
N-EtFOSE	N		50.0	130	260	
HFPO-DA		3.07	20.0	23.0	115	1.000
ADONA	N	1.21	20.0	30.2	151	1.116
9Cl-PF3ONS		3.07	20.0	24.2	121	0.966
11Cl-PF3OUdS		3.22	20.0	20.4	102	1.043
3:3 FTCA	H	1.36	20.0	15.8	78.8	
5:3 FTCA		1.38	125	140	112	1.058

COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
7:3 FTCA		0.65	125	102	81.3	1.395
PFEESA		7.99	5.00	5.61	112	1.041
PFMPA			10.0	10.4	104	
PFMBA			5.00	5.56	111	1.069
NFDHA	H		10.0	5.72	57.2	

(1) Where applicable, custom lab flags have been used on this report; N = authentic recovery in the OPR is not within method/contract control limits; H = concentration is estimated.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: FC2-Form8A.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48; Report Filename: PFC_FC_LC_PFAS_WG88238-102_Form8A_SJ3384099.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 8B

PERFLUORINATED ORGANICS ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Lab Sample I.D.:**	WG88238-102
Matrix:	TISSUE	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	15-Jan-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	06-Feb-2024 **Time:** 17:09:22	**Column ID:**	C18
Extract Volume (uL):	4000	**OPR Data Filename:**	**FC4L_027 S: 18**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_027 S: 20
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 1 mL EXTRACT VOLUME.

LABELED COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
13C4-PFBA			40.0	36.3	90.7	1.000
13C5-PFPeA			20.0	19.4	97.0	0.854
13C5-PFHxA		12.3	10.0	9.10	91.0	1.000
13C4-PFHpA			10.0	9.20	92.0	0.877
13C8-PFOA			10.0	8.68	86.8	1.000
13C9-PFNA			5.00	5.04	101	1.000
13C6-PFDA			5.00	4.53	90.7	0.999
13C7-PFUnA			5.00	4.25	85.1	1.042
13C2-PFDoA			5.00	3.80	76.0	1.079
13C2-PFTeDA			5.00	3.21	64.2	1.174
13C3-PFBS		2.72	10.0	9.39	93.7	0.770
13C3-PFHxS		2.40	10.0	9.09	90.8	1.000
13C8-PFOS		2.02	10.1	9.58	95.3	1.000
13C2-4:2 FTS		1.80	20.2	24.4	121	0.812
13C2-6:2 FTS		2.31	20.0	18.8	94.3	1.002
13C2-8:2 FTS		3.23	20.0	16.9	84.2	1.266
13C8-PFOSA			10.0	9.22	92.2	1.161
D3-N-MeFOSA			10.0	4.86	48.6	1.346
D5-N-EtFOSA			10.0	3.66	36.6	1.381
D3-MeFOSAA			20.0	27.4	137	1.303
D5-EtFOSAA	V		20.0	36.1	180	1.327
d7-NMe-FOSE	V		100	3.79	3.78	1.329
d9-NEt-FOSE	V		100	6.71	6.71	1.367
13C3-HFPO-DA		3.14	40.0	27.4	68.4	1.035

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: FC2-Form8B.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_WG88238-102_Form8B_SJ3384099.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 8A

PERFLUORINATED ORGANICS ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Lab Sample I.D.:**	WG88238-103
Matrix:	TISSUE	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	15-Jan-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	06-Feb-2024 **Time:** 16:55:22	**Column ID:**	C18
Extract Volume (uL):	4000	**OPR Data Filename:**	**FC4L_027 S: 17**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_027 S: 20
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 1 mL EXTRACT VOLUME.

COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
PFBA			6.40	7.79	122	1.007
PFPeA			3.20	3.46	108	1.001
PFHxA		3.53	1.60	1.72	107	1.000
PFHpA		2.31	1.60	1.96	123	1.000
PFOA		2.02	1.60	1.83	114	
PFNA		2.48	1.60	1.89	118	
PFDA		2.39	1.60	1.80	113	0.999
PFUnA		3.80	1.60	1.90	119	1.000
PFDoA		8.15	1.30	1.55	119	1.000
PFTrDA		3.37	1.60	2.07	130	0.955
PFTeDA		2.54	1.60	1.76	110	0.999
PFBS		2.86	1.60	1.75	109	1.000
PFPeS		2.35	1.60	1.88	118	0.866
PFHxS		2.52	1.60	1.69	106	
PFHpS		1.87	1.60	1.60	100	0.938
PFOS		2.32	1.60	1.70	106	
PFNS		2.10	1.60	1.42	89.0	1.041
PFDS		2.09	1.60	1.44	89.9	1.081
PFDoS		2.07	1.60	1.27	79.5	1.184
4:2 FTS		0.41	6.40	6.80	106	0.999
6:2 FTS		0.41	5.75	7.93	138	1.000
8:2 FTS		0.47	5.42	6.01	111	1.000
PFOSA			1.60	1.90	119	
N-MeFOSA		0.58	1.60	1.74	109	
N-EtFOSA		0.49	4.48	4.68	104	
MeFOSAA		1.69	1.60	1.53	95.8	
EtFOSAA		1.23	1.60	1.63	102	
N-MeFOSE			16.0	25.1	157	
N-EtFOSE	N		16.0	31.8	199	
HFPO-DA		2.85	6.40	7.11	111	1.000
ADONA	N	1.26	6.40	10.2	159	1.114
9Cl-PF3ONS		3.14	6.40	7.74	121	0.966
11Cl-PF3OUdS		3.06	6.40	6.08	95.0	1.043
3:3 FTCA	H	1.31	6.40	6.37	99.5	
5:3 FTCA		1.38	40.0	47.4	118	1.058

COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
7:3 FTCA		0.67	40.0	33.0	82.4	1.397
PFEESA		8.34	1.60	1.90	118	1.042
PFMPA			3.20	3.37	105	
PFMBA			1.60	1.83	114	1.069
NFDHA	H		3.20	1.58	49.3	

(1) Where applicable, custom lab flags have been used on this report; N = authentic recovery in the OPR is not within method/contract control limits; H = concentration is estimated.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: FC2-Form8A.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48; Report Filename: PFC_FC_LC_PFAS_WG88238-103_Form8A_SJ3384097.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 8B

PERFLUORINATED ORGANICS ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Lab Sample I.D.:**	WG88238-103
Matrix:	TISSUE	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	15-Jan-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	06-Feb-2024 **Time:** 16:55:22	**Column ID:**	C18
Extract Volume (uL):	4000	**OPR Data Filename:**	**FC4L_027 S: 17**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_027 S: 20
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_027 S: 15

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 1 mL EXTRACT VOLUME.

LABELED COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
13C4-PFBA			40.0	45.7	114	0.996
13C5-PFPeA			20.0	25.4	127	0.855
13C5-PFHxA		12.9	10.0	11.2	112	1.000
13C4-PFHpA			10.0	10.5	105	0.877
13C8-PFOA			10.0	10.3	103	1.001
13C9-PFNA			5.00	6.31	126	1.001
13C6-PFDA			5.00	5.55	111	1.000
13C7-PFUnA			5.00	5.09	102	1.042
13C2-PFDoA			5.00	4.54	90.9	1.079
13C2-PFTeDA			5.00	3.95	79.1	1.174
13C3-PFBS		2.69	10.0	11.2	112	0.769
13C3-PFHxS		2.42	10.0	11.4	114	1.000
13C8-PFOS		2.24	10.1	12.0	120	1.000
13C2-4:2 FTS		1.94	20.2	31.9	158	0.812
13C2-6:2 FTS		2.28	20.0	23.1	115	1.002
13C2-8:2 FTS		3.32	20.0	20.6	103	1.265
13C8-PFOSA			10.0	12.1	121	1.160
D3-N-MeFOSA			10.0	6.58	65.8	1.346
D5-N-EtFOSA			10.0	4.60	46.0	1.380
D3-MeFOSAA	V		20.0	33.0	165	1.302
D5-EtFOSAA	V		20.0	38.7	194	1.326
d7-NMe-FOSE			100	6.06	6.04	1.329
d9-NEt-FOSE			100	18.7	18.7	1.367
13C3-HFPO-DA		2.97	40.0	34.6	86.5	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Andrew Porat

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: FC2-Form8B.xsl; Created: 16-Feb-2024 10:29:18; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_WG88238-103_Form8B_SJ3384097.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 3A
INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 01-Mar-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A

CS1 Data Filename: FC3L_107 S: 16

CS2 Data Filename: FC3L_107 S: 17

CS3 Data Filename: FC3L_107 S: 18

CS4 Data Filename: FC3L_107 S: 19

CS5 Data Filename: FC3L_107 S: 20

CS6 Data Filename: FC3L_107 S: 21

CS7 Data Filename: FC3L_107 S: 22

CS8 Data Filename: FC3L_107 S: 23

		RELATIVE RESPONSE (RR)										
COMPOUND	LAB FLAG [1]	CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	MEAN RR	CV (%RSD)[2]
PFBA			0.86	0.83	0.85	0.81	0.85	0.82	0.82	0.82	0.83	2.14
PFPeA			1.14	1.11	1.07	0.98	1.07	1.04	1.00	1.00	1.05	5.39
PFHxA			1.33	1.23	1.13	1.03	1.04	1.00	1.01	1.05	1.10	11.0
PFHpA			1.15	1.24	1.20	1.13	1.16	1.11	1.13	1.13	1.16	3.70
PFOA			1.47	1.32	1.34	1.34	1.26	1.29	1.28	1.27	1.32	5.22
PFNA			1.08	1.00	0.99	1.04	0.99	0.99	0.98	0.97	1.01	3.77
PFDA			0.83	0.74	0.70	0.66	0.74	0.67	0.70	0.68	0.71	7.38
PFUnA			0.78	0.76	0.77	0.70	0.75	0.71	0.70	0.70	0.73	4.69
PFDoA			1.18	1.14	1.11	1.12	1.17	1.09	1.07	1.02	1.11	4.78
PFTrDA			0.98	0.92	0.84	0.81	0.83	0.80	0.80	0.75	0.84	8.87
PFTeDA			0.87	0.83	0.77	0.75	0.78	0.76	0.74	0.68	0.77	7.62
PFBS			1.14	1.01	1.05	1.05	1.08	1.04	1.06	1.04	1.06	3.67
PFPeS			1.00	0.92	0.99	0.95	1.01	0.94	0.96	0.91	0.96	3.99
PFHxS			1.37	1.28	1.26	1.14	1.26	1.16	1.19	1.20	1.23	6.14
PFHpS			1.11	1.09	1.00	0.97	1.02	0.99	1.00	0.93	1.01	5.99
PFOS			1.25	1.14	1.12	1.02	1.11	1.17	1.10	1.06	1.12	6.16
PFNS			1.05	1.00	1.02	0.97	1.01	0.96	0.99	0.97	0.99	2.96
PFDS			0.93	0.97	0.92	0.89	0.94	0.93	0.95	0.94	0.94	2.43
PFDoS			0.84	0.82	0.86	0.79	0.86	0.84	0.87	0.87	0.85	3.31
4:2 FTS			0.53	0.50	0.49	0.45	0.49	0.47	0.45	0.42	0.47	7.27
6:2 FTS			0.51	0.46	0.48	0.43	0.46	0.44	0.43	0.40	0.45	7.25
8:2 FTS			0.35	0.30	0.32	0.30	0.32	0.30	0.30	0.25	0.31	9.70
PFOSA			0.97	0.96	0.93	0.89	0.92	0.90	0.90	0.91	0.92	3.33
N-MeFOSA			0.90	1.05	0.93	0.93	0.92	0.96	0.95	0.90	0.94	4.82
N-EtFOSA			1.15	1.14	1.08	1.10	1.18	1.10	1.18	1.13	1.13	3.25
MeFOSAA			0.87	0.93	1.00	0.91	0.94	0.88	0.86		0.91	5.56
EtFOSAA			0.77	0.75	0.68	0.75	0.78	0.73	0.74		0.74	4.16
N-MeFOSE			0.81	0.78	0.77	0.74	0.77	0.76	0.74	0.73	0.76	3.65
N-EtFOSE			1.08	1.03	1.03	0.99	1.04	1.02	1.01	0.98	1.02	3.19
HFPO-DA			1.02	0.96	0.96	0.89	0.97	0.92	0.91	0.87	0.94	5.20
ADONA			4.87	4.87	4.83	4.56	4.86	4.80	4.80	4.74	4.79	2.17
9Cl-PF3ONS			1.38	1.26	1.35	1.28	1.34	1.29	1.31	1.19	1.30	4.43
11Cl-PF3OUdS			0.76	0.73	0.75	0.71	0.78	0.74	0.77	0.71	0.74	3.36
3:3 FTCA			0.07	0.06	0.06	0.06	0.06	0.07	0.07	0.08	0.07	8.61
5:3 FTCA			0.18	0.16	0.17	0.17	0.17	0.17	0.18	0.21	0.18	7.83
7:3 FTCA			0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.12	0.10	7.99
PFEESA			2.86	2.57	2.60	2.50	2.56	2.51	2.57	2.87	2.63	5.64
PFMPA			1.62	1.60	1.57	1.47	1.56	1.54	1.51	1.59	1.56	3.24

COMPOUND	LAB FLAG [1]	RELATIVE RESPONSE (RR) CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	MEAN RR	CV (%RSD)[2]
PFMBA			2.14	2.14	2.16	2.06	2.17	2.09	2.14	2.30	2.15	3.37
NFDHA			0.09	0.09	0.09	0.08	0.09	0.09	0.08	0.08	0.09	5.65

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see SGS AXYS METHOD MLA-110 Rev 02

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Jordan Berends

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SGS AXYS METHOD MLA-110 Rev 02

Form 3B
INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 01-Mar-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A
CS1 Data Filename: FC3L_107 S: 16
CS2 Data Filename: FC3L_107 S: 17
CS3 Data Filename: FC3L_107 S: 18
CS4 Data Filename: FC3L_107 S: 19
CS5 Data Filename: FC3L_107 S: 20
CS6 Data Filename: FC3L_107 S: 21
CS7 Data Filename: FC3L_107 S: 22
CS8 Data Filename: FC3L_107 S: 23

		RELATIVE RESPONSE (RR)									
LABELED COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**CS7**	**CS8**	**MEAN RR**	**CV (%RSD)[2]**
13C4-PFBA			1.07	1.11	1.08	1.05	1.08	1.09	1.09	1.07	1.08	1.60
13C5-PFPeA			0.93	0.95	0.93	0.92	0.94	0.93	0.95	0.90	0.93	1.71
13C5-PFHxA			0.65	0.70	0.66	0.64	0.69	0.66	0.66	0.63	0.66	3.33
13C4-PFHpA			3.41	3.65	3.45	3.36	3.21	3.53	3.36	3.31	3.41	3.96
13C8-PFOA			3.71	3.92	3.85	3.61	3.62	3.81	3.68	3.81	3.75	3.04
13C9-PFNA			1.02	1.04	1.03	1.05	1.06	1.05	1.04	1.02	1.04	1.56
13C6-PFDA			0.99	1.10	1.05	1.02	1.02	1.04	1.00	1.01	1.03	3.30
13C7-PFUnA			1.07	1.14	1.11	1.07	1.10	1.09	1.06	1.04	1.08	3.02
13C2-PFDoA			0.88	0.94	0.91	0.85	0.87	0.90	0.88	0.95	0.90	3.90
13C2-PFTeDA			0.92	0.98	0.98	0.94	0.98	0.96	0.96	1.06	0.97	4.24
13C3-PFBS			1.31	1.40	1.31	1.24	1.37	1.30	1.25	1.08	1.28	7.48
13C3-PFHxS			1.10	1.15	1.12	1.07	1.12	1.11	1.12	1.10	1.11	2.19
13C8-PFOS			1.04	1.03	1.05	1.06	1.05	1.04	0.99	1.05	1.04	1.93
13C2-4:2 FTS			1.22	1.17	1.10	1.15	1.11	1.01	0.95	0.92	1.08	9.94
13C2-6:2 FTS			1.00	1.00	0.94	0.97	0.98	0.93	0.97	1.01	0.98	2.97
13C2-8:2 FTS			1.49	1.45	1.42	1.44	1.43	1.34	1.33	1.40	1.41	3.76
13C8-PFOSA			1.72	1.76	1.77	1.72	1.77	1.75	1.73	1.93	1.77	3.87
D3-N-MeFOSA			0.24	0.26	0.27	0.26	0.27	0.25	0.25	0.28	0.26	5.17
D5-N-EtFOSA			0.25	0.26	0.26	0.25	0.25	0.26	0.24	0.26	0.25	3.36
D3-MeFOSAA			0.45	0.45	0.46	0.42	0.47	0.50	0.62		0.48	13.6
D5-EtFOSAA			0.40	0.40	0.39	0.39	0.42	0.43	0.52		0.42	10.7
d7-NMe-FOSE			2.21	2.19	2.26	2.22	2.24	2.17	2.19	2.37	2.23	2.77
d9-NEt-FOSE			1.85	1.84	1.90	1.88	1.88	1.83	1.80	1.95	1.87	2.49
13C3-HFPO-DA			0.44	0.46	0.45	0.44	0.45	0.44	0.43	0.41	0.44	3.38

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see SGS AXYS METHOD MLA-110 Rev 02.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Jordan Berends

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Report Filename: GENERIC-SPECS_FC_LC_01-Mar-2023_FC3L__Form3B_GS107465.html; Workgroup: WG88238; Design ID: 5045]

SGS AXYS METHOD MLA-110 Rev 02

Form 3C
LC MS/MS INITIAL CALIBRATION RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 01-Mar-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A
CS1 Data Filename: FC3L_107 S: 16
CS2 Data Filename: FC3L_107 S: 17
CS3 Data Filename: FC3L_107 S: 18
CS4 Data Filename: FC3L_107 S: 19
CS5 Data Filename: FC3L_107 S: 20
CS6 Data Filename: FC3L_107 S: 21
CS7 Data Filename: FC3L_107 S: 22
CS8 Data Filename: FC3L_107 S: 23

		RATIOS							
COMPOUND	LAB FLAG [1]	CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8
PFBA										
PFPeA										
PFHxA			5.24	5.95	5.71	5.10	5.29	5.21	5.37	5.23
PFHpA			2.11	2.24	2.38	2.36	2.23	2.23	2.23	2.21
PFOA			2.14	1.90	2.05	2.03	1.95	1.99	2.00	1.99
PFNA			2.97	2.71	2.79	2.82	2.69	2.84	2.83	2.78
PFDA			3.28	3.99	2.90	3.07	3.10	2.98	3.12	3.01
PFUnA			5.66	5.27	4.47	4.61	4.63	4.60	4.49	4.49
PFDoA			7.35	7.43	7.38	7.72	7.38	7.27	7.30	7.39
PFTrDA			3.39	3.56	3.13	3.19	3.16	3.16	3.17	3.20
PFTeDA			2.56	2.87	2.55	2.81	2.83	2.83	2.78	2.79
PFBS			2.64	2.75	2.72	2.70	2.75	2.74	2.76	2.72
PFPeS			2.35	2.06	2.47	2.30	2.27	2.33	2.37	2.34
PFHxS			2.33	2.29	2.49	2.42	2.61	2.44	2.50	2.45
PFHpS			2.38	2.02	2.09	2.03	2.15	2.08	2.09	2.07
PFOS			2.07	2.49	2.62	2.63	2.60	2.67	2.61	2.60
PFNS			2.39	2.19	2.34	2.41	2.27	2.28	2.24	2.30
PFDS			2.05	2.40	2.30	2.33	2.30	2.30	2.31	2.30
PFDoS			1.86	2.05	2.15	2.13	2.14	2.23	2.18	2.21
4:2 FTS			0.45	0.45	0.45	0.43	0.45	0.45	0.44	0.45
6:2 FTS			0.44	0.42	0.43	0.40	0.41	0.41	0.41	0.42
8:2 FTS			0.55	0.48	0.51	0.53	0.52	0.53	0.53	0.54
PFOSA										
N-MeFOSA			0.48	0.60	0.52	0.53	0.53	0.53	0.54	0.53
N-EtFOSA			0.49	0.53	0.49	0.51	0.52	0.53	0.54	0.53
MeFOSAA			1.36	2.00	2.51	2.02	1.92	1.89	1.91	
EtFOSAA			1.43	1.05	1.05	1.25	1.14	1.12	1.15	
N-MeFOSE										
N-EtFOSE										
HFPO-DA			2.92	2.68	2.91	2.82	2.91	2.81	2.89	2.83
ADONA			1.15	1.21	1.19	1.19	1.20	1.18	1.18	1.19
9Cl-PF3ONS			3.15	2.99	3.20	3.26	3.20	3.15	3.15	3.18
11Cl-PF3OUdS			3.16	3.03	3.18	3.12	3.25	3.11	3.16	3.14
3:3 FTCA			1.60	1.42	1.60	1.50	1.59	1.60	1.57	1.60
5:3 FTCA			1.37	1.31	1.40	1.40	1.39	1.40	1.41	1.41

COMPOUND	LAB FLAG [1]	RATIOS CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8
7:3 FTCA			0.62	0.67	0.65	0.68	0.66	0.64	0.66	0.66
PFEESA			7.86	9.04	8.42	8.79	8.42	8.33	8.40	8.78
PFMPA										
PFMBA										
NFDHA										

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Jordan Berends

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SGS AXYS METHOD MLA-110 Rev 02

Form 3D
LC MS/MS INITIAL CALIBRATION RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 01-Mar-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A
CS1 Data Filename: FC3L_107 S: 16
CS2 Data Filename: FC3L_107 S: 17
CS3 Data Filename: FC3L_107 S: 18
CS4 Data Filename: FC3L_107 S: 19
CS5 Data Filename: FC3L_107 S: 20
CS6 Data Filename: FC3L_107 S: 21
CS7 Data Filename: FC3L_107 S: 22
CS8 Data Filename: FC3L_107 S: 23

		RATIOS							
LABELED COMPOUND	LAB FLAG[1]	CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8
13C4-PFBA										
13C5-PFPeA										
13C5-PFHxA			14.8	14.6	14.9	13.9	14.9	15.4	16.1	14.7
13C4-PFHpA										
13C8-PFOA										
13C9-PFNA										
13C6-PFDA										
13C7-PFUnA										
13C2-PFDoA										
13C2-PFTeDA										
13C3-PFBS			2.83	2.71	2.68	2.63	2.82	2.82	2.70	2.77
13C3-PFHxS			2.45	2.41	2.44	2.36	2.39	2.49	2.50	2.50
13C8-PFOS			2.24	2.18	2.09	2.25	2.16	2.28	2.19	2.17
13C2-4:2 FTS			1.85	1.81	1.78	1.77	1.74	1.51	1.22	0.55
13C2-6:2 FTS			2.22	2.19	2.07	2.13	2.03	1.83	1.52	0.74
13C2-8:2 FTS			3.37	3.31	3.31	3.25	3.06	2.99	2.34	1.27
13C8-PFOSA										
D3-N-MeFOSA										
D5-N-EtFOSA										
D3-MeFOSAA										
D5-EtFOSAA										
d7-NMe-FOSE										
d9-NEt-FOSE										
13C3-HFPO-DA			2.93	2.85	2.85	2.92	2.92	2.87	2.94	3.04

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Jordan Berends

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SGS AXYS METHOD MLA-110 Rev 02

Form 4A
LC MS/MS CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	01-Mar-2023	**VER Data Filename:**	FC4L_027 S: 15
Instrument ID:	LCMS/MS	**Analysis Date:**	06-Feb-2024
LC Column ID:	C18	**Analysis Time:**	16:28:21

COMPOUND	LAB FLAG [1]	RRT	QUANT TRANSITION	RATIO	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
PFBA		1.003	213 >169		20.0	21.4	107
PFPeA		1.001	263 > 219		10.0	9.56	95.6
PFHxA		1.000	313 > 269	4.35	5.00	5.02	100
PFHpA		1.000	363 > 319	2.08	5.00	5.67	113
PFOA		1.001	413 > 369	2.06	5.00	5.81	116
PFNA		1.001	463 > 419	2.73	5.00	5.34	107
PFDA		1.000	513 > 469	2.62	5.00	4.90	98.0
PFUnA		1.000	563 > 519	4.04	5.00	5.02	100
PFDoA		1.000	613 > 569	7.69	4.06	4.39	108
PFTrDA		0.956	663 > 619	2.82	5.00	5.18	104
PFTeDA		1.000	713 > 669	2.53	5.00	4.98	99.7
PFBS		1.000	299 > 80	2.69	5.00	5.06	101
PFPeS		0.866	349 > 80	2.42	5.00	5.79	116
PFHxS		1.000	399 > 80	2.37	5.00	4.84	96.8
PFHpS		0.938	449 > 80	2.04	5.00	5.48	110
PFOS		1.000	499 > 80	2.56	5.00	4.96	99.2
PFNS		1.041	549 > 80	2.17	5.00	4.76	95.1
PFDS		1.081	599 > 80	2.38	5.00	5.18	104
PFDoS		1.184	699 > 80	2.21	5.00	4.68	93.7
4:2 FTS		1.000	327 > 307	0.41	20.0	19.4	97.1
6:2 FTS		0.999	427 > 407	0.38	18.0	19.3	107
8:2 FTS		1.000	527 > 507	0.50	17.0	16.5	97.4
PFOSA		1.001	498 > 78		5.00	5.56	111
N-MeFOSA		1.000	512 > 219	0.52	5.00	5.68	114
N-EtFOSA		1.001	526 > 219	0.53	14.0	16.1	115
MeFOSAA		1.001	570 > 419	2.04	5.00	5.20	104
EtFOSAA		1.001	584 > 419	1.14	5.00	5.33	107
N-MeFOSE		1.002	616 > 59		50.0	54.9	110
N-EtFOSE		1.002	630 > 59		50.0	52.3	105
HFPO-DA		1.000	285 > 169	2.88	20.0	21.9	109
ADONA		1.115	377 > 251	1.21	20.0	29.8	149
9Cl-PF3ONS		0.966	531 > 351	3.26	20.0	22.2	111
11Cl-PF3OUdS		1.043	631 > 451	3.27	20.0	22.8	114
3:3 FTCA			241 > 177	1.64	20.0	19.0	95.2
5:3 FTCA		1.059	341 > 237	1.41	125	131	105
7:3 FTCA		1.398	441 > 317	0.67	125	111	89.1
PFEESA		1.041	315 > 135	9.19	5.00	5.42	108
PFMPA			229 > 85		10.0	9.97	99.7
PFMBA		1.067	279 > 85		5.00	5.44	109
NFDHA			295 > 201		10.0	6.46	64.6

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Andrew Porat_____

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SGS AXYS METHOD MLA-110 Rev 02

Form 4B
LC MS/MS CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	01-Mar-2023	**VER Data Filename:**	FC4L_027 S: 15
Instrument ID:	LCMS/MS	**Analysis Date:**	06-Feb-2024
LC Column ID:	C18	**Analysis Time:**	16:28:21

LABELED COMPOUND	LAB FLAG [1]	RRT	QUANT TRANSITION	RATIO	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
13C4-PFBA		0.997	217 > 172		40.0	38.5	96.3
13C5-PFPeA		0.857	268 > 223		20.0	21.7	108
13C5-PFHxA		1.000	318 > 273	12.6	10.0	9.36	93.6
13C4-PFHpA		0.876	367 > 322		10.0	9.23	92.3
13C8-PFOA		0.999	421 > 376		10.0	9.20	92.0
13C9-PFNA		1.000	472 > 427		5.00	5.19	104
13C6-PFDA		1.000	519 > 474		5.00	4.84	96.8
13C7-PFUnA		1.042	570 > 525		5.00	4.64	92.9
13C2-PFDoA		1.079	615 > 570		5.00	4.53	90.6
13C2-PFTeDA		1.175	715 > 670		5.00	3.93	78.6
13C3-PFBS		0.770	302 > 80	2.78	10.0	11.1	111
13C3-PFHxS		1.001	402 > 80	2.47	10.0	10.7	106
13C8-PFOS		1.000	507 > 80	2.21	10.1	10.4	104
13C2-4:2 FTS		0.812	329 > 81	1.81	20.2	22.3	111
13C2-6:2 FTS		1.002	429 > 81	2.20	20.0	20.4	102
13C2-8:2 FTS		1.264	529 > 81	3.91	20.0	20.3	101
13C8-PFOSA		1.158	506 > 78		10.0	11.4	114
D3-N-MeFOSA		1.346	515 > 219		10.0	9.60	96.0
D5-N-EtFOSA		1.380	531 > 219		10.0	8.78	87.8
D3-MeFOSAA		1.302	573 > 419		20.0	26.6	133
D5-EtFOSAA		1.324	589 > 419		20.0	27.0	135
d7-NMe-FOSE		1.329	623 > 59		100	106	105
d9-NEt-FOSE		1.365	639 > 59		100	101	101
13C3-HFPO-DA		1.035	287 > 169	2.93	40.0	29.7	74.3

(1) Where applicable, custom lab flags have been used on this report.

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Signed: _____Andrew Porat_____

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SGS AXYS METHOD MLA-110 Rev 02

Form 4A
LC MS/MS CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	01-Mar-2023	**VER Data Filename:**	FC4L_027 S: 29
Instrument ID:	LCMS/MS	**Analysis Date:**	06-Feb-2024
LC Column ID:	C18	**Analysis Time:**	19:38:09

COMPOUND	LAB FLAG [1]	RRT	QUANT TRANSITION	RATIO	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
PFBA		1.003	213 >169		20.0	21.4	107
PFPeA		1.000	263 > 219		10.0	10.0	100
PFHxA		1.000	313 > 269	4.21	5.00	5.04	101
PFHpA		1.000	363 > 319	2.14	5.00	5.48	110
PFOA		1.000	413 > 369	2.09	5.00	5.64	113
PFNA		1.000	463 > 419	2.90	5.00	5.66	113
PFDA		1.000	513 > 469	2.95	5.00	4.82	96.4
PFUnA		1.001	563 > 519	4.00	5.00	5.07	101
PFDoA		1.000	613 > 569	7.08	4.06	4.40	108
PFTrDA		0.955	663 > 619	3.04	5.00	5.33	107
PFTeDA		1.000	713 > 669	2.47	5.00	5.08	102
PFBS		1.001	299 > 80	2.74	5.00	5.32	106
PFPeS		0.867	349 > 80	2.36	5.00	5.74	115
PFHxS		1.001	399 > 80	2.47	5.00	4.80	96.1
PFHpS		0.938	449 > 80	2.11	5.00	5.48	110
PFOS		1.001	499 > 80	2.60	5.00	5.01	100
PFNS		1.042	549 > 80	2.10	5.00	4.64	92.9
PFDS		1.081	599 > 80	2.31	5.00	5.15	103
PFDoS		1.184	699 > 80	2.23	5.00	4.82	96.5
4:2 FTS		1.000	327 > 307	0.42	20.0	20.2	101
6:2 FTS		1.000	427 > 407	0.38	18.0	19.4	108
8:2 FTS		1.000	527 > 507	0.52	17.0	17.6	104
PFOSA		1.000	498 > 78		5.00	5.59	112
N-MeFOSA		1.000	512 > 219	0.51	5.00	5.73	115
N-EtFOSA		1.001	526 > 219	0.53	14.0	15.6	111
MeFOSAA		1.001	570 > 419	1.92	5.00	4.83	96.5
EtFOSAA		1.001	584 > 419	1.23	5.00	5.22	104
N-MeFOSE		1.002	616 > 59		50.0	53.6	107
N-EtFOSE		1.002	630 > 59		50.0	54.5	109
HFPO-DA		1.000	285 > 169	2.76	20.0	20.2	101
ADONA		1.115	377 > 251	1.20	20.0	28.7	144
9Cl-PF3ONS		0.966	531 > 351	3.11	20.0	20.8	104
11Cl-PF3OUdS		1.043	631 > 451	3.19	20.0	21.7	109
3:3 FTCA			241 > 177	1.36	20.0	18.8	94.1
5:3 FTCA		1.059	341 > 237	1.34	125	140	112
7:3 FTCA		1.396	441 > 317	0.65	125	116	92.6
PFEESA		1.042	315 > 135	8.82	5.00	5.53	111
PFMPA			229 > 85		10.0	10.2	102
PFMBA		1.067	279 > 85		5.00	5.39	108
NFDHA			295 > 201		10.0	7.02	70.2

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SGS AXYS METHOD MLA-110 Rev 02

Form 4B
LC MS/MS CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	01-Mar-2023	**VER Data Filename:**	FC4L_027 S: 29
Instrument ID:	LCMS/MS	**Analysis Date:**	06-Feb-2024
LC Column ID:	C18	**Analysis Time:**	19:38:09

LABELED COMPOUND	LAB FLAG [1]	RRT	QUANT TRANSITION	RATIO	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
13C4-PFBA		0.997	217 > 172		40.0	38.3	95.8
13C5-PFPeA		0.858	268 > 223		20.0	21.7	108
13C5-PFHxA		1.000	318 > 273	12.1	10.0	9.14	91.4
13C4-PFHpA		0.877	367 > 322		10.0	9.14	91.4
13C8-PFOA		1.000	421 > 376		10.0	9.15	91.5
13C9-PFNA		1.000	472 > 427		5.00	5.40	108
13C6-PFDA		1.000	519 > 474		5.00	5.05	101
13C7-PFUnA		1.042	570 > 525		5.00	4.74	94.7
13C2-PFDoA		1.079	615 > 570		5.00	4.64	92.8
13C2-PFTeDA		1.176	715 > 670		5.00	4.28	85.7
13C3-PFBS		0.770	302 > 80	2.47	10.0	9.90	98.8
13C3-PFHxS		0.999	402 > 80	2.42	10.0	10.2	102
13C8-PFOS		1.000	507 > 80	2.14	10.1	10.6	105
13C2-4:2 FTS		0.813	329 > 81	1.82	20.2	26.5	131
13C2-6:2 FTS		1.002	429 > 81	2.22	20.0	20.1	101
13C2-8:2 FTS		1.266	529 > 81	3.52	20.0	18.3	91.3
13C8-PFOSA		1.159	506 > 78		10.0	18.9	189
D3-N-MeFOSA		1.347	515 > 219		10.0	11.0	110
D5-N-EtFOSA		1.382	531 > 219		10.0	10.1	101
D3-MeFOSAA		1.304	573 > 419		20.0	24.4	122
D5-EtFOSAA		1.327	589 > 419		20.0	24.9	124
d7-NMe-FOSE		1.330	623 > 59		100	191	190
d9-NEt-FOSE		1.367	639 > 59		100	132	132
13C3-HFPO-DA		1.036	287 > 169	3.17	40.0	31.1	77.6

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Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids													Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
BFR	BTBPE	SGS AXYS MLA-033	MLA-033					Y											Y						Y													
BFR	DBDPE	SGS AXYS MLA-033	MLA-033					Y											Y						Y													
BFR	HBB	SGS AXYS MLA-033	MLA-033					Y											Y						Y													
BFR	PBEB	SGS AXYS MLA-033	MLA-033					Y											Y						Y													
Bisphenols	Bisphenol A	SGS AXYS MLA-113	MLA-113					Y																	Y													
Bisphenols	Bisphenol AF	SGS AXYS MLA-113	MLA-113					Y																	Y													
Bisphenols	Bisphenol B	SGS AXYS MLA-113	MLA-113					Y																	Y													
Bisphenols	Bisphenol E	SGS AXYS MLA-113	MLA-113					Y																	Y													
Bisphenols	Bisphenol F	SGS AXYS MLA-113	MLA-113					Y																	Y													
Bisphenols	Bisphenol S	SGS AXYS MLA-113	MLA-113					Y																	Y													
BPA and MPE	4,4'-dihydroxy-2,2-diphenylpropane (Bisphenol A) (BPA)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-(2-ethyl-5-oxohexyl) phthalate (MEOHP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-(3-carboxypropyl) phthalate (MCPP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-2-ethylhexyl phthalate (MEHP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-benzyl phthalate (MBzP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-butyl phthalate (MBP) (n + iso)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-cyclohexyl phthalate (MCHP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-ethyl phthalate (MEP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-iso-nonyl phthalate (MiNP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-methyl phthalate (MMP)	SGS AXYS MLA-059	MLA-059																					Y													
BPA and MPE	Mono-(2-ethyl-5-carboxypentyl) phthalate (MECPP)	SGS AXYS MLA-059	MLA-059																																		
OC Pesticides	"Organochlorine Pesticides and PCBs" category (CA only)	EPA 608	MLA-007																																		
OC Pesticides		EPA 625	MLA-007																																		
OC Pesticides	"Organochlorine Pesticides" category (CA only)	EPA 8081B	MLA-007																																		
OC Pesticides	"Pesticides" category (CA only)	EPA 8270E	MLA-007																																		
OC Pesticides	2,4'-DDD	EPA 625	MLA-007																											Y							
OC Pesticides		EPA 8270E	MLA-007							Y						Y																					
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	2,4'-DDE	EPA 625	MLA-007																											Y							
OC Pesticides		EPA 8270E	MLA-007							Y						Y																					
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	2,4'-DDT	EPA 625	MLA-007																											Y							
OC Pesticides		EPA 8270E	MLA-007							Y						Y																					
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	4,4'-DDD	EPA 625	MLA-007																											Y	Y	Y		Y		Y	
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	4,4'-DDE	EPA 625	MLA-007																											Y	Y	Y		Y		Y	
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	4,4'-DDT	EPA 625	MLA-007																											Y	Y	Y		Y		Y	
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Aldrin	EPA 625	MLA-007																											Y	Y	Y		Y		Y	
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
				CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Alpha-HCH	EPA 625	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Beta-HCH	EPA 625	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Chlordane, technical	EPA 8270E	MLA-007							Y	Y			Y	Y															Y	Y			Y		Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007							Y																				Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228																											Y								
OC Pesticides	cis-Chlordane (alpha-Chlordane)	EPA 8270E	MLA-007							Y	Y			Y		Y														Y	Y			Y				
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	cis-Nonachlor	EPA 8270E	MLA-007							Y						Y														Y								
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Delta-HCH	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Dieldrin	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Endosulphan I	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Endosulphan II	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Endosulphan sulphate	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Endrin	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y	
OC Pesticides	Endrin aldehyde	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y								

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				Serum	Solids												Tissue and Tissue Flora												Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y															Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Endrin ketone	EPA 8081B	MLA-007						Y	Y				Y		Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Gamma-HCH (Lindane)	EPA 625	MLA-007																										Y	Y	Y			Y		Y			
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Heptachlor	EPA 625	MLA-007																										Y	Y	Y			Y		Y			
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Heptachlor epoxide	EPA 608	MLA-007																										Y	Y	Y			Y		Y			
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Hexachlorobenzene	EPA 1625	MLA-007																										Y	Y				Y					
OC Pesticides		EPA 8270E	MLA-007							Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y						Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228							Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Methoxychlor	EPA 608	MLA-007																										Y	Y				Y		Y			
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Mirex	EPA 8270E	MLA-007							Y				Y		Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Oxychlordane	EPA 8270E	MLA-007							Y																													
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Toxaphene	EPA 8270E	MLA-007																																			
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y												Y					Y														
OC Pesticides	trans-Chlordane (gamma-Chlordane)	EPA 8270E	MLA-007							Y	Y			Y		Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	trans-Nonachlor	EPA 8270E	MLA-007							Y						Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y								Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y										Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
PAH	"Extractable Organics" category (CA only)	EPA 8270E	MLA-021						Y																													
PAH	"Semi-volatile Organic Compounds" category (CA only)	EPA 1625	MLA-021																																			
PAH	1,2,6-Trimethylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y														
PAH	1,2-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y														
PAH	1,4,6,7-Tetramethylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y														
PAH	1,7-Dimethylfluorene	SGS AXYS MLA-021	MLA-021					Y																	Y														

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				Serum	Solids													Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PAH	1,7-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	1,8-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	1-Methylchrysene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	1-Methylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	1-Methylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2,3,5-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2,3,6-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2,4-Dimethyldibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2,6-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2-Methylanthracene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2-Methylfluorene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2-Methylnaphthalene	EPA 8270E	MLA-021							Y				Y						Y										Y									
PAH		SGS AXYS MLA-021	MLA-021					Y							Y	Y			Y	Y			Y		Y											Y		
PAH	2-Methylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	3,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	3-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	3-Methylfluoranthene/ Benzo(a)fluorene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	3-Methylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	5,9-Dimethylchrysene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	5/6-Methylchrysenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	7-Methylbenzo(a)pyrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	9/4-Methylphenanthrenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	Acenaphthene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y					Y																			
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y											Y		
PAH	Acenaphthylene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y					Y																			
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y											Y		
PAH	Anthracene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y					Y																			
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y											Y		
PAH	Benz[a]anthracene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y					Y																			
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y											Y		
PAH	Benzo[a]pyrene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y					Y																			
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y											Y		
PAH	Benzo[b]fluoranthene	EPA 1625	MLA-021																										Y	Y	Y			Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y					Y																			
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y											Y		
PAH	Benzo[e]pyrene	SGS AXYS MLA-021	MLA-021					Y												Y					Y													
PAH	Benzo[ghi]perylene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y					Y																			
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y											Y		
PAH	Benzo[j/k]fluoranthenes	SGS AXYS MLA-021	MLA-021					Y												Y					Y													
PAH	Benzo[k]fluoranthene	EPA 1625	MLA-021																										Y	Y	Y			Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y						Y																			
PAH		SGS AXYS MLA-021	MLA-021							Y					Y	Y			Y	Y			Y		Y											Y		
PAH	Biphenyl	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Acenaphthenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Benz(a)anthracenes/chrysenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Biphenyls	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Dibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Fluorenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Naphthalenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Biphenyls	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Dibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Fluorenes	SGS AXYS MLA-021	MLA-021					Y																	Y													

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				Serum	Solids														Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PAH	C2-Naphthalenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C2-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C3-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C3-Dibenzothiophene	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C3-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C3-Fluorenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C3-Naphthalenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C3-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C4-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C4-Dibenzothiophene	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C4-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C4-Naphthalenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	C4-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	Chrysene	EPA 1625	MLA-021																									Y	Y				Y		Y			
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																		
PAH		SGS AXYS MLA-021	MLA-021				Y			Y					Y	Y			Y	Y			Y		Y					Y						Y			
PAH	Dibenzo[a,h]anthracene	EPA 1625	MLA-021																									Y	Y				Y		Y			
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																		
PAH		SGS AXYS MLA-021	MLA-021				Y			Y					Y	Y			Y	Y			Y		Y					Y						Y			
PAH	Dibenzothiophene	SGS AXYS MLA-021	MLA-021				Y																		Y													
PAH	Fluoranthene	EPA 1625	MLA-021																									Y	Y				Y		Y			
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																		
PAH		SGS AXYS MLA-021	MLA-021				Y			Y					Y	Y			Y	Y			Y		Y					Y						Y			
PAH	Fluorene	EPA 1625	MLA-021																									Y	Y				Y		Y			
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																		
PAH		SGS AXYS MLA-021	MLA-021				Y			Y					Y	Y			Y	Y			Y		Y					Y						Y			
PAH	Indeno[1,2,3-cd]pyrene	EPA 1625	MLA-021																									Y	Y				Y		Y			
PAH		EPA 8270E	MLA-021							Y	Y			Y	Y						Y																		
PAH		SGS AXYS MLA-021	MLA-021				Y			Y					Y	Y			Y	Y			Y		Y					Y						Y			
PAH	Naphthalene	EPA 1625	MLA-021																									Y	Y				Y		Y			
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																		
PAH		SGS AXYS MLA-021	MLA-021				Y			Y					Y	Y			Y	Y			Y		Y					Y						Y			
PAH	Perylene	SGS AXYS MLA-021	MLA-021				Y												Y						Y													
PAH	Phenanthrene	EPA 1625	MLA-021																									Y	Y				Y		Y			
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																		
PAH		SGS AXYS MLA-021	MLA-021				Y			Y					Y	Y			Y	Y			Y		Y					Y						Y			
PAH	Pyrene	EPA 1625	MLA-021																									Y	Y				Y		Y			
PAH		EPA 8270E	MLA-021							Y	Y			Y	Y						Y																		
PAH		SGS AXYS MLA-021	MLA-021				Y			Y					Y	Y			Y	Y			Y		Y					Y						Y			
PAH	Retene	SGS AXYS MLA-021	MLA-021				Y																		Y													
PBDPE	BDE 10 2,6-dibromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 100 2,2',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 105 2,3,3',4,4'-pentabromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 11 3,3'-dibromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 116 2,3,4,5,6-pentabromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 119 2,3',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 12 3,4-dibromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 126 3,3',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 13 3,4'-dibromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 140 2,2',3,4,4',6'-hexabromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 15 4,4'-dibromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 153 2,2',4,4',5,5'-hexabromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													
PBDPE	BDE 154 2,2',4,4',5',6-hexabromodiphenylether	EPA 1614	MLA-033													Y																					Y	
PBDPE		SGS AXYS MLA-033	MLA-033				Y												Y						Y													

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				Serum	Solids													Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PBDPE	BDE 155 2,2',4,4',6,6'-hexabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 166 2,3,4,4',5,6-hexabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 17 2,2',4-tribromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 181 2,2',3,4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 183 2,2',3,4,4',5',6-heptabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 190 2,3,3',4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 206 2,2',3,3',4,4',5,5',6-nonabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 207 2,2',3,3',4,4',5,6,6'-nonabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 208 2,2',3,3',4,5,5',6,6'-nonabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 209 Decabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 25 2,3',4-tribromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 28 2,4,4'-tribromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 30 2,4,6-tribromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 33 2',3,4-tribromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 35 3,3',4-tribromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 37 3,4,4'-tribromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 47 2,2',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 49 2,2',4,5'-tetrabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 66 2,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 7 2,4-dibromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 75 2,4,4',6-tetrabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 77 3,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 8 2,4'-dibromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 85 2,2',3,4,4'-pentabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PBDPE	BDE 99 2,2',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y						Y													
PCB Aroclors	"Organochlorine Pesticides and PCBs" category (CA only)	EPA 625	MLA-007																																		
PCB Aroclors	"PCBs" category (CA only)	EPA 8270E	MLA-007						Y																												
PCB Aroclors	PCB Aroclor 1016	EPA 1668	MLA-010							Y	Y																				Y	Y					
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y	
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																						
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																					Y						
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y						Y						
PCB Aroclors	PCB Aroclor 1016/1242	EPA 8270E	MLA-007																																		
PCB Aroclors	PCB Aroclor 1221	EPA 1668	MLA-010							Y	Y																				Y	Y					
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y	
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																						
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																					Y						
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y						Y						
PCB Aroclors	PCB Aroclor 1232	EPA 1668	MLA-010							Y	Y																				Y	Y					
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y	
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																						

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				Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y									
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y									
PCB Aroclors	PCB Aroclor 1242	EPA 1668	MLA-010							Y	Y																			Y	Y								
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y			
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																								
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y									
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y									
PCB Aroclors	PCB Aroclor 1248	EPA 1668	MLA-010							Y	Y																			Y	Y								
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y			
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																								
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y									
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y									
PCB Aroclors	PCB Aroclor 1254	EPA 1668	MLA-010							Y	Y																			Y	Y								
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y			
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																								
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y									
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y									
PCB Aroclors	PCB Aroclor 1260	EPA 1668	MLA-010							Y	Y																			Y	Y								
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y			
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																								
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y									
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y									
PCB Aroclors	PCB Aroclor 1268	SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 1 2-Chlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 10 2,6-Dichlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 100 2,2',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 101 2,2',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 101/90/89	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 102 2,2',4,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 103 2,2',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 104 2,2',4,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 105 2,3,3',4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									

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				Serum	Solids												Tissue and Tissue Flora												Urine	Water	Water, Non-Potable											AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 105/127	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners	PCB 106 2,3,3',4,5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 107 2,3,3',4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 107/109	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners	PCB 108 2,3,3',4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 109 2,3,3',4,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 11 3,3'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 110 2,3,3',4',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 111 2,3,3',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 111/117	EPA 8270E	MLA-007																																					
PCB congeners	PCB 112 2,3,3',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 113 2,3,3',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 114 2,3,4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 115 2,3,4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 116 2,3,4,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 117 2,3,4',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 118 2,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																		
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 118/106	EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners	PCB 119 2,3',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 12 3,4-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 12/13	EPA 8270E	MLA-007																																			
PCB congeners	PCB 120 2,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 121 2,3',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 122 2,3,3',4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 123 2,3',4,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y					Y			Y							Y						Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 124 2,3',4',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 125 2,3',4',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 126 3,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 127 3,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 128 2,2',3,3',4,4'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 129 2,2',3,3',4,5-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 13 3,4'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 130 2,2',3,3',4,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 131 2,2',3,3',4,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 131/142	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners	PCB 132 2,2',3,3',4,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 132/168	EPA 8270E	MLA-007																																				
PCB congeners	PCB 133 2,2',3,3',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 134 2,2',3,3',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 134/143	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															

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				Serum	Solids											Tissue and Tissue Flora							Urine		Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners	PCB 135 2,2',3,3',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 136 2,2',3,3',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 137 2,2',3,4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 138 2,2',3,4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 139 2,2',3,4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 14 3,5-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 140 2,2',3,4,4',6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 141 2,2',3,4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 142 2,2',3,4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 143 2,2',3,4,5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 144 2,2',3,4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										

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				Serum	Solids											Tissue and Tissue Flora						Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners	PCB 144/135	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners	PCB 145 2,2',3,4,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 146 2,2',3,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 147 2,2',3,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 148 2,2',3,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 149 2,2',3,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 149/139	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners	PCB 15 4,4'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 150 2,2',3,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 151 2,2',3,5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 152 2,2',3,5,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 153 2,2',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y							
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			

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				Serum	Solids												Tissue and Tissue Flora												Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 154 2,2',4,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 155 2,2',4,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 156 2,3,3',4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																				
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 157 2,3,3',4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 158 2,3,3',4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 158/160	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners	PCB 159 2,3,3',4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-007	MLA-007																						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 16 2,2',3-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 16/32	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners	PCB 160 2,3,3',4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 161 2,3,3',4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 162 2,3,3',4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		

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				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y								
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 163 2,3,3',4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 164 2,3,3',4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 165 2,3,3',5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 166 2,3,4,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 167 2,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 168 2,3',4,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 169 3,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y																			
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 17 2,2',4-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 170 2,2',3,3',4,4',5-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																		
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 170/190	EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners	PCB 171 2,2',3,3',4,4',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 172 2,2',3,3',4,5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								

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				Serum	Solids												Tissue and Tissue Flora							Urine		Water, Non-Potable											AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 172/192	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 173 2,2',3,3',4,5,6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 174 2,2',3,3',4,5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 174/181	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 175 2,2',3,3',4,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 176 2,2',3,3',4,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 177 2,2',3,3',4,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 178 2,2',3,3',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 179 2,2',3,3',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 18 2,2',5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 180 2,2',3,4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids											Tissue and Tissue Flora							Urine		Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y								
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 181 2,2',3,4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 182 2,2',3,4,4',5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 183 2,2',3,4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 184 2,2',3,4,4',6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 185 2,2',3,4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 186 2,2',3,4,5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 187 2,2',3,4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																		
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 187/182	EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners	PCB 188 2,2',3,4',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 189 2,3,3',4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 19 2,2',6-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids												Tissue and Tissue Flora												Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners	PCB 190 2,3,3',4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 191 2,3,3',4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 192 2,3,3',4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 193 2,3,3',4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 194 2,2',3,3',4,4',5,5'-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 195 2,2',3,3',4,4',5,6-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 196 2,2',3,3',4,4',5,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 196/203	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 197 2,2',3,3',4,4',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 198 2,2',3,3',4,5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 199 2,2',3,3',4,5,5',6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		

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				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 2 3-Chlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 20 2,3,3'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 200 2,2',3,3',4,5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 201 2,2',3,3',4,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 202 2,2',3,3',5,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 203 2,2',3,4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 204 2,2',3,4,4',5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 205 2,3,3',4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 206 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 207 2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 208 2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y												
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 209 Decachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 21 2,3,4-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 22 2,3,4'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 23 2,3,5-Trichlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 23/34	EPA 8270E	MLA-007																																			
PCB congeners	PCB 24 2,3,6-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 24/27	EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y														
PCB congeners	PCB 25 2,3',4-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 26 2,3',5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 27 2,3',6-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 28 2,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 29 2,4,5-Trichlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 3 4-Chlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 30 2,4,6-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 31 2,4',5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 32 2,4',6-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 33 2,3',4'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 33/20/21	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners	PCB 34 2,3',5'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 35 3,3',4-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 36 3,3',5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 37 3,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 38 3,4,5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 39 3,4',5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids												Tissue and Tissue Flora												Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners	PCB 4 2,2'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 4/10	EPA 8270E	MLA-007																																					
PCB congeners	PCB 40 2,2',3,3'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 41 2,2',3,4-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 41/71/64/68	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 42/59	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners	PCB 43 2,2',3,5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 44 2,2',3,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 45 2,2',3,6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 46 2,2',3,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 47 2,2',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 47/48/75	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners	PCB 48 2,2',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 49 2,2',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		

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SGS AXYS Analytical Services Ltd.
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				Serum	Solids												Tissue and Tissue Flora							Urine		Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 49/43	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007																Y						Y														
PCB congeners	PCB 5 2,3-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 50 2,2',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 51 2,2',4,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 52 2,2',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 52/73	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 53 2,2',5,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 54 2,2',6,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 55 2,3,3',4-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 56 2,3,3',4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 56/60	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 57 2,3,3',5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 58 2,3,3',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue and Tissue Flora							Urine		Water	Water, Non-Potable											AFFF	
				CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 59 2,3,3',6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 6 2,3'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 60 2,3,4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 61 2,3,4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 62 2,3,4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 62/65	EPA 8270E	MLA-007																																				
PCB congeners	PCB 63 2,3,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 64 2,3,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 65 2,3,5,6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y				Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y	Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 66 2,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 66/80	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 67 2,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 68 2,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 69 2,3',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		

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				Serum	Solids											Tissue and Tissue Flora							Urine		Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y								
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 7 2,4-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 7/9	EPA 8270E	MLA-007																																		
PCB congeners	PCB 70 2,3',4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 70/76	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y												
PCB congeners	PCB 71 2,3',4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 72 2,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 73 2,3',5',6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 74 2,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																	
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 74/61	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y												
PCB congeners	PCB 75 2,4,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 76 2,3',4',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 77 3,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y												
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 78 3,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 79 3,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y								

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SGS AXYS Analytical Services Ltd.
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				Serum	Solids												Tissue and Tissue Flora						Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y						Y		Y								Y					Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y							
PCB congeners	PCB 8 2,4'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 8/5	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 80 3,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 81 3,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 82 2,2',3,3',4-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 83 2,2',3,3',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 83/108	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 84 2,2',3,3',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y					Y										Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 85 2,2',3,4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 85/120	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 86 2,2',3,4,5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 87 2,2',3,4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 87/115/116	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 88 2,2',3,4,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y		Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y					Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y											Y										Y								
PCB congeners	PCB 88/121	EPA 8270E	MLA-007																																				
PCB congeners	PCB 89 2,2',3,4,6'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y					Y		Y								Y	Y		Y	Y	Y	Y	Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum: CALA	Solids: Alaska DEC	Solids: ANAB DoD **	Solids: ANAB ISO 17025	Solids: CALA	Solids: California WB	Solids: Florida DOH	Solids: Maine DOH	Solids: Minnesota DOH	Solids: New Jersey DEP	Solids: New York DOH	Solids: Virginia DGS	Solids: Washington DE	Tissue and Tissue Flora: ANAB DoD **	Tissue and Tissue Flora: ANAB ISO 17025	Tissue and Tissue Flora: CALA	Tissue and Tissue Flora: Florida DOH	Tissue and Tissue Flora: Minnesota DOH	Tissue and Tissue Flora: New Jersey DEP	Tissue and Tissue Flora: Virginia DGS	Urine: CALA	Water: CALA	Water, Non-Potable: Alaska DEC	Water, Non-Potable: ANAB DoD **	Water, Non-Potable: ANAB ISO 17025	Water, Non-Potable: California WB	Water, Non-Potable: Florida DOH	Water, Non-Potable: Maine DOH	Water, Non-Potable: Minnesota DOH	Water, Non-Potable: New Jersey DEP	Water, Non-Potable: New York DOH	Water, Non-Potable: Pennsylvania DEP	Water, Non-Potable: Virginia DGS	Water, Non-Potable: Washington DE *	AFFF: ANAB DoD **	AFFF: ANAB ISO 17025
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 9 2,5-Dichlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 90 2,2',3,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 91 2,2',3,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 92 2,2',3,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 93 2,2',3,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 94 2,2',3,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 95 2,2',3,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 95/93	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 96 2,2',3,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 97 2,2',3,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 97/86	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 98 2,2',3,4',6'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 98/102	EPA 8270E	MLA-007																																				
PCB congeners	PCB 99 2,2',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB congeners, total	EPA 1668	MLA-010											Y																				Y					

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue and Tissue Flora						Urine	Water	Water, Non-Potable											AFFF	
				CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners	PCBs, as congeners	EPA 1668	MLA-010																Y																		
PCB congeners		SGS AXYS MLA-010	MLA-010																Y																		
PCB congeners		SGS AXYS MLA-210	MLA-210						Y										Y										Y								
PCB congeners		SGS AXYS MLA-908	MLA-908						Y										Y										Y								
PCB congeners	Total Dichlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners	Total Heptachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners	Total Hexachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners	Total Monochlorobiphenyls	SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners	Total Nonachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners	Total Octachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners	Total Pentachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners	Total Polychlorinated biphenyls	SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners	Total Tetrachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners	Total Trichlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCDDF	"Dioxins and Dibenzofurans" category (CA only)	EPA 1613	MLA-017																																		
PCDDF		EPA 8290A	MLA-017																																		
PCDDF	1,2,3,4,6,7,8-HpCDD	EPA 1613	MLA-017		Y				Y						Y				Y						Y				Y	Y		Y	Y		Y	Y	
PCDDF		EPA 8290A	MLA-017		Y				Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y				
PCDDF		SGS AXYS MLA-017	MLA-017	Y			Y		Y									Y	Y				Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217				Y		Y					Y				Y	Y		Y	Y	Y		Y				Y				Y			Y	Y
PCDDF		ATM 16130	MLA-217						Y										Y										Y								
PCDDF	1,2,3,4,6,7,8-HpCDF	EPA 1613	MLA-017		Y				Y						Y				Y						Y				Y	Y		Y	Y		Y	Y	
PCDDF		EPA 8290A	MLA-017		Y				Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y				
PCDDF		SGS AXYS MLA-017	MLA-017	Y			Y		Y									Y	Y				Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217				Y		Y					Y				Y	Y		Y	Y	Y		Y				Y				Y			Y	Y
PCDDF		ATM 16130	MLA-217						Y										Y										Y								
PCDDF	1,2,3,4,7,8,9-HpCDF	EPA 1613	MLA-017		Y				Y						Y				Y						Y				Y	Y		Y	Y		Y	Y	
PCDDF		EPA 8290A	MLA-017		Y				Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y				
PCDDF		SGS AXYS MLA-017	MLA-017	Y			Y		Y									Y	Y				Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217				Y		Y					Y				Y	Y		Y	Y	Y		Y				Y				Y			Y	Y
PCDDF		ATM 16130	MLA-217						Y										Y										Y								
PCDDF	1,2,3,4,7,8-HxCDD	EPA 1613	MLA-017		Y				Y						Y				Y						Y				Y	Y		Y	Y		Y	Y	
PCDDF		EPA 8290A	MLA-017		Y				Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y				
PCDDF		SGS AXYS MLA-017	MLA-017	Y			Y		Y									Y	Y				Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217				Y		Y					Y				Y	Y		Y	Y	Y		Y				Y				Y			Y	Y
PCDDF		ATM 16130	MLA-217						Y										Y										Y								
PCDDF	1,2,3,4,7,8-HxCDF	EPA 1613	MLA-017		Y				Y						Y				Y						Y				Y	Y		Y	Y		Y	Y	
PCDDF		EPA 8290A	MLA-017		Y				Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y				
PCDDF		SGS AXYS MLA-017	MLA-017	Y			Y		Y									Y	Y				Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217				Y		Y					Y				Y	Y		Y	Y	Y		Y				Y				Y			Y	Y
PCDDF		ATM 16130	MLA-217						Y										Y										Y								

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids												Tissue and Tissue Flora											Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCDDF	1,2,3,6,7,8-HxCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y							
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y											Y							
PCDDF	1,2,3,6,7,8-HxCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y							
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y											Y							
PCDDF	1,2,3,7,8,9-HxCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y							
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y											Y							
PCDDF	1,2,3,7,8,9-HxCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y							
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y											Y							
PCDDF	1,2,3,7,8-PeCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y							
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y											Y							
PCDDF	1,2,3,7,8-PeCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y							
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y											Y							
PCDDF	2,3,4,6,7,8-HxCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y							
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y											Y							
PCDDF	2,3,4,7,8-PeCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y							
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y											Y							
PCDDF	2,3,7,8-TCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y							
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y											Y							
PCDDF	2,3,7,8-TCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y							
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y											Y							
PCDDF	OCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y							
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y											Y							
PCDDF	OCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y	Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y		Y		
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y							
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y	
PCDDF		ATM 16130	MLA-217							Y										Y											Y							
PCDDF	Total HpCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y								
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y											Y							
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y				Y	Y		Y	Y		Y	Y					Y					Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y							
PCDDF	Total HpCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y								
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y											Y							
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y				Y	Y		Y	Y		Y	Y					Y					Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y							
PCDDF	Total HxCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y								
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y											Y							
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y				Y	Y		Y	Y		Y	Y					Y					Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y							
PCDDF	Total HxCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y							

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y						Y		
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y				Y	Y		Y	Y		Y	Y				Y					Y		Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	Total PCDD	EPA 1613	MLA-017		Y																					Y												
PCDDF		EPA 8290A	MLA-017		Y																					Y												
PCDDF	Total PCDD/F	EPA 1613	MLA-017		Y																					Y												
PCDDF		EPA 8290A	MLA-017		Y																					Y												
PCDDF	Total PCDF	EPA 1613	MLA-017		Y																					Y												
PCDDF		EPA 8290A	MLA-017		Y																					Y												
PCDDF	Total PeCDD	EPA 1613	MLA-017		Y					Y										Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y						Y		
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y					Y		Y	Y			Y				Y					Y		Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	Total PeCDF	EPA 1613	MLA-017		Y					Y										Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y						Y		
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y					Y		Y	Y			Y				Y					Y		Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	Total TCDD	EPA 1613	MLA-017		Y					Y										Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y						Y		
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y					Y		Y	Y			Y				Y					Y		Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	Total TCDF	EPA 1613	MLA-017		Y					Y										Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y						Y		
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y					Y		Y	Y			Y				Y					Y		Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PFAS	"Per- and Polyfluorinated Alkyl Substances (PFAS)" category (CA only)	DoD QSM Version 5,1 (or new	MLA-110																																			
PFAS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonate (11Cl-PF3OUdS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y										Y	Y									Y	Y								Y	Y
PFAS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonate (11Cl-PF3OUdS)	SGS AXYS MLA-110	MLA-110	Y				Y											Y						Y												
PFAS	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	SGS AXYS MLA-110	MLA-110			Y				Y						Y	Y			Y							Y			Y						Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y									Y	Y								Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y			Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y			Y					Y	Y
PFAS	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	SGS AXYS MLA-110	MLA-110			Y				Y		Y				Y	Y			Y	Y						Y				Y					Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y									Y	Y								Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110		Y	Y	Y			Y		Y	Y			Y	Y	Y		Y	Y	Y	Y				Y	Y			Y		Y			Y	Y
PFAS	4,8-dioxa-3H-perfluorononanoate (ADONA)	SGS AXYS MLA-110	MLA-110			Y	Y										Y	Y									Y	Y								Y	Y
PFAS		DoD QSM Version 5,3	MLA-110			Y											Y										Y										Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y											Y										Y										Y	
PFAS		EPA 1633 draft	MLA-110			Y											Y										Y										Y	
PFAS	4:2 Fluorotelomersulfonate (4:2 FTS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y			Y		Y	Y			Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y			Y		Y			Y	Y
PFAS	6:2 Fluorotelomersulfonate (6:2 FTS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y			Y		Y			Y	Y
PFAS	8:2 Fluorotelomersulfonate (8:2 FTS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y			Y		Y			Y	Y
PFAS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonate (9Cl-PF3ONS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y										Y	Y									Y	Y								Y	Y
PFAS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonate (9Cl-PF3ONS)	SGS AXYS MLA-110	MLA-110	Y				Y											Y						Y												
PFAS	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	SGS AXYS MLA-110	MLA-110			Y				Y						Y	Y			Y							Y			Y						Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y			Y		Y			Y	Y
PFAS	Dodecafluoro-3H-4,8-dioxanonanoate (NaDONA)	SGS AXYS MLA-110	MLA-110	Y				Y											Y						Y												
PFAS		EPA 1633 draft	MLA-110									Y										Y										Y						
PFAS	Hexafluoropropylene oxide dimer acid (HFPO-DA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y								Y	Y			Y					Y		Y									Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y			Y		Y			Y	Y
PFAS	Hexafluoropropylene oxide dimer acid, anion and acid (HFPO-DA)	SGS AXYS MLA-110	MLA-110			Y	Y										Y	Y									Y	Y								Y	Y
PFAS	Hexaflurorpropylene oxide dimer acid (HFPO-DA)	SGS AXYS MLA-110	MLA-110	Y						Y		Y								Y	Y									Y		Y						
PFAS	N-Ethylperfluorooctane sulfonamide (EtFOSAm)	SGS AXYS MLA-110	MLA-110							Y										Y										Y								
PFAS		DoD QSM Version 5,3	MLA-110						Y																					Y								
PFAS		DoD QSM Version 5,4	MLA-110						Y																					Y								

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable											AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
		EPA 1633 draft										Y									Y											Y						
PFAS	N-Ethylperfluorooctanesulfonamide (N-EtFOSA)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y							Y	Y	Y	Y						Y			Y	Y								Y	Y	Y
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y										Y									Y	Y											Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y										Y	Y									Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y						Y	Y	Y	Y	Y					Y	Y	Y	Y		Y						Y	Y	Y
PFAS	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y									Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	N-Ethylperfluorooctanesulfonamidoethanol (N-EtFOSE)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y									Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y				Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y				Y	Y	Y
PFAS	N-Methylperfluorooctanesulfonamide (N-MeFOSA)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y									Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y				Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y				Y	Y	Y
PFAS	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y									Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y									Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y				Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y				Y	Y	Y
PFAS	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-060	MLA-060																																			
PFAS		SGS AXYS MLA-041	MLA-041																																			
PFAS		SGS AXYS MLA-043	MLA-043																																			
PFAS		SGS AXYS MLA-042	MLA-042	Y																																		
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y			Y	Y					Y		Y			Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y		Y						Y	Y	Y	Y									Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorobutanoate (PFBA)	SGS AXYS MLA-060	MLA-060																																			
PFAS		SGS AXYS MLA-041	MLA-041																																			
PFAS		SGS AXYS MLA-043	MLA-043																																			
PFAS		SGS AXYS MLA-042	MLA-042	Y																																		
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y			Y	Y					Y		Y			Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y		Y						Y	Y	Y	Y									Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y		Y	Y					Y		Y			Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y		Y						Y	Y	Y	Y									Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorodecanoate (PFDA)	SGS AXYS MLA-060	MLA-060																																			
PFAS		SGS AXYS MLA-041	MLA-041																																			
PFAS		SGS AXYS MLA-043	MLA-043																																			
PFAS		SGS AXYS MLA-042	MLA-042	Y																																		
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y		Y	Y					Y		Y			Y						Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y								Y	Y		Y						Y	Y	Y	Y									Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	Y
PFAS		DoD QSM Version 5.3	MLA-110			Y											Y										Y										Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y										Y	Y									Y	Y										Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y				Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y				Y	Y	Y
PFAS	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-060	MLA-060																																			
PFAS		SGS AXYS MLA-041	MLA-041																																			
PFAS		SGS AXYS MLA-043	MLA-043																																			
PFAS		SGS AXYS MLA-042	MLA-042	Y																																		
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y			Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y		Y						Y	Y	Y	Y									Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y		Y	Y					Y		Y			Y						Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y								Y	Y		Y						Y	Y	Y	Y									Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y

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				Serum	Solids											Tissue and Tissue Flora							Urine		Water, Non-Potable												AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PFAS	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y								Y	Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y	
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y								Y	Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y	
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y								Y	Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y	
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y								Y	Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y	
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorononanoate (PFNA)	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y								Y	Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y	
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorooctanesulfonamide (PFOSA), a.k.a. FOSA	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y								Y	Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y	
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y								Y	Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y	
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS		DoD AFFF01 Rev 1.0	MLA-110										Y																								Y	Y
PFAS	Perfluorooctanoate (PFOA)	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y								Y	Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y	
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS		DoD AFFF01 Rev 1.0	MLA-110																																	Y	Y
PFAS	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y	Y	Y	Y	Y					Y		Y	Y		Y							Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y							Y	Y							Y	Y	Y	Y	Y								Y	Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y	
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y			Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		

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				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	4,4,5,5,6,6,6-heptafluorohexanoic acid (3:3 FTCA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y				Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y				Y	Y	Y
PFAS	2H,2H,3H,3H-perfluorooctanoic acid (5:3 FTCA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y				Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y				Y	Y	Y
PFAS	2H,2H,3H,3H-perfluorodecanoic acid (7:3 FTCA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y				Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y				Y	Y	Y
PFAS	Perfluoro-3-methoxypropanoic acid (PFMPA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y				Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y				Y	Y	Y
PFAS	Perfluoro-4-methoxybutanoic acid (PFMBA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y				Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y				Y	Y	Y
PFAS	Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y				Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y				Y	Y	Y
PFAS	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y				Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y				Y	Y	Y
PPCP	1,7-Dimethylxanthine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	10-hydroxy-amitriptyline	SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	2-hydroxy-ibuprofen	SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	4-Epianhydrochlortetracycline (EACTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	4-Epianhydrotetracycline (EATC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	4-Epichlortetracycline (ECTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	4-Epioxytetracycline (EOTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	4-Epitetracycline (ETC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	Acetaminophen	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	Albuterol	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	Alprazolam	SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	Amitriptyline	SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	Amlodipine	SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	Amphetamine	SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	Anhydrochlortetracycline (ACTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													
PPCP	Anhydrotetracycline (ATC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																Y													

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PPCP	Atenolol	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Atorvastatin	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Azithromycin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Benzoylecgonine	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Benztropine	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Betamethasone	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Bisphenol A	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Caffeine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Carbadox	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Carbamazepine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Cefotaxime	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Chlortetracycline (CTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Cimetidine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Ciprofloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Clarithromycin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Clinafloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Clonidine	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Cloxacillin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Cocaine	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Codeine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Cotinine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	DEET (N,N-diethyl-m-toluamide)	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Dehydronifedipine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Demeclocycline	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Desmethyldiltiazem	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Diazepam	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Digoxigenin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Digoxin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Diltiazem	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Diphenhydramine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Doxycycline	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Enalapril	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Enrofloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Erythromycin	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Erythromycin anydrate	EPA 1694	MLA-075								Y																				Y						
PPCP	Flumequine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Fluocinonide	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Fluoxetine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Fluticasone propionate	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Furosemide	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Gemfibrozil	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Glipizide	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Glyburide	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Hydrochlorothiazide	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Hydrocodone	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Hydrocortisone	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Ibuprofen	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Isochlortetracycline (ICTC)	EPA 1694	MLA-075								Y																				Y						

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Lincomycin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Lomefloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Meprobamate	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Metformin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Methylprednisolone	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Metoprolol	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Miconazole	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Minocycline	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Naproxen	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Norfloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Norfluoxetine	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Norgestimate	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Norverapamil	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Ofloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Ormetoprim	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Oxacillin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Oxolinic acid	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Oxycodone	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Oxytetracycline (OTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Paroxetine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Penicillin G	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Penicillin V	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Prednisolone	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Prednisone	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Promethazine	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Propoxyphene	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Propranolol	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Ranitidine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Roxithromycin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sarafloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sertraline	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Simvastatin	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfachloropyridazine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfadiazine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfadimethoxine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfamerazine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfamethazine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfamethizole	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfamethoxazole	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfanilamide	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Sulfathiazole	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Tetracycline (TC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Theophylline	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Thiabendazole	EPA 1694	MLA-075								Y																				Y						

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Trenbolone	SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Trenbolone acetate	SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Triamterene	SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Triclocarban	EPA 1694	MLA-075								Y																				Y							
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Triclosan	EPA 1694	MLA-075								Y																				Y							
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Trimethoprim	EPA 1694	MLA-075								Y																				Y							
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Tylosin	EPA 1694	MLA-075								Y																				Y							
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Valsartan	SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Verapamil	SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Virginiamycin	EPA 1694	MLA-075								Y																				Y							
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Warfarin	EPA 1694	MLA-075								Y																				Y							
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
TOP	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorobutanoate (PFBA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorodecanoate (PFDA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorononanoate (PFNA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorooctanoate (PFOA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-111	MLA-111					Y																	Y													

Note * Analysis of pesticides and PCBs in non-potable water samples by SGS AXYS method MLA-007, with the exception of NPDES or State permitted discharges and Stormwater applications, may fall within the scope of Washington State Department of Ecology solids matrix accreditation, subject to approval of the Ecology Project Manager.

Note ** PFAS by LC-MS/MS compliant with US DoD QSM 5.3 table B-15 and US DoD QSM 5.4 table B-24

Legend

Y	Accreditation scope
AFFF	Aqueous film forming foam
BFR	Brominated flame retardants (non-PBDPE)
BPA and mPE	Bisphenol A and mono-Phthalate Esters
OC Pesticides	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PBDPE	Polybrominated diphenylethers
PCB	Polychlorinated Biphenyls
PCDDF	Polychlorinated dibenzodioxins/furans
PFAS	Per- and Polyfluoroalkyl Substances
PPCP	Pharmaceutical and Personal Care Products
TOP	Total Oxidizable Precursors
California WB	California Water Boards, Lab ID 2911
Florida DOH	Florida Department of Health, Lab ID E871007, (NELAC Standard)
Pennsylvania DEP	Pennsylvania Department of Environmental Protection
Minnesota DOH	Minnesota Department of Health, Lab ID 232-999-430, (NELAC Standard)
New Jersey DEP	New Jersey Department of Environmental Protection, Lab ID CANA005, (NELAC Standard)
New York DOH	New York Department of Health, Lab ID 11674, (NELAC Standard)
Washington DE	Washington Department of Ecology, Lab ID C404
Virginia DGS	Virginia Department of General Services, Division of Consolidated Laboratory Services, Lab ID 460224, (NELAC Standard)
Alaska DEC	Alaska Department of Environmental Conservation, Contaminated Sites Laboratory Approval 17-014
Maine DOH	Maine Center for Disease Control and Prevention, Department of Health and Human Services, Lab ID CN00003

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable									AFFF	
				CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025

ANAB DoD — ANSI National Accreditation Board, certificate ADE-1861, (US DoD QSM 5.3 and 5.4 Standard)

CALA — Canadian Association for Laboratory Accreditation Inc., Lab ID A2637, (ISO/IEC 17025:2017 Standard)

SGS AXYS

2045 Mills Road West
Sidney, BC, Canada V8L5X2

TEL: (250) 655-5800
TOLL-FREE: 1-888-373-0881

SGS AXYS Client No.: 5123

Client Address: SGS Orlando
4405 Vineland Rd, Suite C-15
Orlando, FL, US,

The SGS AXYS contact for these data is Ivona Zysk.

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BATCH SUMMARY

Batch ID: WG88919	***Date:*** 07-Mar-2024
Analysis Type: Per- and Polyfluoroalkyl Substances (PFAS)	***Matrix Type:*** Biosolids human

BATCH MAKEUP

Contract: 5123

Samples:

L40602-1	Jamestown WWTP
L40602-2	Grand Forks WWTP
L40602-3	Fargo WWTP
L40602-4	Dickinson WWTP
L40602-5	Watford City WWTP
L40602-6	Bismarck WWTP
L40602-7	Bismarck WWTP Dup
L40602-8	Mandan WWTP

Blank:
WG88919-101

Reference or Spike:
WG88919-102
WG88919-103

Duplicate:

Comments:

1. Data are considered final.
2. Data are not blank corrected. Blank data should be taken into consideration when evaluating sample data.
3. Blank data should be evaluated against specifications using the same blank sample size as the size of the client samples.
4. In the continuing calibration verification (filenames: FC4L_050 S:15; FC4L_058 S:46) ADONA is observed above the upper method limit. As this analyte was not observed in client samples data is not considered affected.
5. In the continuing calibration verification (filenames: FC4L_050 S:15; FC4L_058 S:46) some surrogates are observed above the upper method control limit. As the result for the associated targets are observed within method specifications data is not considered impacted.
6. The percent recovery of native ADONA in the OPR (AXYS ID: WG88919-102) was observed to be higher than method specifications and has been flagged with 'N'. The client data is not considered affected since this native analyte is not detected in the client samples.
7. Percent recoveries of several surrogates in the client samples were observed to be outside the method limits and these surrogates have been flagged with a 'V' on the report forms. As the isotope dilution method of quantification produces data that are recovery corrected, the slight variance from the method acceptance criteria is deemed not to affect the quantification of these analytes. Percent surrogate recoveries are used as a general method performance indicator only.

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February 2017

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SGS AXYS

5123

2045 Mills Road West TEL: (250) 655-5800
Sidney, British Columbia, Canada V8L 5X2 FAX: (250) 655-5811

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:	
Company	NDDEQ	Company	NDDEQ
Address	4201 Normandy St Bismarck ND 58503	Address	4201 Normandy St Bismarck ND 58503
Contact	Shannon Suggs	Contact	Shannon Suggs
Phone	701-328-6409	Phone	701-328-6409
FAX		FAX	
E-mail	SSuggs@nd.gov	E-mail	SSuggs@nd.gov

Project Name/Number: NDDEQ PFAS

Sampler's Name:
Signature: SSuggs

ANALYSIS REQUESTED: MLA-110

Client Sample Identification	Matrix	Sampling Date	Sampling Time	Container Type/No.	AXYS Lab Sample ID (Lab use only)
Jamestown WWTP	BSH	11/15/23	10:20		L40602-1
Grand Forks WWTP	BSH	11/16/23	10:00		-2
Fargo WWTP	BSH	11/16/23	10:30		-3
Dickinson WWTP	BSH	11/20/23	10:45		-4
Watford City WWTP	BSH	11/20/23	2:20		-5
Bismarck WWTP	BSH	11/22/23	11:35		-6
Bismarck WWTP Dup	BSH	11/22/23	11:36		-7
Mandan WWTP	BSH	11/15/23	13:30		-8

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time	Courier	Waybill No.
SSuggs	11/22/23			Fed Ex	11/22/23		
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time	Sample Receipt	
				23 NOV 2023	11:15		

Remarks:

Sample Receipt	Cooler
Temp °C	
Custody Seal #	
Seal Intact Y / N	
Sample Tags Y / N	

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Jamestown WWTP
Sample Collection:
15-Nov-2023 10:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ PFAS		
Contract No.:	5123	**Lab Sample I.D.:**	L40602-1
Matrix:	BIOSOLIDS HUMAN	**Sample Size:**	0.223 g (dry)
Sample Receipt Date:	23-Nov-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	26-Feb-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	27-Feb-2024 **Time:** 18:13:13	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_050 S: 22**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_050 S: 21
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_050 S: 15
Concentration Units:	ng/g (dry weight basis)	**% Moisture:**	95.6

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		3.58 (Q)		
PFPeA	ND		1.79 (Q)		
PFHxA	ND		0.896 (Q)		
PFHpA	ND		0.896 (Q)		
PFOA	ND		0.896 (Q)		
PFNA	ND		0.896 (Q)		
PFDA	ND		0.896 (Q)		
PFUnA	ND		0.896 (Q)		
PFDoA	ND		0.717 (Q)		
PFTrDA	ND		0.896 (Q)		
PFTeDA	ND		0.896 (Q)		
PFBS	ND		0.896 (Q)		
PFPeS	ND		0.900 (Q)		
PFHxS	ND		0.896 (Q)		
PFHpS	ND		0.896 (Q)		
PFOS	ND		0.896 (Q)		
PFNS	ND		0.896 (Q)		
PFDS	ND		0.896 (Q)		
PFDoS	ND		0.896 (Q)		
4:2 FTS	ND		3.58 (Q)		
6:2 FTS	ND		3.23 (Q)		
8:2 FTS	ND		3.05 (Q)		
PFOSA	ND		0.896 (Q)		
N-MeFOSA	K J	1.01	0.896 (Q)	0.95	
N-EtFOSA	ND		2.51 (Q)		
MeFOSAA	ND		0.896 (Q)		
EtFOSAA	ND		0.896 (Q)		
N-MeFOSE	ND		8.96 (Q)		
N-EtFOSE	ND		8.96 (Q)		
HFPO-DA	ND		3.58 (Q)		
ADONA	ND		3.58 (Q)		
9Cl-PF3ONS	ND		3.59 (Q)		
11Cl-PF3OUdS	ND		3.59 (Q)		
3:3 FTCA	ND		3.58 (Q)		
5:3 FTCA	ND		22.4 (Q)		
7:3 FTCA	ND		22.4 (Q)		
PFEESA	ND		0.896 (Q)		
PFMPA	ND		1.79 (Q)		
PFMBA	ND		0.896 (Q)		

NFDHA	ND	1.79 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than limit of quantification.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Aaron Kyle

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SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
Jamestown WWTP
Sample Collection:
15-Nov-2023 10:20

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ PFAS
Matrix:	BIOSOLIDS HUMAN	**Lab Sample I.D.:**	L40602-1
Sample Receipt Date:	23-Nov-2023	**Sample Size:**	0.223 g (dry)
Extraction Date:	26-Feb-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	27-Feb-2024 **Time:** 18:13:13	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_050 S: 22**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_050 S: 21
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_050 S: 15
		% Moisture:	95.6

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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	40.3	101		1.000
13C5-PFPeA		20.0	21.2	106		0.853
13C5-PFHxA		10.0	9.83	98.3	12.0	1.001
13C4-PFHpA		10.0	9.51	95.1		0.879
13C8-PFOA		10.0	9.22	92.2		1.000
13C9-PFNA		5.00	5.11	102		1.001
13C6-PFDA		5.00	4.84	96.8		1.000
13C7-PFUnA		5.00	4.86	97.2		1.044
13C2-PFDoA		5.00	4.41	88.1		1.082
13C2-PFTeDA		5.00	2.51	50.1		1.177
13C3-PFBS		10.0	9.86	98.4	2.71	0.771
13C3-PFHxS		10.0	10.1	101	2.33	1.000
13C8-PFOS		10.1	10.9	108	2.20	1.000
13C2-4:2 FTS		20.2	20.6	102	2.00	0.812
13C2-6:2 FTS		20.0	19.3	96.8	2.35	1.002
13C2-8:2 FTS		20.0	18.5	92.2	3.88	1.269
13C8-PFOSA		10.0	14.4	144		1.162
D3-N-MeFOSA		10.0	4.29	42.9		1.348
D5-N-EtFOSA		10.0	3.00	30.0		1.380
D3-MeFOSAA	V	20.0	30.9	154		1.306
D5-EtFOSAA	V	20.0	34.5	172		1.329
d7-NMe-FOSE		100	84.5	84.2		1.332
d9-NEt-FOSE		100	77.8	77.8		1.366
13C3-HFPO-DA		40.0	32.0	80.1	2.74	1.037

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

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Signed: _____Aaron Kyle_____

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Report Filename: PFC_FC_LC_PFAS_L40602-1_Form2_FC4L_050S22_SJ3393637.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Grand Forks WWTP
Sample Collection:
16-Nov-2023 10:00

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ PFAS		
Contract No.:	5123	**Lab Sample I.D.:**	L40602-2
Matrix:	BIOSOLIDS HUMAN	**Sample Size:**	0.171 g (dry)
Sample Receipt Date:	23-Nov-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	26-Feb-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	27-Feb-2024 **Time:** 18:26:42	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_050 S: 23**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_050 S: 21
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_050 S: 15
Concentration Units:	ng/g (dry weight basis)	**% Moisture:**	96.6

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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		4.68 (Q)		
PFPeA	ND		2.34 (Q)		
PFHxA	ND		1.17 (Q)		
PFHpA	ND		1.17 (Q)		
PFOA	J	1.64	1.17 (Q)	2.33	
PFNA	ND		1.17 (Q)		
PFDA	J	1.20	1.17 (Q)	3.13	1.001
PFUnA	ND		1.17 (Q)		
PFDoA	ND		0.935 (Q)		
PFTrDA	ND		1.17 (Q)		
PFTeDA	ND		1.17 (Q)		
PFBS	K J	1.64	1.17 (Q)	32.1	0.996
PFPeS	ND		1.17 (Q)		
PFHxS	ND		1.17 (Q)		
PFHpS	ND		1.17 (Q)		
PFOS		17.1	1.17 (Q)	2.43	
PFNS	ND		1.17 (Q)		
PFDS	ND		1.17 (Q)		
PFDoS	ND		1.17 (Q)		
4:2 FTS	ND		4.68 (Q)		
6:2 FTS	ND		4.21 (Q)		
8:2 FTS	ND		3.97 (Q)		
PFOSA	J	1.32	1.17 (Q)		
N-MeFOSA	ND		1.17 (Q)		
N-EtFOSA	ND		3.27 (Q)		
MeFOSAA	J	4.35	1.74 (S)	1.84	
EtFOSAA	J	1.34	1.17 (Q)	1.69	
N-MeFOSE	ND		11.7 (Q)		
N-EtFOSE	ND		11.7 (Q)		
HFPO-DA	ND		4.68 (Q)		
ADONA	ND		4.68 (Q)		
9Cl-PF3ONS	ND		4.69 (Q)		
11Cl-PF3OUdS	ND		4.68 (Q)		
3:3 FTCA	ND		4.68 (Q)		
5:3 FTCA	ND		29.2 (Q)		
7:3 FTCA	ND		29.2 (Q)		
PFEESA	ND		1.17 (Q)		
PFMPA	ND		2.34 (Q)		
PFMBA	ND		1.17 (Q)		

NFDHA	ND	2.34 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than limit of quantification.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Aaron Kyle

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SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
Grand Forks WWTP
Sample Collection:
16-Nov-2023 10:00

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ PFAS
Matrix:	BIOSOLIDS HUMAN	**Lab Sample I.D.:**	L40602-2
Sample Receipt Date:	23-Nov-2023	**Sample Size:**	0.171 g (dry)
Extraction Date:	26-Feb-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	27-Feb-2024 **Time:** 18:26:42	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_050 S: 23**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_050 S: 21
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_050 S: 15
		% Moisture:	96.6

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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	38.7	96.7		1.000
13C5-PFPeA		20.0	20.7	103		0.852
13C5-PFHxA		10.0	9.17	91.7	13.7	1.000
13C4-PFHpA		10.0	9.24	92.4		0.880
13C8-PFOA		10.0	8.95	89.5		1.000
13C9-PFNA		5.00	5.27	105		1.001
13C6-PFDA		5.00	4.65	93.1		1.000
13C7-PFUnA		5.00	4.18	83.7		1.044
13C2-PFDoA		5.00	3.39	67.7		1.083
13C2-PFTeDA		5.00	1.26	25.2		1.177
13C3-PFBS		10.0	9.73	97.1	2.67	0.772
13C3-PFHxS		10.0	9.62	96.0	2.30	1.000
13C8-PFOS		10.1	10.3	102	2.17	1.000
13C2-4:2 FTS		20.2	20.6	102	1.93	0.812
13C2-6:2 FTS		20.0	19.5	97.4	2.33	1.002
13C2-8:2 FTS		20.0	18.6	92.7	3.66	1.270
13C8-PFOSA	V	10.0	15.2	152		1.162
D3-N-MeFOSA		10.0	5.12	51.2		1.347
D5-N-EtFOSA		10.0	3.77	37.7		1.379
D3-MeFOSAA		20.0	29.5	148		1.308
D5-EtFOSAA	V	20.0	30.5	153		1.331
d7-NMe-FOSE		100	65.7	65.5		1.332
d9-NEt-FOSE		100	68.6	68.6		1.365
13C3-HFPO-DA		40.0	31.2	78.0	2.96	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Aaron Kyle_____

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Report Filename: PFC_FC_LC_PFAS_L40602-2_Form2_FC4L_050S23_SJ3393638.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Fargo WWTP
Sample Collection:
16-Nov-2023 10:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ PFAS
Matrix:	BIOSOLIDS HUMAN	**Lab Sample I.D.:**	L40602-3
Sample Receipt Date:	23-Nov-2023	**Sample Size:**	0.518 g (dry)
Extraction Date:	26-Feb-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	27-Feb-2024 **Time:** 18:40:20	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_050 S: 24**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_050 S: 21
Concentration Units:	ng/g (dry weight basis)	**Cal. Ver. Data Filename:**	FC4L_050 S: 15
		% Moisture:	79.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		1.55 (Q)		
PFPeA	ND		0.773 (Q)		
PFHxA	J	0.475	0.386 (Q)	6.67	1.000
PFHpA	ND		0.386 (Q)		
PFOA	ND		0.386 (Q)		
PFNA	K J	0.559	0.386 (Q)	14.0	
PFDA	J	0.525	0.386 (Q)	3.56	1.000
PFUnA	K J	0.391	0.386 (Q)	10.1	1.000
PFDoA	J	0.623	0.309 (Q)	7.56	1.000
PFTrDA	K J	0.511	0.386 (Q)	13.2	0.955
PFTeDA	J	0.763	0.386 (Q)	4.08	1.001
PFBS	K	3.76	0.386 (Q)	101	0.996
PFPeS	ND		0.388 (Q)		
PFHxS	ND		0.386 (Q)		
PFHpS	ND		0.386 (Q)		
PFOS	K	2.77	0.386 (Q)	6.21	
PFNS	ND		0.386 (Q)		
PFDS	ND		0.386 (Q)		
PFDoS	ND		0.386 (Q)		
4:2 FTS	ND		1.55 (Q)		
6:2 FTS		105	1.39 (Q)	0.38	0.999
8:2 FTS	ND		1.31 (Q)		
PFOSA	J	0.455	0.386 (Q)		
N-MeFOSA	K J	0.602	0.386 (Q)	0.96	
N-EtFOSA	ND		1.08 (Q)		
MeFOSAA	J	1.37	0.386 (Q)	1.68	
EtFOSAA	J	1.54	0.386 (Q)	1.21	
N-MeFOSE	J	12.8	3.86 (Q)		
N-EtFOSE	ND		3.86 (Q)		
HFPO-DA	ND		1.55 (Q)		
ADONA	ND		1.55 (Q)		
9Cl-PF3ONS	ND		1.55 (Q)		
11Cl-PF3OUdS	ND		1.55 (Q)		
3:3 FTCA	ND		1.55 (Q)		
5:3 FTCA	ND		9.66 (Q)		
7:3 FTCA	ND		9.66 (Q)		
PFEESA	ND		0.386 (Q)		
PFMPA	ND		0.773 (Q)		
PFMBA	ND		0.386 (Q)		

NFDHA	ND	0.773 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than limit of quantification.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Aaron Kyle

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48; Report Filename: PFC_FC_LC_PFAS_L40602-3_Form1A_FC4L_050S24_SJ3393639.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
Fargo WWTP
Sample Collection:
16-Nov-2023 10:30

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ PFAS
Matrix:	BIOSOLIDS HUMAN	**Lab Sample I.D.:**	L40602-3
Sample Receipt Date:	23-Nov-2023	**Sample Size:**	0.518 g (dry)
Extraction Date:	26-Feb-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	27-Feb-2024 **Time:** 18:40:20	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_050 S: 24**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_050 S: 21
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_050 S: 15
		% Moisture:	79.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	37.8	94.5		0.996
13C5-PFPeA		20.0	20.1	100		0.852
13C5-PFHxA		10.0	9.24	92.4	11.9	1.000
13C4-PFHpA		10.0	8.61	86.1		0.880
13C8-PFOA		10.0	8.76	87.6		1.000
13C9-PFNA		5.00	4.89	97.7		1.000
13C6-PFDA		5.00	4.42	88.4		1.000
13C7-PFUnA		5.00	2.58	51.7		1.040
13C2-PFDoA		5.00	1.88	37.6		1.077
13C2-PFTeDA		5.00	1.03	20.7		1.179
13C3-PFBS		10.0	9.96	99.4	2.75	0.772
13C3-PFHxS		10.0	10.1	100	2.45	1.000
13C8-PFOS		10.1	10.3	102	2.33	1.000
13C2-4:2 FTS		20.2	23.1	114	1.86	0.812
13C2-6:2 FTS		20.0	18.5	92.7	2.07	1.002
13C2-8:2 FTS		20.0	29.5	147	3.43	1.268
13C8-PFOSA		10.0	8.53	85.3		1.166
D3-N-MeFOSA		10.0	1.85	18.5		1.353
D5-N-EtFOSA		10.0	1.28	12.8		1.385
D3-MeFOSAA		20.0	22.1	110		1.303
D5-EtFOSAA		20.0	15.8	78.8		1.321
d7-NMe-FOSE		100	29.1	29.1		1.338
d9-NEt-FOSE		100	29.4	29.4		1.371
13C3-HFPO-DA		40.0	29.7	74.1	2.70	1.036

(1) Where applicable, custom lab flags have been used on this report.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Aaron Kyle_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40602-3_Form2_FC4L_050S24_SJ3393639.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Dickinson WWTP
Sample Collection:
20-Nov-2023 10:45

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ PFAS		
Contract No.:	5123	**Lab Sample I.D.:**	L40602-4
Matrix:	BIOSOLIDS HUMAN	**Sample Size:**	0.118 g (dry)
Sample Receipt Date:	23-Nov-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	26-Feb-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	27-Feb-2024 **Time:** 18:53:49	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_050 S: 25**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_050 S: 21
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_050 S: 15
Concentration Units:	ng/g (dry weight basis)	**% Moisture:**	97.6

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		6.77 (Q)		
PFPeA	J	7.68	3.38 (Q)		1.001
PFHxA	J	5.77	1.69 (Q)	4.29	1.000
PFHpA	ND		1.69 (Q)		
PFOA		9.59	1.69 (Q)	2.08	
PFNA	J	2.27	1.69 (Q)	3.64	
PFDA		9.82	1.69 (Q)	2.91	1.000
PFUnA	ND		1.69 (Q)		
PFDoA	J	3.10	1.35 (Q)	8.86	1.000
PFTrDA	ND		1.69 (Q)		
PFTeDA	ND		1.69 (Q)		
PFBS	K J	2.64	1.69 (Q)	6.70	0.999
PFPeS	ND		1.70 (Q)		
PFHxS	ND		1.69 (Q)		
PFHpS	ND		1.69 (Q)		
PFOS		25.8	1.69 (Q)	2.52	
PFNS	ND		1.69 (Q)		
PFDS	ND		1.69 (Q)		
PFDoS	ND		1.69 (Q)		
4:2 FTS	ND		6.77 (Q)		
6:2 FTS	ND		6.10 (Q)		
8:2 FTS	ND		5.75 (Q)		
PFOSA	J	2.61	1.69 (Q)		
N-MeFOSA	K J	1.84	1.69 (Q)	0.94	
N-EtFOSA	ND		4.74 (Q)		
MeFOSAA		16.7	1.69 (Q)	2.32	
EtFOSAA		6.84	1.69 (Q)	1.16	
N-MeFOSE	ND		16.9 (Q)		
N-EtFOSE	ND		16.9 (Q)		
HFPO-DA	ND		6.77 (Q)		
ADONA	ND		6.77 (Q)		
9Cl-PF3ONS	ND		6.79 (Q)		
11Cl-PF3OUdS	ND		6.78 (Q)		
3:3 FTCA	ND		6.77 (Q)		
5:3 FTCA	ND		42.3 (Q)		
7:3 FTCA	ND		42.3 (Q)		
PFEESA	ND		1.69 (Q)		
PFMPA	ND		3.38 (Q)		
PFMBA	ND		1.69 (Q)		

NFDHA	ND	3.38 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than limit of quantification.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Aaron Kyle

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48; Report Filename: PFC_FC_LC_PFAS_L40602-4_Form1A_FC4L_050S25_SJ3393640.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
Dickinson WWTP
Sample Collection:
20-Nov-2023 10:45

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ PFAS
Matrix:	BIOSOLIDS HUMAN	**Lab Sample I.D.:**	L40602-4
Sample Receipt Date:	23-Nov-2023	**Sample Size:**	0.118 g (dry)
Extraction Date:	26-Feb-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	27-Feb-2024 **Time:** 18:53:49	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_050 S: 25**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_050 S: 21
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_050 S: 15
		% Moisture:	97.6

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	40.0	100		1.000
13C5-PFPeA		20.0	20.9	104		0.853
13C5-PFHxA		10.0	9.21	92.1	12.1	1.001
13C4-PFHpA		10.0	9.35	93.5		0.880
13C8-PFOA		10.0	9.03	90.3		1.000
13C9-PFNA		5.00	5.02	100		1.000
13C6-PFDA		5.00	4.79	95.7		1.000
13C7-PFUnA		5.00	4.79	95.8		1.044
13C2-PFDoA		5.00	4.41	88.2		1.083
13C2-PFTeDA		5.00	2.36	47.2		1.177
13C3-PFBS		10.0	9.79	97.7	2.64	0.772
13C3-PFHxS		10.0	10.1	100	2.37	1.000
13C8-PFOS		10.1	10.4	104	2.20	0.999
13C2-4:2 FTS		20.2	21.1	104	1.97	0.812
13C2-6:2 FTS		20.0	18.6	92.9	2.33	1.002
13C2-8:2 FTS		20.0	18.6	92.9	3.65	1.270
13C8-PFOSA	V	10.0	16.4	164		1.161
D3-N-MeFOSA		10.0	5.80	58.0		1.347
D5-N-EtFOSA		10.0	4.34	43.4		1.380
D3-MeFOSAA		20.0	28.3	141		1.307
D5-EtFOSAA		20.0	29.7	149		1.331
d7-NMe-FOSE		100	105	105		1.332
d9-NEt-FOSE		100	96.3	96.2		1.366
13C3-HFPO-DA		40.0	31.1	77.7	2.92	1.037

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Aaron Kyle_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40602-4_Form2_FC4L_050S25_SJ3393640.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Watford City WWTP
Sample Collection:
20-Nov-2023 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ PFAS
Matrix:	BIOSOLIDS HUMAN	**Lab Sample I.D.:**	L40602-5
Sample Receipt Date:	23-Nov-2023	**Sample Size:**	0.187 g (dry)
Extraction Date:	26-Feb-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	27-Feb-2024 **Time:** 19:07:18	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_050 S: 26**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_050 S: 21
Concentration Units:	ng/g (dry weight basis)	**Cal. Ver. Data Filename:**	FC4L_050 S: 15
		% Moisture:	96.3

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		4.27 (Q)		
PFPeA	J	3.04	2.14 (Q)		1.001
PFHxA		4.47	1.07 (Q)	5.34	1.000
PFHpA	J	1.08	1.07 (Q)	2.30	1.001
PFOA	J	2.86	1.07 (Q)	2.01	
PFNA	J	3.76	1.07 (Q)	2.59	
PFDA		15.5	1.07 (Q)	2.62	1.000
PFUnA	J	1.68	1.07 (Q)	5.37	1.000
PFDoA	J	2.33	0.854 (Q)	7.02	1.000
PFTrDA	ND		1.07 (Q)		
PFTeDA	ND		1.07 (Q)		
PFBS	K	14.4	1.07 (Q)	94.6	0.996
PFPeS	ND		1.07 (Q)		
PFHxS	K J	1.54	1.07 (Q)	9.51	
PFHpS	ND		1.07 (Q)		
PFOS		29.7	1.07 (Q)	2.59	
PFNS	ND		1.07 (Q)		
PFDS	ND		1.07 (Q)		
PFDoS	ND		1.07 (Q)		
4:2 FTS	ND		4.27 (Q)		
6:2 FTS	K B J	4.24	3.85 (Q)	0.38	1.002
8:2 FTS	ND		3.63 (Q)		
PFOSA	J	2.29	1.07 (Q)		
N-MeFOSA	ND		1.07 (Q)		
N-EtFOSA	ND		2.99 (Q)		
MeFOSAA		5.63	1.07 (Q)	2.40	
EtFOSAA	J	3.18	1.07 (Q)	1.13	
N-MeFOSE	ND		10.7 (Q)		
N-EtFOSE	ND		10.7 (Q)		
HFPO-DA	ND		4.27 (Q)		
ADONA	ND		4.27 (Q)		
9Cl-PF3ONS	ND		4.28 (Q)		
11Cl-PF3OUdS	ND		4.28 (Q)		
3:3 FTCA	ND		4.27 (Q)		
5:3 FTCA	J	61.4	26.7 (Q)	1.37	1.061
7:3 FTCA	ND		26.7 (Q)		
PFEESA	ND		1.07 (Q)		
PFMPA	ND		2.14 (Q)		
PFMBA	ND		1.07 (Q)		

NFDHA	ND	2.14 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; B = analyte found in the associated blank and concentration in sample is less than 10X the concentration in the associated blank; J = concentration less than limit of quantification.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Aaron Kyle

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40602-5_Form1A_FC4L_050S26_SJ3393641.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Watford City WWTP
Sample Collection:
20-Nov-2023 14:20

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ PFAS		
Contract No.:	5123	**Lab Sample I.D.:**	L40602-5
Matrix:	BIOSOLIDS HUMAN	**Sample Size:**	0.187 g (dry)
Sample Receipt Date:	23-Nov-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	26-Feb-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	27-Feb-2024 **Time:** 19:07:18	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_050 S: 26**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_050 S: 21
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_050 S: 15
Concentration Units:	ng absolute	**% Moisture:**	96.3

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	40.2	101		1.000
13C5-PFPeA		20.0	21.6	108		0.852
13C5-PFHxA		10.0	9.43	94.3	12.1	0.999
13C4-PFHpA		10.0	9.36	93.6		0.880
13C8-PFOA		10.0	9.01	90.1		1.000
13C9-PFNA		5.00	5.24	105		1.000
13C6-PFDA		5.00	5.04	101		1.000
13C7-PFUnA		5.00	4.48	89.6		1.044
13C2-PFDoA		5.00	3.73	74.5		1.082
13C2-PFTeDA		5.00	1.65	32.9		1.177
13C3-PFBS		10.0	10.4	104	2.68	0.772
13C3-PFHxS		10.0	10.5	105	2.42	0.999
13C8-PFOS		10.1	10.6	105	2.15	1.001
13C2-4:2 FTS		20.2	25.2	125	1.88	0.812
13C2-6:2 FTS		20.0	18.8	94.3	2.30	1.002
13C2-8:2 FTS		20.0	20.2	101	3.60	1.269
13C8-PFOSA		10.0	14.4	144		1.162
D3-N-MeFOSA		10.0	3.46	34.6		1.348
D5-N-EtFOSA		10.0	2.56	25.6		1.380
D3-MeFOSAA	V	20.0	35.7	179		1.307
D5-EtFOSAA	V	20.0	36.7	183		1.331
d7-NMe-FOSE		100	49.3	49.1		1.333
d9-NEt-FOSE		100	61.4	61.3		1.367
13C3-HFPO-DA		40.0	34.2	85.5	3.02	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Aaron Kyle_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40602-5_Form2_FC4L_050S26_SJ3393641.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Bismarck WWTP
Sample Collection:
22-Nov-2023 11:35

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ PFAS
Matrix:	BIOSOLIDS HUMAN	**Lab Sample I.D.:**	L40602-6
Sample Receipt Date:	23-Nov-2023	**Sample Size:**	0.605 g (dry)
Extraction Date:	26-Feb-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	27-Feb-2024 **Time:** 19:20:39	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_050 S: 27**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_050 S: 21
Concentration Units:	ng/g (dry weight basis)	**Cal. Ver. Data Filename:**	FC4L_050 S: 15
		% Moisture:	75.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		1.32 (Q)		
PFPeA	ND		0.661 (Q)		
PFHxA		1.65	0.331 (Q)	4.03	1.000
PFHpA	ND		0.331 (Q)		
PFOA	J	0.376	0.331 (Q)	1.66	
PFNA	J	0.502	0.331 (Q)	3.38	
PFDA	J	0.467	0.331 (Q)	2.23	1.000
PFUnA	J	0.553	0.331 (Q)	6.27	0.999
PFDoA	X				
PFTrDA	ND		0.331 (Q)		
PFTeDA	K J	1.13	0.331 (Q)	6.73	1.001
PFBS	ND		0.593 (S)		
PFPeS	ND		0.332 (Q)		
PFHxS	ND		0.331 (Q)		
PFHpS	ND		0.331 (Q)		
PFOS	K	2.61	0.331 (Q)	4.45	
PFNS	ND		0.331 (Q)		
PFDS	ND		0.331 (Q)		
PFDoS	ND		0.331 (Q)		
4:2 FTS	ND		1.32 (Q)		
6:2 FTS	ND		1.19 (Q)		
8:2 FTS	ND		1.12 (Q)		
PFOSA	J	0.476	0.331 (Q)		
N-MeFOSA	J	0.788	0.331 (Q)	0.51	
N-EtFOSA	ND		0.926 (Q)		
MeFOSAA		6.79	0.331 (Q)	1.97	
EtFOSAA		2.39	0.331 (Q)	1.05	
N-MeFOSE		15.4	3.31 (Q)		
N-EtFOSE	J	3.36	3.31 (Q)		
HFPO-DA	ND		1.32 (Q)		
ADONA	ND		1.32 (Q)		
9Cl-PF3ONS	ND		1.33 (Q)		
11Cl-PF3OUdS	ND		1.32 (Q)		
3:3 FTCA	ND		1.32 (Q)		
5:3 FTCA		70.9	8.27 (Q)	1.37	1.061
7:3 FTCA	ND		8.27 (Q)		
PFEESA	ND		0.331 (Q)		
PFMPA	ND		0.661 (Q)		
PFMBA	ND		0.331 (Q)		

NFDHA	ND	0.661 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than limit of quantification; X = result reported separately.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Aaron Kyle

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48; Report Filename: PFC_FC_LC_PFAS_L40602-6_Form1A_FC4L_050S27_SJ3393642.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
Bismarck WWTP
Sample Collection:
22-Nov-2023 11:35

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ PFAS
Matrix:	BIOSOLIDS HUMAN	**Lab Sample I.D.:**	L40602-6
Sample Receipt Date:	23-Nov-2023	**Sample Size:**	0.605 g (dry)
Extraction Date:	26-Feb-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	27-Feb-2024 **Time:** 19:20:39	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_050 S: 27**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_050 S: 21
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_050 S: 15
		% Moisture:	75.8

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	38.6	96.5		0.996
13C5-PFPeA		20.0	20.3	102		0.853
13C5-PFHxA		10.0	9.23	92.3	12.7	1.000
13C4-PFHpA		10.0	8.04	80.4		0.881
13C8-PFOA		10.0	8.93	89.3		1.000
13C9-PFNA		5.00	5.06	101		1.000
13C6-PFDA		5.00	4.76	95.2		1.000
13C7-PFUnA		5.00	2.76	55.3		1.037
13C2-PFDoA	X					
13C2-PFTeDA		5.00	1.78	35.7		1.182
13C3-PFBS		10.0	9.88	98.6	2.75	0.772
13C3-PFHxS		10.0	9.95	99.4	2.47	1.000
13C8-PFOS		10.1	10.3	103	2.31	1.000
13C2-4:2 FTS		20.2	29.9	148	2.12	0.812
13C2-6:2 FTS		20.0	18.6	93.0	2.21	1.001
13C2-8:2 FTS	V	20.0	32.4	162	3.45	1.267
13C8-PFOSA		10.0	9.30	93.0		1.169
D3-N-MeFOSA		10.0	2.73	27.3		1.357
D5-N-EtFOSA		10.0	2.01	20.1		1.389
D3-MeFOSAA		20.0	18.4	91.9		1.301
D5-EtFOSAA		20.0	8.38	41.9		1.315
d7-NMe-FOSE		100	58.3	58.1		1.342
d9-NEt-FOSE		100	57.2	57.2		1.376
13C3-HFPO-DA		40.0	31.2	78.1	2.93	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits; X = result reported separately.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Aaron Kyle

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40602-6_Form2_FC4L_050S27_SJ3393642.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Bismarck WWTP
Sample Collection:
22-Nov-2023 11:35

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ PFAS
Matrix:	BIOSOLIDS HUMAN	**Lab Sample I.D.:**	L40602-6 N
Sample Receipt Date:	23-Nov-2023	**Sample Size:**	0.605 g (dry)
Extraction Date:	26-Feb-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	02-Mar-2024 **Time:** 03:09:59	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_058 S: 48**
Dilution Factor:	2	**Blank Data Filename:**	FC4L_050 S: 21
Concentration Units:	ng/g (dry weight basis)	**Cal. Ver. Data Filename:**	FC4L_058 S: 46
		% Moisture:	75.8

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Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	X				
PFPeA	X				
PFHxA	X				
PFHpA	X				
PFOA	X				
PFNA	X				
PFDA	X				
PFUnA	X				
PFDoA	D J	0.852	0.529 (Q)	5.79	1.000
PFTrDA	X				
PFTeDA	X				
PFBS	X				
PFPeS	X				
PFHxS	X				
PFHpS	X				
PFOS	X				
PFNS	X				
PFDS	X				
PFDoS	X				
4:2 FTS	X				
6:2 FTS	X				
8:2 FTS	X				
PFOSA	X				
N-MeFOSA	X				
N-EtFOSA	X				
MeFOSAA	X				
EtFOSAA	X				
N-MeFOSE	X				
N-EtFOSE	X				
HFPO-DA	X				
ADONA	X				
9Cl-PF3ONS	X				
11Cl-PF3OUdS	X				
3:3 FTCA	X				
5:3 FTCA	X				
7:3 FTCA	X				
PFEESA	X				
PFMPA	X				
PFMBA	X				

NFDHA	X

(1) Where applicable, custom lab flags have been used on this report; D = dilution data; J = concentration less than limit of quantification; X = result reported separately.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

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Signed: Aaron Kyle

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48; Report Filename: PFC_FC_LC_PFAS_L40602-6_Form1A_FC4L_058S48_SJ3395952.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Bismarck WWTP
Sample Collection:
22-Nov-2023 11:35

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ PFAS		
Contract No.:	5123	**Lab Sample I.D.:**	L40602-6 N
Matrix:	BIOSOLIDS HUMAN	**Sample Size:**	0.605 g (dry)
Sample Receipt Date:	23-Nov-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	26-Feb-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	02-Mar-2024 **Time:** 03:09:59	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_058 S: 48**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_050 S: 21
Dilution Factor:	2	**Cal. Ver. Data Filename:**	FC4L_058 S: 46
Concentration Units:	ng absolute	**% Moisture:**	75.8

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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA	X					
13C5-PFPeA	X					
13C5-PFHxA	X					
13C4-PFHpA	X					
13C8-PFOA	X					
13C9-PFNA	X					
13C6-PFDA	X					
13C7-PFUnA	X					
13C2-PFDoA	D	5.00	1.92	38.4		1.077
13C2-PFTeDA	X					
13C3-PFBS	X					
13C3-PFHxS	X					
13C8-PFOS	X					
13C2-4:2 FTS	X					
13C2-6:2 FTS	X					
13C2-8:2 FTS	X					
13C8-PFOSA	X					
D3-N-MeFOSA	X					
D5-N-EtFOSA	X					
D3-MeFOSAA	X					
D5-EtFOSAA	X					
d7-NMe-FOSE	X					
d9-NEt-FOSE	X					
13C3-HFPO-DA	X					

(1) Where applicable, custom lab flags have been used on this report; D = dilution data; X = result reported separately.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Aaron Kyle

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48; Report Filename: PFC_FC_LC_PFAS_L40602-6_Form2_FC4L_058S48_SJ3395952.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Bismarck WWTP Dup
Sample Collection:
22-Nov-2023 11:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ PFAS
Matrix:	BIOSOLIDS HUMAN	**Lab Sample I.D.:**	L40602-7
Sample Receipt Date:	23-Nov-2023	**Sample Size:**	0.602 g (dry)
Extraction Date:	26-Feb-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	27-Feb-2024 **Time:** 19:34:09	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_050 S: 28**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_050 S: 21
Concentration Units:	ng/g (dry weight basis)	**Cal. Ver. Data Filename:**	FC4L_050 S: 15
		% Moisture:	76.1

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COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		1.33 (Q)		
PFPeA	ND		0.665 (Q)		
PFHxA		1.77	0.332 (Q)	4.54	1.000
PFHpA	ND		0.332 (Q)		
PFOA	J	0.414	0.332 (Q)	2.00	
PFNA	J	0.430	0.332 (Q)	2.87	
PFDA	J	0.532	0.332 (Q)	2.38	1.001
PFUnA	J	0.498	0.332 (Q)	5.92	1.001
PFDoA	X				
PFTrDA	ND		0.332 (Q)		
PFTeDA	K J	1.01	0.332 (Q)	4.72	1.002
PFBS	K	6.73	0.332 (Q)	341	0.997
PFPeS	ND		0.334 (Q)		
PFHxS	ND		0.332 (Q)		
PFHpS	ND		0.413 (S)		
PFOS	K	2.89	0.332 (Q)	4.49	
PFNS	ND		0.332 (Q)		
PFDS	ND		0.332 (Q)		
PFDoS	ND		0.332 (Q)		
4:2 FTS	ND		1.33 (Q)		
6:2 FTS	ND		1.20 (Q)		
8:2 FTS	ND		1.13 (Q)		
PFOSA	J	0.507	0.332 (Q)		
N-MeFOSA	ND		0.332 (Q)		
N-EtFOSA	ND		0.931 (Q)		
MeFOSAA		6.01	0.332 (Q)	2.28	
EtFOSAA		2.64	0.332 (Q)	1.14	
N-MeFOSE		18.0	3.32 (Q)		
N-EtFOSE	ND		3.32 (Q)		
HFPO-DA	ND		1.33 (Q)		
ADONA	ND		1.33 (Q)		
9Cl-PF3ONS	ND		1.33 (Q)		
11Cl-PF3OUdS	ND		1.33 (Q)		
3:3 FTCA	ND		1.33 (Q)		
5:3 FTCA		66.4	8.31 (Q)	1.35	1.061
7:3 FTCA	ND		8.31 (Q)		
PFEESA	ND		0.332 (Q)		
PFMPA	ND		0.665 (Q)		
PFMBA	ND		0.332 (Q)		

NFDHA	ND	0.665 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than limit of quantification; X = result reported separately.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

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Signed: Aaron Kyle

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48; Report Filename: PFC_FC_LC_PFAS_L40602-7_Form1A_FC4L_050S28_SJ3393643.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Bismarck WWTP Dup
Sample Collection:
22-Nov-2023 11:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ PFAS
Lab Sample I.D.:	L40602-7		
Matrix:	BIOSOLIDS HUMAN	**Sample Size:**	0.602 g (dry)
Sample Receipt Date:	23-Nov-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	26-Feb-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	27-Feb-2024 **Time:** 19:34:09	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_050 S: 28**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_050 S: 21
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_050 S: 15
Concentration Units:	ng absolute	**% Moisture:**	76.1

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LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	41.0	103		0.996
13C5-PFPeA		20.0	22.2	111		0.853
13C5-PFHxA		10.0	9.95	99.5	12.0	1.000
13C4-PFHpA		10.0	8.22	82.2		0.880
13C8-PFOA		10.0	9.15	91.5		0.999
13C9-PFNA		5.00	5.28	106		1.000
13C6-PFDA		5.00	4.93	98.6		0.999
13C7-PFUnA		5.00	3.14	62.8		1.037
13C2-PFDoA	X					
13C2-PFTeDA		5.00	2.41	48.3		1.181
13C3-PFBS		10.0	10.5	105	2.70	0.771
13C3-PFHxS		10.0	10.8	108	2.40	1.000
13C8-PFOS		10.1	10.8	108	2.30	1.000
13C2-4:2 FTS		20.2	28.9	143	1.97	0.812
13C2-6:2 FTS		20.0	20.5	103	2.32	1.002
13C2-8:2 FTS	V	20.0	36.8	184	3.48	1.267
13C8-PFOSA		10.0	10.7	107		1.168
D3-N-MeFOSA		10.0	3.34	33.4		1.356
D5-N-EtFOSA		10.0	2.85	28.5		1.388
D3-MeFOSAA		20.0	19.2	96.0		1.302
D5-EtFOSAA		20.0	7.94	39.7		1.316
d7-NMe-FOSE		100	62.9	62.7		1.341
d9-NEt-FOSE		100	70.2	70.1		1.374
13C3-HFPO-DA		40.0	34.1	85.2	2.81	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits; X = result reported separately.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Aaron Kyle_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40602-7_Form2_FC4L_050S28_SJ3393643.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Bismarck WWTP Dup
Sample Collection:
22-Nov-2023 11:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ PFAS
Matrix:	BIOSOLIDS HUMAN	**Lab Sample I.D.:**	L40602-7 N
Sample Receipt Date:	23-Nov-2023	**Sample Size:**	0.602 g (dry)
Extraction Date:	26-Feb-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	02-Mar-2024 **Time:** 03:23:45	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_058 S: 49**
Dilution Factor:	2	**Blank Data Filename:**	FC4L_050 S: 21
Concentration Units:	ng/g (dry weight basis)	**Cal. Ver. Data Filename:**	FC4L_058 S: 46
		% Moisture:	76.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	X				
PFPeA	X				
PFHxA	X				
PFHpA	X				
PFOA	X				
PFNA	X				
PFDA	X				
PFUnA	X				
PFDoA	K D J	0.837	0.532 (Q)	13.8	0.999
PFTrDA	X				
PFTeDA	X				
PFBS	X				
PFPeS	X				
PFHxS	X				
PFHpS	X				
PFOS	X				
PFNS	X				
PFDS	X				
PFDoS	X				
4:2 FTS	X				
6:2 FTS	X				
8:2 FTS	X				
PFOSA	X				
N-MeFOSA	X				
N-EtFOSA	X				
MeFOSAA	X				
EtFOSAA	X				
N-MeFOSE	X				
N-EtFOSE	X				
HFPO-DA	X				
ADONA	X				
9Cl-PF3ONS	X				
11Cl-PF3OUdS	X				
3:3 FTCA	X				
5:3 FTCA	X				
7:3 FTCA	X				
PFEESA	X				
PFMPA	X				
PFMBA	X				

NFDHA	X

(1) Where applicable, custom lab flags have been used on this report; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; D = dilution data; J = concentration less than limit of quantification; X = result reported separately.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

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Signed: Aaron Kyle

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40602-7_Form1A_FC4L_058S49_SJ3395953.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Bismarck WWTP Dup
Sample Collection:
22-Nov-2023 11:36

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	NDDEQ PFAS		
Contract No.:	5123	**Lab Sample I.D.:**	L40602-7 N
Matrix:	BIOSOLIDS HUMAN	**Sample Size:**	0.602 g (dry)
Sample Receipt Date:	23-Nov-2023	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	26-Feb-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	02-Mar-2024 **Time:** 03:23:45	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_058 S: 49**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_050 S: 21
Dilution Factor:	2	**Cal. Ver. Data Filename:**	FC4L_058 S: 46
Concentration Units:	ng absolute	**% Moisture:**	76.1

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA	X					
13C5-PFPeA	X					
13C5-PFHxA	X					
13C4-PFHpA	X					
13C8-PFOA	X					
13C9-PFNA	X					
13C6-PFDA	X					
13C7-PFUnA	X					
13C2-PFDoA	D	5.00	2.35	46.9		1.077
13C2-PFTeDA	X					
13C3-PFBS	X					
13C3-PFHxS	X					
13C8-PFOS	X					
13C2-4:2 FTS	X					
13C2-6:2 FTS	X					
13C2-8:2 FTS	X					
13C8-PFOSA	X					
D3-N-MeFOSA	X					
D5-N-EtFOSA	X					
D3-MeFOSAA	X					
D5-EtFOSAA	X					
d7-NMe-FOSE	X					
d9-NEt-FOSE	X					
13C3-HFPO-DA	X					

(1) Where applicable, custom lab flags have been used on this report; D = dilution data; X = result reported separately.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Aaron Kyle_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40602-7_Form2_FC4L_058S49_SJ3395953.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Mandan WWTP
Sample Collection:
15-Nov-2023 13:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ PFAS
Matrix:	BIOSOLIDS HUMAN	**Lab Sample I.D.:**	L40602-8
Sample Receipt Date:	23-Nov-2023	**Sample Size:**	0.124 g (dry)
Extraction Date:	26-Feb-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	27-Feb-2024 **Time:** 19:47:46	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_050 S: 29**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_050 S: 21
Concentration Units:	ng/g (dry weight basis)	**Cal. Ver. Data Filename:**	FC4L_050 S: 15
		% Moisture:	97.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		6.46 (Q)		
PFPeA	ND		3.23 (Q)		
PFHxA	J	2.93	1.62 (Q)	4.67	1.001
PFHpA	ND		1.62 (Q)		
PFOA	J	4.36	1.62 (Q)	2.12	
PFNA	J	2.29	1.62 (Q)	2.42	
PFDA		14.7	1.62 (Q)	2.83	1.000
PFUnA	J	3.32	1.62 (Q)	5.19	1.000
PFDoA		7.05	1.29 (Q)	6.76	1.000
PFTrDA	ND		1.62 (Q)		
PFTeDA	J	2.84	1.62 (Q)	2.85	0.999
PFBS	K J	1.97	1.62 (Q)	5.60	0.997
PFPeS	ND		1.62 (Q)		
PFHxS	ND		1.62 (Q)		
PFHpS	ND		1.62 (Q)		
PFOS		36.4	1.62 (Q)	2.46	
PFNS	ND		1.62 (Q)		
PFDS	J	2.29	1.62 (Q)	1.82	1.085
PFDoS	ND		1.62 (Q)		
4:2 FTS	ND		6.46 (Q)		
6:2 FTS	ND		5.82 (Q)		
8:2 FTS	ND		5.49 (Q)		
PFOSA		8.68	1.62 (Q)		
N-MeFOSA	K J	2.04	1.62 (Q)	0.94	
N-EtFOSA	ND		4.52 (Q)		
MeFOSAA		28.2	1.62 (Q)	2.19	
EtFOSAA		10.6	1.62 (Q)	1.52	
N-MeFOSE	J	17.7	16.2 (Q)		
N-EtFOSE	ND		16.2 (Q)		
HFPO-DA	ND		6.46 (Q)		
ADONA	ND		6.46 (Q)		
9Cl-PF3ONS	ND		6.48 (Q)		
11Cl-PF3OUdS	ND		6.47 (Q)		
3:3 FTCA	ND		6.46 (Q)		
5:3 FTCA	J	40.5	40.4 (Q)	1.27	1.061
7:3 FTCA	ND		40.4 (Q)		
PFEESA	ND		1.62 (Q)		
PFMPA	ND		3.23 (Q)		
PFMBA	ND		1.62 (Q)		

NFDHA	ND	3.23 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than limit of quantification.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Aaron Kyle

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48; Report Filename: PFC_FC_LC_PFAS_L40602-8_Form1A_FC4L_050S29_SJ3393644.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Mandan WWTP
Sample Collection:
15-Nov-2023 13:30

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	NDDEQ PFAS
Matrix:	BIOSOLIDS HUMAN	**Lab Sample I.D.:**	L40602-8
Sample Receipt Date:	23-Nov-2023	**Sample Size:**	0.124 g (dry)
Extraction Date:	26-Feb-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	27-Feb-2024 **Time:** 19:47:46	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_050 S: 29**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_050 S: 21
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_050 S: 15
		% Moisture:	97.5

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	40.0	100		1.000
13C5-PFPeA		20.0	21.1	106		0.853
13C5-PFHxA		10.0	9.17	91.7	12.3	1.000
13C4-PFHpA		10.0	9.22	92.2		0.880
13C8-PFOA		10.0	9.22	92.2		0.999
13C9-PFNA		5.00	4.99	99.7		1.000
13C6-PFDA		5.00	4.64	92.9		0.999
13C7-PFUnA		5.00	4.68	93.6		1.043
13C2-PFDoA		5.00	4.25	84.9		1.082
13C2-PFTeDA		5.00	2.11	42.3		1.176
13C3-PFBS		10.0	9.87	98.5	2.75	0.771
13C3-PFHxS		10.0	9.95	99.4	2.28	0.999
13C8-PFOS		10.1	10.3	102	2.16	1.000
13C2-4:2 FTS		20.2	21.4	106	1.97	0.812
13C2-6:2 FTS		20.0	18.6	92.9	2.29	1.002
13C2-8:2 FTS		20.0	19.1	95.3	3.86	1.270
13C8-PFOSA		10.0	14.4	144		1.161
D3-N-MeFOSA		10.0	3.82	38.2		1.347
D5-N-EtFOSA		10.0	2.69	26.9		1.380
D3-MeFOSAA		20.0	29.4	147		1.308
D5-EtFOSAA	V	20.0	32.2	161		1.331
d7-NMe-FOSE		100	95.0	94.7		1.332
d9-NEt-FOSE		100	88.3	88.2		1.366
13C3-HFPO-DA		40.0	32.8	81.9	2.93	1.036

(1) Where applicable, custom lab flags have been used on this report; V = surrogate recovery is not within method/contract control limits.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Aaron Kyle_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_L40602-8_Form2_FC4L_050S29_SJ3393644.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 1A

PERFLUORINATED ORGANICS ANALYSIS REPORT

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Project No.	N/A		
Contract No.:	5123	**Lab Sample I.D.:**	WG88919-101
Matrix:	SOLID	**Sample Size:**	0.500 g
Sample Receipt Date:	N/A	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	26-Feb-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	27-Feb-2024 **Time:** 17:59:27	**Column ID:**	C18
Extract Volume (uL):	4000	**Sample Data Filename:**	**FC4L_050 S: 21**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_050 S: 21
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_050 S: 15
Concentration Units:	ng/g		

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

COMPOUND	LAB FLAG [1]	CONC. FOUND	REPORTING LIMIT (RL)[2]	RATIO	RRT
PFBA	ND		1.60 (Q)		
PFPeA	ND		0.800 (Q)		
PFHxA	ND		0.400 (Q)		
PFHpA	ND		0.400 (Q)		
PFOA	ND		0.400 (Q)		
PFNA	ND		0.400 (Q)		
PFDA	ND		0.400 (Q)		
PFUnA	ND		0.400 (Q)		
PFDoA	ND		0.320 (Q)		
PFTrDA	ND		0.400 (Q)		
PFTeDA	ND		0.400 (Q)		
PFBS	ND		0.400 (Q)		
PFPeS	ND		0.402 (Q)		
PFHxS	ND		0.400 (Q)		
PFHpS	ND		0.400 (Q)		
PFOS	ND		0.400 (Q)		
PFNS	ND		0.400 (Q)		
PFDS	ND		0.400 (Q)		
PFDoS	ND		0.400 (Q)		
4:2 FTS	ND		1.60 (Q)		
6:2 FTS	K J	1.58	1.44 (Q)	0.49	1.002
8:2 FTS	ND		1.36 (Q)		
PFOSA	ND		0.400 (Q)		
N-MeFOSA	ND		0.400 (Q)		
N-EtFOSA	ND		1.12 (Q)		
MeFOSAA	ND		0.400 (Q)		
EtFOSAA	ND		0.400 (Q)		
N-MeFOSE	ND		4.00 (Q)		
N-EtFOSE	ND		4.00 (Q)		
HFPO-DA	ND		1.60 (Q)		
ADONA	ND		1.60 (Q)		
9Cl-PF3ONS	ND		1.60 (Q)		
11Cl-PF3OUdS	ND		1.60 (Q)		
3:3 FTCA	ND		1.60 (Q)		
5:3 FTCA	ND		10.0 (Q)		
7:3 FTCA	ND		10.0 (Q)		
PFEESA	ND		0.400 (Q)		
PFMPA	ND		0.800 (Q)		
PFMBA	ND		0.400 (Q)		

NFDHA	ND	0.800 (Q)

(1) Where applicable, custom lab flags have been used on this report; ND = not detected at RL; K = peak detected but did not meet quantification criteria, result reported represents the estimated maximum possible concentration; J = concentration less than limit of quantification.
(2) Reporting Limit (Code): S = sample detection limit; M = method detection limit; L = lowest calibration level equivalent; Q = minimum reporting level.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Aaron Kyle

For Axys Internal Use Only [XSL Template: FC2-Form1A.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_WG88919-101_Form1A_FC4L_050S21_SJ3393635.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

CLIENT SAMPLE NO.
Lab Blank
Sample Collection:
N/A

Form 2

PERFLUORINATED ORGANICS ANALYSIS REPORT

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Project No.**	N/A
Matrix:	SOLID	**Lab Sample I.D.:**	WG88919-101
Sample Receipt Date:	N/A	**Sample Size:**	0.500 g
Extraction Date:	26-Feb-2024	**Initial Calibration Date:**	01-Mar-2023
Analysis Date:	27-Feb-2024 **Time:** 17:59:27	**Instrument ID:**	LCMS/MS
Extract Volume (uL):	4000	**Column ID:**	C18
Injection Volume (uL):	2	**Sample Data Filename:**	**FC4L_050 S: 21**
Dilution Factor:	N/A	**Blank Data Filename:**	FC4L_050 S: 21
Concentration Units:	ng absolute	**Cal. Ver. Data Filename:**	FC4L_050 S: 15

This page is part of a total report that contains information necessary for accreditation compliance.
Results are compliant with NELAP accreditation described in the total report. Sample results relate only to the sample tested.

LABELED COMPOUND	LAB FLAG [1]	SPIKE CONC.	CONC. FOUND	R(%) [2]	RATIO	RRT
13C4-PFBA		40.0	40.3	101		0.997
13C5-PFPeA		20.0	20.7	104		0.853
13C5-PFHxA		10.0	9.27	92.7	11.8	1.000
13C4-PFHpA		10.0	9.41	94.1		0.879
13C8-PFOA		10.0	9.04	90.4		0.999
13C9-PFNA		5.00	5.05	101		1.000
13C6-PFDA		5.00	4.55	91.0		1.000
13C7-PFUnA		5.00	4.69	93.9		1.044
13C2-PFDoA		5.00	4.59	91.7		1.083
13C2-PFTeDA		5.00	3.61	72.2		1.177
13C3-PFBS		10.0	9.84	98.2	2.77	0.771
13C3-PFHxS		10.0	9.64	96.2	2.34	0.999
13C8-PFOS		10.1	10.7	107	2.22	1.000
13C2-4:2 FTS		20.2	20.9	104	1.91	0.812
13C2-6:2 FTS		20.0	19.0	95.3	2.30	1.002
13C2-8:2 FTS		20.0	20.5	103	4.03	1.269
13C8-PFOSA		10.0	11.4	114		1.162
D3-N-MeFOSA		10.0	6.16	61.6		1.347
D5-N-EtFOSA		10.0	5.35	53.5		1.380
D3-MeFOSAA		20.0	26.0	130		1.307
D5-EtFOSAA		20.0	26.4	132		1.330
d7-NMe-FOSE		100	93.6	93.3		1.332
d9-NEt-FOSE		100	95.5	95.4		1.366
13C3-HFPO-DA		40.0	31.6	79.0	2.79	1.036

(1) Where applicable, custom lab flags have been used on this report.
(2) R(%) = percent recovery.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Aaron Kyle_____

For Axys Internal Use Only [XSL Template: FC2-Form2.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48;
Report Filename: PFC_FC_LC_PFAS_WG88919-101_Form2_FC4L_050S21_SJ3393635.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 8A

PERFLUORINATED ORGANICS ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Lab Sample I.D.:**	WG88919-102
Matrix:	SOLID	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	26-Feb-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	27-Feb-2024 **Time:** 17:32:04	**Column ID:**	C18
Extract Volume (uL):	4000	**OPR Data Filename:**	**FC4L_050 S: 19**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_050 S: 21
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_050 S: 15

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 1 mL EXTRACT VOLUME.

COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
PFBA			20.0	20.8	104	1.004
PFPeA			10.0	10.1	101	1.000
PFHxA		4.32	5.00	4.88	97.5	1.000
PFHpA		2.12	5.00	5.34	107	1.000
PFOA		1.92	5.00	5.39	108	
PFNA		2.60	5.00	5.42	108	
PFDA		2.60	5.00	4.78	95.7	1.000
PFUnA		4.48	5.00	5.37	107	1.000
PFDoA		7.40	4.06	4.34	107	0.999
PFTrDA		2.80	5.00	5.32	106	0.956
PFTeDA		2.51	5.00	5.27	105	1.000
PFBS		2.60	5.00	4.81	96.3	1.000
PFPeS		2.40	5.00	5.44	109	0.869
PFHxS		2.45	5.00	4.83	96.6	
PFHpS		2.27	5.00	5.77	115	0.937
PFOS		2.35	5.00	4.90	98.0	
PFNS		2.29	5.00	4.53	90.5	1.043
PFDS		2.28	5.00	5.19	104	1.084
PFDoS		2.19	5.00	4.45	88.9	1.185
4:2 FTS		0.40	20.0	20.1	101	0.999
6:2 FTS		0.37	18.0	18.7	104	1.001
8:2 FTS		0.49	16.9	14.9	88.1	0.999
PFOSA			5.00	5.26	105	
N-MeFOSA		0.53	5.00	5.51	110	
N-EtFOSA		0.51	14.0	13.0	93.2	
MeFOSAA		1.84	5.00	4.64	92.8	
EtFOSAA		1.07	5.00	4.67	93.3	
N-MeFOSE			50.0	46.0	92.1	
N-EtFOSE			50.0	44.6	89.3	
HFPO-DA		2.79	20.0	20.1	101	1.001
ADONA	N	1.18	20.0	26.5	132	1.115
9Cl-PF3ONS		3.10	20.0	19.1	95.7	0.963
11Cl-PF3OUdS		3.23	20.0	19.6	97.8	1.043
3:3 FTCA		1.63	20.0	19.5	97.5	
5:3 FTCA		1.37	125	127	102	1.061

COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
7:3 FTCA		0.64	125	96.6	77.2	1.397
PFEESA		9.27	5.00	5.55	111	1.042
PFMPA			10.0	10.4	104	
PFMBA			5.00	5.20	104	1.070
NFDHA			10.0	7.12	71.2	

(1) Where applicable, custom lab flags have been used on this report; N = authentic recovery in the OPR is not within method/contract control limits.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Aaron Kyle

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

For Axys Internal Use Only [XSL Template: FC2-Form8A.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48; Report Filename: PFC_FC_LC_PFAS_WG88919-102_Form8A_SJ3393632.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 8B

PERFLUORINATED ORGANICS ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Lab Sample I.D.:**	WG88919-102
Matrix:	SOLID	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	26-Feb-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	27-Feb-2024 **Time:** 17:32:04	**Column ID:**	C18
Extract Volume (uL):	4000	**OPR Data Filename:**	**FC4L_050 S: 19**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_050 S: 21
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_050 S: 15

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 1 mL EXTRACT VOLUME.

LABELED COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
13C4-PFBA			40.0	40.3	101	1.000
13C5-PFPeA			20.0	21.9	109	0.853
13C5-PFHxA		13.2	10.0	9.46	94.6	1.000
13C4-PFHpA			10.0	9.49	94.9	0.880
13C8-PFOA			10.0	9.15	91.5	1.000
13C9-PFNA			5.00	5.13	103	1.000
13C6-PFDA			5.00	4.77	95.4	1.000
13C7-PFUnA			5.00	4.68	93.5	1.044
13C2-PFDoA			5.00	4.53	90.6	1.083
13C2-PFTeDA			5.00	3.51	70.2	1.177
13C3-PFBS		2.72	10.0	9.67	96.5	0.772
13C3-PFHxS		2.38	10.0	9.99	99.7	1.000
13C8-PFOS		2.15	10.1	9.88	98.2	1.000
13C2-4:2 FTS		1.66	20.2	19.1	94.9	0.812
13C2-6:2 FTS		2.32	20.0	19.1	95.4	1.001
13C2-8:2 FTS		4.00	20.0	20.1	100	1.269
13C8-PFOSA			10.0	10.8	108	1.161
D3-N-MeFOSA			10.0	5.51	55.1	1.347
D5-N-EtFOSA			10.0	4.96	49.6	1.379
D3-MeFOSAA			20.0	25.8	129	1.306
D5-EtFOSAA			20.0	25.6	128	1.329
d7-NMe-FOSE			100	85.4	85.2	1.331
d9-NEt-FOSE			100	86.2	86.1	1.365
13C3-HFPO-DA		2.88	40.0	33.1	82.7	1.036

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Aaron Kyle

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: PFC_FC_LC_PFAS_WG88919-102_Form8B_SJ3393632.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 8A

PERFLUORINATED ORGANICS ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Lab Sample I.D.:**	WG88919-103
Matrix:	SOLID	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	26-Feb-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	27-Feb-2024 **Time:** 17:18:43	**Column ID:**	C18
Extract Volume (uL):	4000	**OPR Data Filename:**	**FC4L_050 S: 18**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_050 S: 21
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_050 S: 15

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 1 mL EXTRACT VOLUME.

COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
PFBA			6.40	6.24	97.5	1.004
PFPeA			3.20	2.93	91.7	1.000
PFHxA		4.18	1.60	1.49	93.2	1.000
PFHpA		2.10	1.60	1.57	98.4	1.001
PFOA		2.00	1.60	1.63	102	
PFNA		2.40	1.60	1.67	104	
PFDA		2.94	1.60	1.47	92.0	1.000
PFUnA		4.40	1.60	1.61	101	1.000
PFDoA		8.37	1.30	1.25	96.1	1.000
PFTrDA		3.07	1.60	1.62	101	0.957
PFTeDA		2.34	1.60	1.55	96.6	1.000
PFBS		2.35	1.60	1.27	79.2	1.000
PFPeS		2.44	1.60	1.62	101	0.868
PFHxS		2.15	1.60	1.42	88.8	
PFHpS		1.97	1.60	1.64	102	0.937
PFOS		2.56	1.60	1.50	93.5	
PFNS		2.26	1.60	1.35	84.2	1.043
PFDS		2.05	1.60	1.43	89.7	1.084
PFDoS		2.15	1.60	1.25	78.1	1.185
4:2 FTS		0.40	6.40	5.99	93.6	1.000
6:2 FTS		0.40	5.75	7.13	124	1.000
8:2 FTS		0.51	5.42	4.67	86.0	1.000
PFOSA			1.60	1.53	95.8	
N-MeFOSA		0.51	1.60	1.54	95.9	
N-EtFOSA		0.43	4.48	3.58	79.8	
MeFOSAA		1.61	1.60	0.900	56.2	
EtFOSAA		1.52	1.60	1.39	86.9	
N-MeFOSE			16.0	13.8	86.1	
N-EtFOSE			16.0	13.3	83.0	
HFPO-DA		2.69	6.40	5.91	92.3	1.000
ADONA		1.18	6.40	7.79	122	1.115
9Cl-PF3ONS		2.98	6.40	6.08	94.9	0.964
11Cl-PF3OUdS		3.09	6.40	5.40	84.4	1.043
3:3 FTCA		1.05	6.40	5.19	81.1	
5:3 FTCA		1.40	40.0	37.5	93.8	1.061

COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
7:3 FTCA		0.65	40.0	27.2	68.1	1.397
PFEESA		9.92	1.60	1.65	103	1.042
PFMPA			3.20	2.94	91.9	
PFMBA			1.60	1.53	95.4	1.070
NFDHA			3.20	1.75	54.8	

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Aaron Kyle

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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SGS AXYS METHOD MLA-110 Rev 02

Form 8B

PERFLUORINATED ORGANICS ONGOING PRECISION AND RECOVERY (OPR)

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Contract No.:	5123	**Lab Sample I.D.:**	WG88919-103
Matrix:	SOLID	**Initial Calibration Date:**	01-Mar-2023
Extraction Date:	26-Feb-2024	**Instrument ID:**	LCMS/MS
Analysis Date:	27-Feb-2024 **Time:** 17:18:43	**Column ID:**	C18
Extract Volume (uL):	4000	**OPR Data Filename:**	**FC4L_050 S: 18**
Injection Volume (uL):	2	**Blank Data Filename:**	FC4L_050 S: 21
Dilution Factor:	N/A	**Cal. Ver. Data Filename:**	FC4L_050 S: 15

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT, BASED ON A 1 mL EXTRACT VOLUME.

LABELED COMPOUND	LAB FLAG [1]	RATIO	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	% RECOVERY	RRT
13C4-PFBA			40.0	40.6	101	1.000
13C5-PFPeA			20.0	21.4	107	0.853
13C5-PFHxA		14.0	10.0	9.36	93.6	1.000
13C4-PFHpA			10.0	9.20	92.0	0.878
13C8-PFOA			10.0	9.08	90.8	0.999
13C9-PFNA			5.00	5.24	105	1.000
13C6-PFDA			5.00	4.60	92.0	1.000
13C7-PFUnA			5.00	4.47	89.5	1.044
13C2-PFDoA			5.00	4.27	85.5	1.083
13C2-PFTeDA			5.00	3.38	67.5	1.177
13C3-PFBS		2.76	10.0	10.3	103	0.770
13C3-PFHxS		2.39	10.0	10.0	100	1.000
13C8-PFOS		2.13	10.1	10.4	103	1.000
13C2-4:2 FTS		1.87	20.2	20.3	101	0.812
13C2-6:2 FTS		2.22	20.0	19.1	95.8	1.002
13C2-8:2 FTS		4.15	20.0	20.2	101	1.270
13C8-PFOSA			10.0	11.1	111	1.161
D3-N-MeFOSA			10.0	5.86	58.6	1.347
D5-N-EtFOSA			10.0	4.89	48.9	1.379
D3-MeFOSAA			20.0	26.6	133	1.307
D5-EtFOSAA			20.0	25.7	129	1.330
d7-NMe-FOSE			100	89.5	89.2	1.331
d9-NEt-FOSE			100	90.4	90.4	1.365
13C3-HFPO-DA		2.90	40.0	32.3	80.7	1.036

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Aaron Kyle

These pages are part of a larger report that may contain information necessary for full data evaluation. Results reported relate only to the sample tested.

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Report Filename: PFC_FC_LC_PFAS_WG88919-103_Form8B_SJ3393630.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 3A
INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 01-Mar-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A

CS1 Data Filename: FC3L_107 S: 16

CS2 Data Filename: FC3L_107 S: 17

CS3 Data Filename: FC3L_107 S: 18

CS4 Data Filename: FC3L_107 S: 19

CS5 Data Filename: FC3L_107 S: 20

CS6 Data Filename: FC3L_107 S: 21

CS7 Data Filename: FC3L_107 S: 22

CS8 Data Filename: FC3L_107 S: 23

		RELATIVE RESPONSE (RR)										
COMPOUND	LAB FLAG [1]	CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	MEAN RR	CV (%RSD)[2]
PFBA			0.86	0.83	0.85	0.81	0.85	0.82	0.82	0.82	0.83	2.14
PFPeA			1.14	1.11	1.07	0.98	1.07	1.04	1.00	1.00	1.05	5.39
PFHxA			1.33	1.23	1.13	1.03	1.04	1.00	1.01	1.05	1.10	11.0
PFHpA			1.15	1.24	1.20	1.13	1.16	1.11	1.13	1.13	1.16	3.70
PFOA			1.47	1.32	1.34	1.34	1.26	1.29	1.28	1.27	1.32	5.22
PFNA			1.08	1.00	0.99	1.04	0.99	0.99	0.98	0.97	1.01	3.77
PFDA			0.83	0.74	0.70	0.66	0.74	0.67	0.70	0.68	0.71	7.38
PFUnA			0.78	0.76	0.77	0.70	0.75	0.71	0.70	0.70	0.73	4.69
PFDoA			1.18	1.14	1.11	1.12	1.17	1.09	1.07	1.02	1.11	4.78
PFTrDA			0.98	0.92	0.84	0.81	0.83	0.80	0.80	0.75	0.84	8.87
PFTeDA			0.87	0.83	0.77	0.75	0.78	0.76	0.74	0.68	0.77	7.62
PFBS			1.14	1.01	1.05	1.05	1.08	1.04	1.06	1.04	1.06	3.67
PFPeS			1.00	0.92	0.99	0.95	1.01	0.94	0.96	0.91	0.96	3.99
PFHxS			1.37	1.28	1.26	1.14	1.26	1.16	1.19	1.20	1.23	6.14
PFHpS			1.11	1.09	1.00	0.97	1.02	0.99	1.00	0.93	1.01	5.99
PFOS			1.25	1.14	1.12	1.02	1.11	1.17	1.10	1.06	1.12	6.16
PFNS			1.05	1.00	1.02	0.97	1.01	0.96	0.99	0.97	0.99	2.96
PFDS			0.93	0.97	0.92	0.89	0.94	0.93	0.95	0.94	0.94	2.43
PFDoS			0.84	0.82	0.86	0.79	0.86	0.84	0.87	0.87	0.85	3.31
4:2 FTS			0.53	0.50	0.49	0.45	0.49	0.47	0.45	0.42	0.47	7.27
6:2 FTS			0.51	0.46	0.48	0.43	0.46	0.44	0.43	0.40	0.45	7.25
8:2 FTS			0.35	0.30	0.32	0.30	0.32	0.30	0.30	0.25	0.31	9.70
PFOSA			0.97	0.96	0.93	0.89	0.92	0.90	0.90	0.91	0.92	3.33
N-MeFOSA			0.90	1.05	0.93	0.93	0.92	0.96	0.95	0.90	0.94	4.82
N-EtFOSA			1.15	1.14	1.08	1.10	1.18	1.10	1.18	1.13	1.13	3.25
MeFOSAA			0.87	0.93	1.00	0.91	0.94	0.88	0.86		0.91	5.56
EtFOSAA			0.77	0.75	0.68	0.75	0.78	0.73	0.74		0.74	4.16
N-MeFOSE			0.81	0.78	0.77	0.74	0.77	0.76	0.74	0.73	0.76	3.65
N-EtFOSE			1.08	1.03	1.03	0.99	1.04	1.02	1.01	0.98	1.02	3.19
HFPO-DA			1.02	0.96	0.96	0.89	0.97	0.92	0.91	0.87	0.94	5.20
ADONA			4.87	4.87	4.83	4.56	4.86	4.80	4.80	4.74	4.79	2.17
9Cl-PF3ONS			1.38	1.26	1.35	1.28	1.34	1.29	1.31	1.19	1.30	4.43
11Cl-PF3OUdS			0.76	0.73	0.75	0.71	0.78	0.74	0.77	0.71	0.74	3.36
3:3 FTCA			0.07	0.06	0.06	0.06	0.06	0.07	0.07	0.08	0.07	8.61
5:3 FTCA			0.18	0.16	0.17	0.17	0.17	0.17	0.18	0.21	0.18	7.83
7:3 FTCA			0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.12	0.10	7.99
PFEESA			2.86	2.57	2.60	2.50	2.56	2.51	2.57	2.87	2.63	5.64
PFMPA			1.62	1.60	1.57	1.47	1.56	1.54	1.51	1.59	1.56	3.24

COMPOUND	LAB FLAG [1]	RELATIVE RESPONSE (RR) CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	MEAN RR	CV (%RSD)[2]
PFMBA			2.14	2.14	2.16	2.06	2.17	2.09	2.14	2.30	2.15	3.37
NFDHA			0.09	0.09	0.09	0.08	0.09	0.09	0.08	0.08	0.09	5.65

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see SGS AXYS METHOD MLA-110 Rev 02

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Jordan Berends

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SGS AXYS METHOD MLA-110 Rev 02

Form 3B
INITIAL CALIBRATION RELATIVE RESPONSES

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 01-Mar-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A
CS1 Data Filename: FC3L_107 S: 16
CS2 Data Filename: FC3L_107 S: 17
CS3 Data Filename: FC3L_107 S: 18
CS4 Data Filename: FC3L_107 S: 19
CS5 Data Filename: FC3L_107 S: 20
CS6 Data Filename: FC3L_107 S: 21
CS7 Data Filename: FC3L_107 S: 22
CS8 Data Filename: FC3L_107 S: 23

		RELATIVE RESPONSE (RR)									
LABELED COMPOUND	LAB FLAG [1]	CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8	MEAN RR	CV (%RSD)[2]
13C4-PFBA			1.07	1.11	1.08	1.05	1.08	1.09	1.09	1.07	1.08	1.60
13C5-PFPeA			0.93	0.95	0.93	0.92	0.94	0.93	0.95	0.90	0.93	1.71
13C5-PFHxA			0.65	0.70	0.66	0.64	0.69	0.66	0.66	0.63	0.66	3.33
13C4-PFHpA			3.41	3.65	3.45	3.36	3.21	3.53	3.36	3.31	3.41	3.96
13C8-PFOA			3.71	3.92	3.85	3.61	3.62	3.81	3.68	3.81	3.75	3.04
13C9-PFNA			1.02	1.04	1.03	1.05	1.06	1.05	1.04	1.02	1.04	1.56
13C6-PFDA			0.99	1.10	1.05	1.02	1.02	1.04	1.00	1.01	1.03	3.30
13C7-PFUnA			1.07	1.14	1.11	1.07	1.10	1.09	1.06	1.04	1.08	3.02
13C2-PFDoA			0.88	0.94	0.91	0.85	0.87	0.90	0.88	0.95	0.90	3.90
13C2-PFTeDA			0.92	0.98	0.98	0.94	0.98	0.96	0.96	1.06	0.97	4.24
13C3-PFBS			1.31	1.40	1.31	1.24	1.37	1.30	1.25	1.08	1.28	7.48
13C3-PFHxS			1.10	1.15	1.12	1.07	1.12	1.11	1.12	1.10	1.11	2.19
13C8-PFOS			1.04	1.03	1.05	1.06	1.05	1.04	0.99	1.05	1.04	1.93
13C2-4:2 FTS			1.22	1.17	1.10	1.15	1.11	1.01	0.95	0.92	1.08	9.94
13C2-6:2 FTS			1.00	1.00	0.94	0.97	0.98	0.93	0.97	1.01	0.98	2.97
13C2-8:2 FTS			1.49	1.45	1.42	1.44	1.43	1.34	1.33	1.40	1.41	3.76
13C8-PFOSA			1.72	1.76	1.77	1.72	1.77	1.75	1.73	1.93	1.77	3.87
D3-N-MeFOSA			0.24	0.26	0.27	0.26	0.27	0.25	0.25	0.28	0.26	5.17
D5-N-EtFOSA			0.25	0.26	0.26	0.25	0.25	0.26	0.24	0.26	0.25	3.36
D3-MeFOSAA			0.45	0.45	0.46	0.42	0.47	0.50	0.62		0.48	13.6
D5-EtFOSAA			0.40	0.40	0.39	0.39	0.42	0.43	0.52		0.42	10.7
d7-NMe-FOSE			2.21	2.19	2.26	2.22	2.24	2.17	2.19	2.37	2.23	2.77
d9-NEt-FOSE			1.85	1.84	1.90	1.88	1.88	1.83	1.80	1.95	1.87	2.49
13C3-HFPO-DA			0.44	0.46	0.45	0.44	0.45	0.44	0.43	0.41	0.44	3.38

(1) Where applicable, custom lab flags have been used on this report.
(2) For contract CV specifications, see SGS AXYS METHOD MLA-110 Rev 02.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Jordan Berends

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Report Filename: GENERIC-SPECS_FC_LC_01-Mar-2023_FC3L__Form3B_GS107803.html; Workgroup: WG88919; Design ID: 5278]

SGS AXYS METHOD MLA-110 Rev 02

Form 3C
LC MS/MS INITIAL CALIBRATION RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 01-Mar-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A
CS1 Data Filename: FC3L_107 S: 16
CS2 Data Filename: FC3L_107 S: 17
CS3 Data Filename: FC3L_107 S: 18
CS4 Data Filename: FC3L_107 S: 19
CS5 Data Filename: FC3L_107 S: 20
CS6 Data Filename: FC3L_107 S: 21
CS7 Data Filename: FC3L_107 S: 22
CS8 Data Filename: FC3L_107 S: 23

		RATIOS							
COMPOUND	**LAB FLAG [1]**	**CS0**	**CS1**	**CS2**	**CS3**	**CS4**	**CS5**	**CS6**	**CS7**	**CS8**
PFBA										
PFPeA										
PFHxA			5.24	5.95	5.71	5.10	5.29	5.21	5.37	5.23
PFHpA			2.11	2.24	2.38	2.36	2.23	2.23	2.23	2.21
PFOA			2.14	1.90	2.05	2.03	1.95	1.99	2.00	1.99
PFNA			2.97	2.71	2.79	2.82	2.69	2.84	2.83	2.78
PFDA			3.28	3.99	2.90	3.07	3.10	2.98	3.12	3.01
PFUnA			5.66	5.27	4.47	4.61	4.63	4.60	4.49	4.49
PFDoA			7.35	7.43	7.38	7.72	7.38	7.27	7.30	7.39
PFTrDA			3.39	3.56	3.13	3.19	3.16	3.16	3.17	3.20
PFTeDA			2.56	2.87	2.55	2.81	2.83	2.83	2.78	2.79
PFBS			2.64	2.75	2.72	2.70	2.75	2.74	2.76	2.72
PFPeS			2.35	2.06	2.47	2.30	2.27	2.33	2.37	2.34
PFHxS			2.33	2.29	2.49	2.42	2.61	2.44	2.50	2.45
PFHpS			2.38	2.02	2.09	2.03	2.15	2.08	2.09	2.07
PFOS			2.07	2.49	2.62	2.63	2.60	2.67	2.61	2.60
PFNS			2.39	2.19	2.34	2.41	2.27	2.28	2.24	2.30
PFDS			2.05	2.40	2.30	2.33	2.30	2.30	2.31	2.30
PFDoS			1.86	2.05	2.15	2.13	2.14	2.23	2.18	2.21
4:2 FTS			0.45	0.45	0.45	0.43	0.45	0.45	0.44	0.45
6:2 FTS			0.44	0.42	0.43	0.40	0.41	0.41	0.41	0.42
8:2 FTS			0.55	0.48	0.51	0.53	0.52	0.53	0.53	0.54
PFOSA										
N-MeFOSA			0.48	0.60	0.52	0.53	0.53	0.53	0.54	0.53
N-EtFOSA			0.49	0.53	0.49	0.51	0.52	0.53	0.54	0.53
MeFOSAA			1.36	2.00	2.51	2.02	1.92	1.89	1.91	
EtFOSAA			1.43	1.05	1.05	1.25	1.14	1.12	1.15	
N-MeFOSE										
N-EtFOSE										
HFPO-DA			2.92	2.68	2.91	2.82	2.91	2.81	2.89	2.83
ADONA			1.15	1.21	1.19	1.19	1.20	1.18	1.18	1.19
9Cl-PF3ONS			3.15	2.99	3.20	3.26	3.20	3.15	3.15	3.18
11Cl-PF3OUdS			3.16	3.03	3.18	3.12	3.25	3.11	3.16	3.14
3:3 FTCA			1.60	1.42	1.60	1.50	1.59	1.60	1.57	1.60
5:3 FTCA			1.37	1.31	1.40	1.40	1.39	1.40	1.41	1.41

COMPOUND	LAB FLAG [1]	RATIOS CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8
7:3 FTCA			0.62	0.67	0.65	0.68	0.66	0.64	0.66	0.66
PFEESA			7.86	9.04	8.42	8.79	8.42	8.33	8.40	8.78
PFMPA										
PFMBA										
NFDHA										

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Jordan Berends

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SGS AXYS METHOD MLA-110 Rev 02

Form 3D
LC MS/MS INITIAL CALIBRATION RATIOS

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date: 01-Mar-2023

Instrument ID: LC MS/MS

LC Column ID: C18

CS0 Data Filename: N/A
CS1 Data Filename: FC3L_107 S: 16
CS2 Data Filename: FC3L_107 S: 17
CS3 Data Filename: FC3L_107 S: 18
CS4 Data Filename: FC3L_107 S: 19
CS5 Data Filename: FC3L_107 S: 20
CS6 Data Filename: FC3L_107 S: 21
CS7 Data Filename: FC3L_107 S: 22
CS8 Data Filename: FC3L_107 S: 23

		RATIOS							
LABELED COMPOUND	LAB FLAG[1]	CS0	CS1	CS2	CS3	CS4	CS5	CS6	CS7	CS8
13C4-PFBA										
13C5-PFPeA										
13C5-PFHxA			14.8	14.6	14.9	13.9	14.9	15.4	16.1	14.7
13C4-PFHpA										
13C8-PFOA										
13C9-PFNA										
13C6-PFDA										
13C7-PFUnA										
13C2-PFDoA										
13C2-PFTeDA										
13C3-PFBS			2.83	2.71	2.68	2.63	2.82	2.82	2.70	2.77
13C3-PFHxS			2.45	2.41	2.44	2.36	2.39	2.49	2.50	2.50
13C8-PFOS			2.24	2.18	2.09	2.25	2.16	2.28	2.19	2.17
13C2-4:2 FTS			1.85	1.81	1.78	1.77	1.74	1.51	1.22	0.55
13C2-6:2 FTS			2.22	2.19	2.07	2.13	2.03	1.83	1.52	0.74
13C2-8:2 FTS			3.37	3.31	3.31	3.25	3.06	2.99	2.34	1.27
13C8-PFOSA										
D3-N-MeFOSA										
D5-N-EtFOSA										
D3-MeFOSAA										
D5-EtFOSAA										
d7-NMe-FOSE										
d9-NEt-FOSE										
13C3-HFPO-DA			2.93	2.85	2.85	2.92	2.92	2.87	2.94	3.04

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: Jordan Berends

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SGS AXYS METHOD MLA-110 Rev 02

Form 4A
LC MS/MS CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	01-Mar-2023	**VER Data Filename:**	FC4L_050 S: 15
Instrument ID:	LCMS/MS	**Analysis Date:**	27-Feb-2024
LC Column ID:	C18	**Analysis Time:**	16:37:35

COMPOUND	LAB FLAG [1]	RRT	QUANT TRANSITION	RATIO	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
PFBA		1.007	213 >169		20.0	21.9	109
PFPeA		1.000	263 > 219		10.0	10.3	103
PFHxA		1.000	313 > 269	4.58	5.00	5.03	101
PFHpA		1.000	363 > 319	2.19	5.00	5.66	113
PFOA		1.000	413 > 369	1.94	5.00	5.46	109
PFNA		1.000	463 > 419	2.64	5.00	5.26	105
PFDA		1.000	513 > 469	2.79	5.00	4.70	94.1
PFUnA		1.000	563 > 519	4.10	5.00	5.20	104
PFDoA		1.000	613 > 569	7.34	4.06	4.55	112
PFTrDA		0.956	663 > 619	2.87	5.00	5.41	108
PFTeDA		1.000	713 > 669	2.55	5.00	5.15	103
PFBS		1.000	299 > 80	2.64	5.00	4.74	94.7
PFPeS		0.868	349 > 80	2.30	5.00	5.64	113
PFHxS		1.000	399 > 80	2.40	5.00	5.02	100
PFHpS		0.938	449 > 80	2.14	5.00	5.59	112
PFOS		1.000	499 > 80	2.54	5.00	5.05	101
PFNS		1.043	549 > 80	2.29	5.00	4.77	95.4
PFDS		1.085	599 > 80	2.31	5.00	5.42	108
PFDoS		1.186	699 > 80	2.20	5.00	5.13	103
4:2 FTS		1.000	327 > 307	0.42	20.0	20.5	103
6:2 FTS		1.000	427 > 407	0.38	18.0	18.9	105
8:2 FTS		1.000	527 > 507	0.47	17.0	14.5	85.3
PFOSA		1.000	498 > 78		5.00	5.49	110
N-MeFOSA		1.000	512 > 219	0.52	5.00	5.70	114
N-EtFOSA		1.001	526 > 219	0.52	14.0	15.5	111
MeFOSAA		1.000	570 > 419	1.75	5.00	4.64	92.8
EtFOSAA		1.000	584 > 419	1.12	5.00	4.53	90.5
N-MeFOSE		1.002	616 > 59		50.0	53.8	108
N-EtFOSE		1.002	630 > 59		50.0	52.3	105
HFPO-DA		1.000	285 > 169	2.79	20.0	21.5	107
ADONA		1.114	377 > 251	1.18	20.0	28.3	141
9Cl-PF3ONS		0.964	531 > 351	3.30	20.0	21.3	106
11Cl-PF3OUdS		1.043	631 > 451	3.05	20.0	22.6	113
3:3 FTCA			241 > 177	1.76	20.0	21.6	108
5:3 FTCA		1.061	341 > 237	1.36	125	130	104
7:3 FTCA		1.398	441 > 317	0.68	125	114	91.6
PFEESA		1.043	315 > 135	9.34	5.00	5.50	110
PFMPA			229 > 85		10.0	10.6	106
PFMBA		1.069	279 > 85		5.00	5.33	107
NFDHA			295 > 201		10.0	7.39	73.9

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Aaron Kyle_____

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SGS AXYS METHOD MLA-110 Rev 02

Form 4B
LC MS/MS CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	01-Mar-2023	**VER Data Filename:**	FC4L_050 S: 15
Instrument ID:	LCMS/MS	**Analysis Date:**	27-Feb-2024
LC Column ID:	C18	**Analysis Time:**	16:37:35

LABELED COMPOUND	LAB FLAG [1]	RRT	QUANT TRANSITION	RATIO	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
13C4-PFBA		0.997	217 > 172		40.0	38.5	96.3
13C5-PFPeA		0.854	268 > 223		20.0	21.5	107
13C5-PFHxA		0.999	318 > 273	13.0	10.0	9.61	96.1
13C4-PFHpA		0.879	367 > 322		10.0	9.66	96.6
13C8-PFOA		1.000	421 > 376		10.0	9.39	93.9
13C9-PFNA		1.001	472 > 427		5.00	5.18	104
13C6-PFDA		1.000	519 > 474		5.00	5.11	102
13C7-PFUnA		1.044	570 > 525		5.00	4.95	99.0
13C2-PFDoA		1.082	615 > 570		5.00	4.77	95.3
13C2-PFTeDA		1.177	715 > 670		5.00	4.20	83.9
13C3-PFBS		0.771	302 > 80	2.73	10.0	10.2	102
13C3-PFHxS		1.000	402 > 80	2.48	10.0	10.2	102
13C8-PFOS		1.000	507 > 80	2.17	10.1	11.1	110
13C2-4:2 FTS		0.812	329 > 81	1.78	20.2	20.0	99.2
13C2-6:2 FTS		1.002	429 > 81	2.19	20.0	20.4	102
13C2-8:2 FTS		1.268	529 > 81	3.85	20.0	21.1	105
13C8-PFOSA		1.162	506 > 78		10.0	12.5	125
D3-N-MeFOSA		1.347	515 > 219		10.0	10.2	102
D5-N-EtFOSA		1.380	531 > 219		10.0	9.74	97.4
D3-MeFOSAA		1.306	573 > 419		20.0	30.9	155
D5-EtFOSAA		1.329	589 > 419		20.0	30.0	150
d7-NMe-FOSE		1.332	623 > 59		100	123	123
d9-NEt-FOSE		1.366	639 > 59		100	120	120
13C3-HFPO-DA		1.036	287 > 169	2.93	40.0	33.1	82.9

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Aaron Kyle_____

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SGS AXYS METHOD MLA-110 Rev 02

Form 4A
LC MS/MS CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	01-Mar-2023	**VER Data Filename:**	FC4L_058 S: 46
Instrument ID:	LCMS/MS	**Analysis Date:**	02-Mar-2024
LC Column ID:	C18	**Analysis Time:**	02:42:52

COMPOUND	LAB FLAG [1]	RRT	QUANT TRANSITION	RATIO	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
PFBA		1.003	213 >169		20.0	21.6	108
PFPeA		1.000	263 > 219		10.0	10.5	105
PFHxA		1.000	313 > 269	4.66	5.00	5.35	107
PFHpA		1.000	363 > 319	2.01	5.00	5.36	107
PFOA		1.001	413 > 369	1.97	5.00	5.58	112
PFNA		1.001	463 > 419	2.66	5.00	5.66	113
PFDA		1.000	513 > 469	2.94	5.00	5.01	100
PFUnA		1.000	563 > 519	4.27	5.00	5.14	103
PFDoA		1.000	613 > 569	7.97	4.06	4.54	112
PFTrDA		0.957	663 > 619	2.94	5.00	5.26	105
PFTeDA		1.000	713 > 669	2.34	5.00	4.97	99.4
PFBS		1.000	299 > 80	2.61	5.00	4.81	96.2
PFPeS		0.870	349 > 80	2.44	5.00	5.94	119
PFHxS		1.001	399 > 80	2.57	5.00	5.12	102
PFHpS		0.937	449 > 80	2.05	5.00	5.50	110
PFOS		1.000	499 > 80	2.57	5.00	5.00	100
PFNS		1.042	549 > 80	2.38	5.00	4.77	95.4
PFDS		1.083	599 > 80	2.39	5.00	5.15	103
PFDoS		1.184	699 > 80	2.21	5.00	4.74	94.7
4:2 FTS		1.000	327 > 307	0.38	20.0	18.4	91.9
6:2 FTS		0.999	427 > 407	0.37	18.0	18.8	105
8:2 FTS		1.000	527 > 507	0.45	17.0	13.9	81.9
PFOSA		1.000	498 > 78		5.00	5.59	112
N-MeFOSA		1.000	512 > 219	0.53	5.00	5.82	116
N-EtFOSA		1.001	526 > 219	0.52	14.0	15.4	110
MeFOSAA		1.000	570 > 419	2.01	5.00	4.62	92.5
EtFOSAA		1.001	584 > 419	1.13	5.00	4.55	91.0
N-MeFOSE		1.002	616 > 59		50.0	52.9	106
N-EtFOSE		1.002	630 > 59		50.0	52.8	106
HFPO-DA		1.001	285 > 169	2.73	20.0	21.6	108
ADONA		1.114	377 > 251	1.21	20.0	26.4	132
9Cl-PF3ONS		0.964	531 > 351	3.13	20.0	20.1	101
11Cl-PF3OUdS		1.043	631 > 451	3.02	20.0	21.1	106
3:3 FTCA			241 > 177	1.78	20.0	22.3	112
5:3 FTCA		1.061	341 > 237	1.38	125	141	112
7:3 FTCA		1.397	441 > 317	0.67	125	123	98.3
PFEESA		1.041	315 > 135	9.32	5.00	6.07	121
PFMPA			229 > 85		10.0	11.4	114
PFMBA		1.070	279 > 85		5.00	5.78	116
NFDHA			295 > 201		10.0	7.98	79.8

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Aaron Kyle_____

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SGS AXYS METHOD MLA-110 Rev 02

Form 4B
LC MS/MS CALIBRATION VERIFICATION

SGS AXYS ANALYTICAL SERVICES
2045 MILLS RD., SIDNEY, B.C., CANADA
V8L 5X2 TEL (250) 655-5800 FAX (250) 655-5811

Initial Calibration Date:	01-Mar-2023	**VER Data Filename:**	FC4L_058 S: 46
Instrument ID:	LCMS/MS	**Analysis Date:**	02-Mar-2024
LC Column ID:	C18	**Analysis Time:**	02:42:52

LABELED COMPOUND	LAB FLAG [1]	RRT	QUANT TRANSITION	RATIO	EXPECTED CONC. (ng)	CONC. FOUND (ng)	RECOVERY (%)
13C4-PFBA		0.997	217 > 172		40.0	39.1	97.7
13C5-PFPeA		0.854	268 > 223		20.0	20.9	105
13C5-PFHxA		1.000	318 > 273	12.1	10.0	8.91	89.1
13C4-PFHpA		0.880	367 > 322		10.0	9.33	93.3
13C8-PFOA		0.999	421 > 376		10.0	8.82	88.2
13C9-PFNA		1.000	472 > 427		5.00	5.27	105
13C6-PFDA		1.000	519 > 474		5.00	4.80	96.0
13C7-PFUnA		1.042	570 > 525		5.00	4.87	97.3
13C2-PFDoA		1.081	615 > 570		5.00	4.65	93.1
13C2-PFTeDA		1.176	715 > 670		5.00	3.95	79.0
13C3-PFBS		0.773	302 > 80	2.66	10.0	10.5	105
13C3-PFHxS		1.000	402 > 80	2.37	10.0	10.3	103
13C8-PFOS		1.000	507 > 80	2.26	10.1	10.6	106
13C2-4:2 FTS		0.813	329 > 81	1.92	20.2	18.3	90.5
13C2-6:2 FTS		1.002	429 > 81	2.24	20.0	19.4	97.1
13C2-8:2 FTS		1.266	529 > 81	4.14	20.0	21.6	108
13C8-PFOSA		1.162	506 > 78		10.0	11.8	118
D3-N-MeFOSA		1.346	515 > 219		10.0	9.52	95.2
D5-N-EtFOSA		1.377	531 > 219		10.0	9.23	92.3
D3-MeFOSAA		1.304	573 > 419		20.0	26.4	132
D5-EtFOSAA		1.327	589 > 419		20.0	26.0	130
d7-NMe-FOSE		1.330	623 > 59		100	122	122
d9-NEt-FOSE		1.364	639 > 59		100	115	115
13C3-HFPO-DA		1.035	287 > 169	2.96	40.0	35.4	88.5

(1) Where applicable, custom lab flags have been used on this report.

These data are validated and reported as accurate and in accord with SGS AXYS Analytical Services Ltd. ISO17025 compliant quality assurance processes.

Signed: _____Aaron Kyle_____

For Axys Internal Use Only [XSL Template: FC2-Form4B.xsl; Created: 07-Mar-2024 15:55:14; Application: XMLTransformer-1.18.48; Report Filename: GENERIC-SPECS_FC_LC_FC4L_058S46__Form4B_SJ3395950.html; Workgroup: WG88919; Design ID: 5278]

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids													Tissue and Tissue Flora							Urine		Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
BFR	BTBPE	SGS AXYS MLA-033	MLA-033					Y											Y						Y														
BFR	DBDPE	SGS AXYS MLA-033	MLA-033					Y											Y						Y														
BFR	HBB	SGS AXYS MLA-033	MLA-033					Y											Y						Y														
BFR	PBEB	SGS AXYS MLA-033	MLA-033					Y											Y						Y														
Bisphenols	Bisphenol A	SGS AXYS MLA-113	MLA-113					Y																	Y														
Bisphenols	Bisphenol AF	SGS AXYS MLA-113	MLA-113					Y																	Y														
Bisphenols	Bisphenol B	SGS AXYS MLA-113	MLA-113					Y																	Y														
Bisphenols	Bisphenol E	SGS AXYS MLA-113	MLA-113					Y																	Y														
Bisphenols	Bisphenol F	SGS AXYS MLA-113	MLA-113					Y																	Y														
Bisphenols	Bisphenol S	SGS AXYS MLA-113	MLA-113					Y																	Y														
BPA and MPE	4,4'-dihydroxy-2,2-diphenylpropane (Bisphenol A) (BPA)	SGS AXYS MLA-059	MLA-059																					Y														
BPA and MPE	Mono-(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP)	SGS AXYS MLA-059	MLA-059																					Y														
BPA and MPE	Mono-(2-ethyl-5-oxohexyl) phthalate (MEOHP)	SGS AXYS MLA-059	MLA-059																					Y														
BPA and MPE	Mono-(3-carboxypropyl) phthalate (MCPP)	SGS AXYS MLA-059	MLA-059																					Y														
BPA and MPE	Mono-2-ethylhexyl phthalate (MEHP)	SGS AXYS MLA-059	MLA-059																					Y														
BPA and MPE	Mono-benzyl phthalate (MBzP)	SGS AXYS MLA-059	MLA-059																					Y														
BPA and MPE	Mono-butyl phthalate (MBP) (n + iso)	SGS AXYS MLA-059	MLA-059																					Y														
BPA and MPE	Mono-cyclohexyl phthalate (MCHP)	SGS AXYS MLA-059	MLA-059																					Y														
BPA and MPE	Mono-ethyl phthalate (MEP)	SGS AXYS MLA-059	MLA-059																					Y														
BPA and MPE	Mono-iso-nonyl phthalate (MiNP)	SGS AXYS MLA-059	MLA-059																					Y														
BPA and MPE	Mono-methyl phthalate (MMP)	SGS AXYS MLA-059	MLA-059																					Y														
BPA and MPE	Mono-(2-ethyl-5-carboxypentyl) phthalate (MECPP)	SGS AXYS MLA-059	MLA-059																																			
OC Pesticides	"Organochlorine Pesticides and PCBs" category (CA only)	EPA 608	MLA-007																																			
OC Pesticides		EPA 625	MLA-007																																			
OC Pesticides	"Organochlorine Pesticides" category (CA only)	EPA 8081B	MLA-007																																			
OC Pesticides	"Pesticides" category (CA only)	EPA 8270E	MLA-007																																			
OC Pesticides	2,4'-DDD	EPA 625	MLA-007																												Y							
OC Pesticides		EPA 8270E	MLA-007							Y						Y															Y							
OC Pesticides		EPA 1699	MLA-028							Y										Y											Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y						Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y						Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y						Y						Y	Y	
OC Pesticides	2,4'-DDE	EPA 625	MLA-007																												Y							
OC Pesticides		EPA 8270E	MLA-007							Y						Y															Y							
OC Pesticides		EPA 1699	MLA-028							Y										Y											Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y						Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y						Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y						Y						Y	Y	
OC Pesticides	2,4'-DDT	EPA 625	MLA-007																												Y							
OC Pesticides		EPA 8270E	MLA-007							Y						Y															Y							
OC Pesticides		EPA 1699	MLA-028							Y										Y											Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y						Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y						Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y						Y						Y	Y	
OC Pesticides	4,4'-DDD	EPA 625	MLA-007																												Y	Y	Y		Y		Y	
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y											Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y						Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y						Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y						Y						Y	Y	
OC Pesticides	4,4'-DDE	EPA 625	MLA-007																												Y	Y	Y		Y		Y	
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y											Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y						Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y						Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y						Y						Y	Y	
OC Pesticides	4,4'-DDT	EPA 625	MLA-007																												Y	Y	Y		Y		Y	
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y											Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y						Y							Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y						Y								
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y						Y						Y	Y	
OC Pesticides	Aldrin	EPA 625	MLA-007																												Y	Y	Y		Y		Y	
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y											Y							
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y						Y							Y	

Accreditation Scope

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				Serum	Solids												Tissue and Tissue Flora											Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y									
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y		
OC Pesticides	Alpha-HCH	EPA 625	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y									Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y				Y									Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y				Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y		
OC Pesticides	Beta-HCH	EPA 625	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y									Y										
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y				Y									Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y				Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y		
OC Pesticides	Chlordane, technical	EPA 8270E	MLA-007							Y	Y			Y	Y															Y	Y			Y		Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007							Y																				Y									
OC Pesticides		SGS AXYS MLA-228	MLA-228																											Y									
OC Pesticides	cis-Chlordane (alpha-Chlordane)	EPA 8270E	MLA-007							Y	Y			Y		Y														Y	Y			Y				
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y				Y									Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y				Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y		
OC Pesticides	cis-Nonachlor	EPA 8270E	MLA-007							Y						Y														Y								
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y				Y									Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y				Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y		
OC Pesticides	Delta-HCH	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y				Y									Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y				Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y		
OC Pesticides	Dieldrin	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y				Y									Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y				Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y		
OC Pesticides	Endosulphan I	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y				Y									Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y				Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y		
OC Pesticides	Endosulphan II	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y				Y									Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y				Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y		
OC Pesticides	Endosulphan sulphate	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y				Y									Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y				Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y		
OC Pesticides	Endrin	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y				Y									Y	
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y				Y										
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y	Y		
OC Pesticides	Endrin aldehyde	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																							
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									

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				Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y															Y					Y									
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Endrin ketone	EPA 8081B	MLA-007						Y	Y				Y		Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y									
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Gamma-HCH (Lindane)	EPA 625	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y									
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Heptachlor	EPA 625	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8270E	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y									
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Heptachlor epoxide	EPA 608	MLA-007																										Y	Y	Y			Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y									
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Hexachlorobenzene	EPA 1625	MLA-007																										Y	Y				Y				
OC Pesticides		EPA 8270E	MLA-007							Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y						Y						Y			Y	Y					Y					Y							Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y									
OC Pesticides		SGS AXYS MLA-228	MLA-228							Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Methoxychlor	EPA 608	MLA-007																										Y					Y		Y		
OC Pesticides		EPA 8081B	MLA-007						Y	Y	Y			Y	Y	Y																						
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y									
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Mirex	EPA 8270E	MLA-007							Y				Y		Y														Y	Y			Y		Y		
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y									
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Oxychlordane	EPA 8270E	MLA-007							Y																												
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y									
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	Toxaphene	EPA 8270E	MLA-007																																			
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y												Y					Y														
OC Pesticides	trans-Chlordane (gamma-Chlordane)	EPA 8270E	MLA-007							Y	Y			Y		Y															Y	Y			Y				
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y					Y					Y									
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
OC Pesticides	trans-Nonachlor	EPA 8270E	MLA-007							Y						Y														Y									
OC Pesticides		EPA 1699	MLA-028							Y										Y										Y									
OC Pesticides		SGS AXYS MLA-028	MLA-028	Y				Y		Y						Y			Y	Y					Y					Y							Y		
OC Pesticides		SGS AXYS MLA-007	MLA-007					Y		Y										Y										Y									
OC Pesticides		SGS AXYS MLA-228	MLA-228					Y		Y					Y	Y			Y	Y			Y		Y					Y							Y	Y		
PAH	"Extractable Organics" category (CA only)	EPA 8270E	MLA-021						Y																													
PAH	"Semi-volatile Organic Compounds" category (CA only)	EPA 1625	MLA-021																																			
PAH	1,2,6-Trimethylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	1,2-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	1,4,6,7-Tetramethylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	1,7-Dimethylfluorene	SGS AXYS MLA-021	MLA-021					Y																	Y													

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				Serum	Solids													Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PAH	1,7-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	1,8-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	1-Methylchrysene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	1-Methylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	1-Methylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2,3,5-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2,3,6-Trimethylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2,4-Dimethyldibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2,6-Dimethylnaphthalene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2-Methylanthracene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2-Methylfluorene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	2-Methylnaphthalene	EPA 8270E	MLA-021							Y				Y						Y										Y									
PAH		SGS AXYS MLA-021	MLA-021					Y							Y	Y			Y	Y			Y		Y					Y						Y		
PAH	2-Methylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	3,6-Dimethylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	3-Methyldibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	3-Methylfluoranthene/ Benzo(a)fluorene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	3-Methylphenanthrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	5,9-Dimethylchrysene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	5/6-Methylchrysenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	7-Methylbenzo(a)pyrene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	9/4-Methylphenanthrenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	Acenaphthene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Acenaphthylene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Anthracene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Benz[a]anthracene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Benzo[a]pyrene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Benzo[b]fluoranthene	EPA 1625	MLA-021																										Y	Y	Y			Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Benzo[e]pyrene	SGS AXYS MLA-021	MLA-021					Y												Y					Y													
PAH	Benzo[ghi]perylene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Benzo[j/k]fluoranthenes	SGS AXYS MLA-021	MLA-021					Y												Y					Y													
PAH	Benzo[k]fluoranthene	EPA 1625	MLA-021																										Y	Y	Y			Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y							Y																	
PAH		SGS AXYS MLA-021	MLA-021							Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Biphenyl	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Acenaphthenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Benz(a)anthracenes/chrysenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Biphenyls	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Dibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Fluorenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Naphthalenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C1-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Benzofluoranthenes/ Benzopyrenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Biphenyls	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Dibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Fluorenes	SGS AXYS MLA-021	MLA-021					Y																	Y													

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids													Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PAH	C2-Naphthalenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C2-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C3-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C3-Dibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C3-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C3-Fluorenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C3-Naphthalenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C3-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C4-Benz(a)anthracenes/Chrysenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C4-Dibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C4-Fluoranthenes/Pyrenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C4-Naphthalenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	C4-Phenanthrenes/Anthracenes	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	Chrysene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y					Y																		
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Dibenzo[a,h]anthracene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y					Y																		
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Dibenzothiophene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PAH	Fluoranthene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y					Y																		
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Fluorene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y					Y																		
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Indeno[1,2,3-cd]pyrene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021							Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Naphthalene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y					Y																		
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Perylene	SGS AXYS MLA-021	MLA-021					Y												Y					Y													
PAH	Phenanthrene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021						Y	Y	Y			Y	Y					Y																		
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Pyrene	EPA 1625	MLA-021																										Y	Y				Y		Y		
PAH		EPA 8270E	MLA-021							Y	Y			Y	Y						Y																	
PAH		SGS AXYS MLA-021	MLA-021					Y		Y					Y	Y			Y	Y			Y		Y					Y						Y		
PAH	Retene	SGS AXYS MLA-021	MLA-021					Y																	Y													
PBDPE	BDE 10 2,6-dibromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y												Y					Y													
PBDPE	BDE 100 2,2',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y												Y					Y													
PBDPE	BDE 105 2,3,3',4,4'-pentabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y												Y					Y													
PBDPE	BDE 11 3,3'-dibromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y												Y					Y													
PBDPE	BDE 116 2,3,4,5,6-pentabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y												Y					Y													
PBDPE	BDE 119 2,3',4,4',6-pentabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y												Y					Y													
PBDPE	BDE 12 3,4-dibromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y												Y					Y													
PBDPE	BDE 126 3,3',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y												Y					Y													
PBDPE	BDE 13 3,4'-dibromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y												Y					Y													
PBDPE	BDE 140 2,2',3,4,4',6'-hexabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y												Y					Y													
PBDPE	BDE 15 4,4'-dibromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y												Y					Y													
PBDPE	BDE 153 2,2',4,4',5,5'-hexabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y												Y					Y													
PBDPE	BDE 154 2,2',4,4',5',6-hexabromodiphenylether	EPA 1614	MLA-033													Y																				Y		
PBDPE		SGS AXYS MLA-033	MLA-033					Y												Y					Y													

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
				CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PBDPE	BDE 155 2,2',4,4',6,6'-hexabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 166 2,3,4,4',5,6-hexabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 17 2,2',4-tribromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 181 2,2',3,4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 183 2,2',3,4,4',5',6-heptabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 190 2,3,3',4,4',5,6-heptabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 206 2,2',3,3',4,4',5,5',6-nonabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 207 2,2',3,3',4,4',5,6,6'-nonabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 208 2,2',3,3',4,5,5',6,6'-nonabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 209 Decabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 25 2,3',4-tribromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 28 2,4,4'-tribromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 30 2,4,6-tribromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 33 2',3,4-tribromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 35 3,3',4-tribromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 37 3,4,4'-tribromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 47 2,2',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 49 2,2',4,5'-tetrabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 66 2,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 7 2,4-dibromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 75 2,4,4',6-tetrabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 77 3,3',4,4'-tetrabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 8 2,4'-dibromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 85 2,2',3,4,4'-pentabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PBDPE	BDE 99 2,2',4,4',5-pentabromodiphenylether	EPA 1614	MLA-033													Y																					
PBDPE		SGS AXYS MLA-033	MLA-033					Y											Y					Y													
PCB Aroclors	"Organochlorine Pesticides and PCBs" category (CA only)	EPA 625	MLA-007																																	
PCB Aroclors	"PCBs" category (CA only)	EPA 8270E	MLA-007						Y																											
PCB Aroclors	PCB Aroclor 1016	EPA 1668	MLA-010							Y	Y																			Y	Y						
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y	
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																						
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y							
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y					Y						Y							
PCB Aroclors	PCB Aroclor 1016/1242	EPA 8270E	MLA-007																																	
PCB Aroclors	PCB Aroclor 1221	EPA 1668	MLA-010							Y	Y																			Y	Y						
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y	
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																						
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y							
PCB Aroclors		SGS AXYS MLA-007	MLA-007						Y	Y										Y					Y					Y							
PCB Aroclors	PCB Aroclor 1232	EPA 1668	MLA-010							Y	Y																			Y	Y						
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y	
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																						

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y									
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y									
PCB Aroclors	PCB Aroclor 1242	EPA 1668	MLA-010							Y	Y																			Y	Y								
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y			
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																								
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y									
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y									
PCB Aroclors	PCB Aroclor 1248	EPA 1668	MLA-010							Y	Y																			Y	Y								
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y			
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																								
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y									
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y									
PCB Aroclors	PCB Aroclor 1254	EPA 1668	MLA-010							Y	Y																			Y	Y								
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y			
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																								
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y									
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y									
PCB Aroclors	PCB Aroclor 1260	EPA 1668	MLA-010							Y	Y																			Y	Y								
PCB Aroclors		EPA 625	MLA-007																										Y	Y	Y			Y		Y			
PCB Aroclors		EPA 8270E	MLA-007						Y	Y				Y	Y																								
PCB Aroclors		SGS AXYS MLA-010	MLA-010							Y																				Y									
PCB Aroclors		SGS AXYS MLA-007	MLA-007					Y		Y									Y						Y					Y									
PCB Aroclors	PCB Aroclor 1268	SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 1 2-Chlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y							Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 10 2,6-Dichlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y							Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 100 2,2',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y							Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 101 2,2',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y							Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 101/90/89	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 102 2,2',4,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y							Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 103 2,2',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y							Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 104 2,2',4,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y							Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 105 2,3,3',4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									

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				Serum	Solids												Tissue and Tissue Flora												Urine	Water	Water, Non-Potable											AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y							Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 105/127	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners	PCB 106 2,3,3',4,5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 107 2,3,3',4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 107/109	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners	PCB 108 2,3,3',4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 109 2,3,3',4,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 11 3,3'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 110 2,3,3',4',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 111 2,3,3',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 111/117	EPA 8270E	MLA-007																																					
PCB congeners	PCB 112 2,3,3',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 113 2,3,3',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 114 2,3,4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 115 2,3,4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		

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				Serum	Solids												Tissue and Tissue Flora											Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y			
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 116 2,3,4,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y			
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 117 2,3,4',5,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y			
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 118 2,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																				
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y			
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 118/106	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 119 2,3',4,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y			
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 12 3,4-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y			
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 12/13	EPA 8270E	MLA-007																																				
PCB congeners	PCB 120 2,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y			
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 121 2,3',4,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y			
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 122 2,3,3',4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y			
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 123 2,3',4,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y					Y			Y							Y						Y				
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 124 2,3',4',5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y						Y	Y			
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 125 2,3',4',5',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y										
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y			Y	Y					Y					Y								Y		

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				Serum	Solids												Tissue and Tissue Flora												Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y						Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 126 3,3',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y																
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 127 3,3',4,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 128 2,2',3,3',4,4'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y																
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 129 2,2',3,3',4,5-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y																
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 13 3,4'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 130 2,2',3,3',4,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y								Y				Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y																
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 131 2,2',3,3',4,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 131/142	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y																
PCB congeners	PCB 132 2,2',3,3',4,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 132/168	EPA 8270E	MLA-007																																					
PCB congeners	PCB 133 2,2',3,3',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 134 2,2',3,3',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y						Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 134/143	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y																

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				Serum	Solids												Tissue and Tissue Flora												Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners	PCB 135 2,2',3,3',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 136 2,2',3,3',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 137 2,2',3,4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 138 2,2',3,4,4',5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 138/163/164	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 139 2,2',3,4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 14 3,5-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 140 2,2',3,4,4',6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 141 2,2',3,4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 142 2,2',3,4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 143 2,2',3,4,5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 144 2,2',3,4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y							Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									

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				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners	PCB 144/135	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y														
PCB congeners	PCB 145 2,2',3,4,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 146 2,2',3,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 147 2,2',3,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 148 2,2',3,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 149 2,2',3,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 149/139	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners	PCB 15 4,4'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 150 2,2',3,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 151 2,2',3,5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 152 2,2',3,5,6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y									Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 153 2,2',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y									Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y							Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y					Y															
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			

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SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids												Tissue and Tissue Flora												Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS					CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y														Y									
PCB congeners	PCB 154 2,2',4,4',5,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y											Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																							
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y														Y									
PCB congeners	PCB 155 2,2',4,4',6,6'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y											Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																							
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y														Y									
PCB congeners	PCB 156 2,3,3',4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y											Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																							
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y										Y														
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																						
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y														Y									
PCB congeners	PCB 157 2,3,3',4,4',5-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y											Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																							
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y										Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y														Y									
PCB congeners	PCB 158 2,3,3',4,4',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y											Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y														Y									
PCB congeners	PCB 158/160	EPA 8270E	MLA-007																																							
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y										Y														
PCB congeners	PCB 159 2,3,3',4,5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y											Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																							
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007																																							
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y														Y									
PCB congeners	PCB 16 2,2',3-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y											Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y														Y									
PCB congeners	PCB 16/32	EPA 8270E	MLA-007																																							
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y										Y														
PCB congeners	PCB 160 2,3,3',4,5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y											Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y														Y									
PCB congeners	PCB 161 2,3,3',4,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y											Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																							
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y											Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y														Y									
PCB congeners	PCB 162 2,3,3',4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y											Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																							
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y									Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y											Y			Y	Y	Y	Y	Y		

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				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y								
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 163 2,3,3',4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 164 2,3,3',4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 165 2,3,3',5,5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 166 2,3,4,4',5,6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 167 2,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 168 2,3',4,4',5',6-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 169 3,3',4,4',5,5'-Hexachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y																			
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 17 2,2',4-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 170 2,2',3,3',4,4',5-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																		
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 170/190	EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners	PCB 171 2,2',3,3',4,4',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 172 2,2',3,3',4,5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y								

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				Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y								
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 172/192	EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners	PCB 173 2,2',3,3',4,5,6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 174 2,2',3,3',4,5,6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 174/181	EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners	PCB 175 2,2',3,3',4,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 176 2,2',3,3',4,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 177 2,2',3,3',4,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 178 2,2',3,3',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 179 2,2',3,3',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 18 2,2',5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 180 2,2',3,4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																		
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	

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				Serum	Solids											Tissue and Tissue Flora							Urine		Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 181 2,2',3,4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 182 2,2',3,4,4',5,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 183 2,2',3,4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 184 2,2',3,4,4',6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 185 2,2',3,4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 186 2,2',3,4,5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 187 2,2',3,4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																		
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 187/182	EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners	PCB 188 2,2',3,4',5,6,6'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 189 2,3,3',4,4',5,5'-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 19 2,2',6-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									

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				Serum	Solids												Tissue and Tissue Flora												Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners	PCB 190 2,3,3',4,4',5,6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 191 2,3,3',4,4',5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 192 2,3,3',4,5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 193 2,3,3',4',5,5',6-Heptachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 194 2,2',3,3',4,4',5,5'-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																				
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 195 2,2',3,3',4,4',5,6-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 196 2,2',3,3',4,4',5,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 196/203	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 197 2,2',3,3',4,4',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 198 2,2',3,3',4,5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y										
PCB congeners	PCB 199 2,2',3,3',4,5,5',6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 2 3-Chlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 20 2,3,3'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 200 2,2',3,3',4,5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 201 2,2',3,3',4,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 202 2,2',3,3',5,5',6,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 203 2,2',3,4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 204 2,2',3,4,4',5,6,6'-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 205 2,3,3',4,4',5,5',6-Octachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 206 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 207 2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 208 2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y		Y								Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									

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				Serum	Solids												Tissue and Tissue Flora											Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 209 Decachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 21 2,3,4-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 22 2,3,4'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 23 2,3,5-Trichlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 23/34	EPA 8270E	MLA-007																																					
PCB congeners	PCB 24 2,3,6-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 24/27	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners	PCB 25 2,3',4-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 26 2,3',5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 27 2,3',6-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 28 2,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 29 2,4,5-Trichlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids											Tissue and Tissue Flora						Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 3 4-Chlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 30 2,4,6-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 31 2,4',5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 32 2,4',6-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 33 2,3',4'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 33/20/21	EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners	PCB 34 2,3',5'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 35 3,3',4-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 36 3,3',5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 37 3,4,4'-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 38 3,4,5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								
PCB congeners	PCB 39 3,4',5-Trichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y								

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SGS AXYS Analytical Services Ltd.
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				Serum	Solids												Tissue and Tissue Flora												Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners	PCB 4 2,2'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 4/10	EPA 8270E	MLA-007																																					
PCB congeners	PCB 40 2,2',3,3'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 41 2,2',3,4-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 41/71/64/68	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners	PCB 42 2,2',3,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 42/59	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners	PCB 43 2,2',3,5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 44 2,2',3,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 45 2,2',3,6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 46 2,2',3,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 47 2,2',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 47/48/75	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y															
PCB congeners	PCB 48 2,2',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y											Y									
PCB congeners	PCB 49 2,2',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y								Y	Y		Y	Y	Y	Y	Y		

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				Serum	Solids												Tissue and Tissue Flora							Urine		Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 49/43	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007																Y						Y														
PCB congeners	PCB 5 2,3-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 50 2,2',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 51 2,2',4,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 52 2,2',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 52/73	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 53 2,2',5,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 54 2,2',6,6'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 55 2,3,3',4-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 56 2,3,3',4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 56/60	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 57 2,3,3',5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 58 2,3,3',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids											Tissue and Tissue Flora						Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 59 2,3,3',6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 6 2,3'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 60 2,3,4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 61 2,3,4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 62 2,3,4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 62/65	EPA 8270E	MLA-007																																				
PCB congeners	PCB 63 2,3,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 64 2,3,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 65 2,3,5,6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y				Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y	Y								
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 66/80	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 67 2,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 68 2,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y		Y								Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 69 2,3',4,6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y		Y								Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y		Y								Y			Y	Y	Y	Y	Y		

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids											Tissue and Tissue Flora							Urine		Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 7 2,4-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 7/9	EPA 8270E	MLA-007																																			
PCB congeners	PCB 70 2,3',4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 70/76	EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners	PCB 71 2,3',4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 72 2,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 73 2,3',5',6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 74 2,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																		
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 74/61	EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners	PCB 75 2,4,4',6-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 76 2,3',4',5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 77 3,3',4,4'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y													
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 78 3,3',4,5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 79 3,3',4,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y			Y	Y	Y	Y	Y	
PCB congeners		EPA 8270E	MLA-007																																			
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y				Y						Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y									

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				Serum	Solids												Tissue and Tissue Flora												Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-908	MLA-908							Y						Y					Y			Y							Y							Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y									
PCB congeners	PCB 8 2,4'-Dichlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y										Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y							Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y						Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y									
PCB congeners	PCB 8/5	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y												Y						Y														
PCB congeners	PCB 80 3,3',5,5'-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y										Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y							Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y						Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y									
PCB congeners	PCB 81 3,4,4',5-Tetrachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y										Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y							Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y						Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y									
PCB congeners	PCB 82 2,2',3,3',4-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y										Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y							Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y						Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y									
PCB congeners	PCB 83 2,2',3,3',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y										Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y							Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y						Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y									
PCB congeners	PCB 83/108	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y												Y						Y														
PCB congeners	PCB 84 2,2',3,3',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y	Y				Y			Y							Y				Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y										Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y												Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y							Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y						Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y									
PCB congeners	PCB 85 2,2',3,4,4'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y										Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y							Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y						Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y									
PCB congeners	PCB 85/120	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y												Y						Y														
PCB congeners	PCB 86 2,2',3,4,5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y										Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y							Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y						Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y									
PCB congeners	PCB 87 2,2',3,4,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y										Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y							Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y						Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y									
PCB congeners	PCB 87/115/116	EPA 8270E	MLA-007																																					
PCB congeners		SGS AXYS MLA-007	MLA-007					Y												Y						Y														
PCB congeners	PCB 88 2,2',3,4,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y										Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y							Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y						Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y											Y										Y									
PCB congeners	PCB 88/121	EPA 8270E	MLA-007																																					
PCB congeners	PCB 89 2,2',3,4,6'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids													Tissue and Tissue Flora							Urine	Water	Water, Non-Potable												AFFF	
				CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 9 2,5-Dichlorobiphenyl	EPA 1668	MLA-010							Y			Y	Y	Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 90 2,2',3,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 91 2,2',3,4',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 92 2,2',3,5,5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 93 2,2',3,5,6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 94 2,2',3,5,6'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 95 2,2',3,5',6-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 95/93	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 96 2,2',3,6,6'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 97 2,2',3,4',5'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 97/86	EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners	PCB 98 2,2',3,4',6'-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB 98/102	EPA 8270E	MLA-007																																				
PCB congeners	PCB 99 2,2',4,4',5-Pentachlorobiphenyl	EPA 1668	MLA-010							Y	Y		Y	Y	Y	Y				Y			Y							Y	Y		Y	Y	Y	Y	Y		
PCB congeners		EPA 8270E	MLA-007																																				
PCB congeners		SGS AXYS MLA-010	MLA-010	Y				Y		Y									Y	Y					Y					Y									
PCB congeners		SGS AXYS MLA-007	MLA-007					Y											Y						Y														
PCB congeners		SGS AXYS MLA-901	MLA-901	Y																																			
PCB congeners		SGS AXYS MLA-210	MLA-210					Y		Y						Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		SGS AXYS MLA-908	MLA-908							Y					Y	Y				Y			Y							Y			Y	Y	Y	Y	Y		
PCB congeners		EPA 1628	MLA-908							Y										Y										Y									
PCB congeners	PCB congeners, total	EPA 1668	MLA-010											Y																				Y					

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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue and Tissue Flora						Urine	Water	Water, Non-Potable											AFFF	
				CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCB congeners	PCBs, as congeners	EPA 1668	MLA-010																Y																		
PCB congeners		SGS AXYS MLA-010	MLA-010																Y																		
PCB congeners		SGS AXYS MLA-210	MLA-210						Y										Y										Y								
PCB congeners		SGS AXYS MLA-908	MLA-908						Y										Y										Y								
PCB congeners	Total Dichlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners	Total Heptachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners	Total Hexachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners	Total Monochlorobiphenyls	SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners	Total Nonachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners	Total Octachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners	Total Pentachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners	Total Polychlorinated biphenyls	SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners	Total Tetrachlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners	Total Trichlorobiphenyls	EPA 8270E	MLA-007																																		
PCB congeners		SGS AXYS MLA-010	MLA-010	Y			Y											Y					Y														
PCB congeners		SGS AXYS MLA-007	MLA-007				Y											Y					Y														
PCB congeners		SGS AXYS MLA-210	MLA-210				Y								Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCB congeners		SGS AXYS MLA-908	MLA-908						Y					Y	Y				Y			Y							Y				Y	Y	Y	Y	Y	
PCDDF	"Dioxins and Dibenzofurans" category (CA only)	EPA 1613	MLA-017																																		
PCDDF		EPA 8290A	MLA-017																																		
PCDDF	1,2,3,4,6,7,8-HpCDD	EPA 1613	MLA-017		Y				Y						Y				Y						Y				Y				Y		Y	Y	
PCDDF		EPA 8290A	MLA-017		Y				Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y				
PCDDF		SGS AXYS MLA-017	MLA-017	Y			Y		Y									Y	Y				Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217				Y		Y					Y					Y	Y		Y	Y	Y					Y					Y		Y	Y	
PCDDF		ATM 16130	MLA-217						Y										Y										Y								
PCDDF	1,2,3,4,6,7,8-HpCDF	EPA 1613	MLA-017		Y				Y						Y				Y						Y				Y				Y		Y	Y	
PCDDF		EPA 8290A	MLA-017		Y				Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y				
PCDDF		SGS AXYS MLA-017	MLA-017	Y			Y		Y									Y	Y				Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217				Y		Y					Y					Y	Y		Y	Y	Y					Y					Y		Y	Y	
PCDDF		ATM 16130	MLA-217						Y										Y										Y								
PCDDF	1,2,3,4,7,8,9-HpCDF	EPA 1613	MLA-017		Y				Y						Y				Y						Y				Y				Y		Y	Y	
PCDDF		EPA 8290A	MLA-017		Y				Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y				
PCDDF		SGS AXYS MLA-017	MLA-017	Y			Y		Y									Y	Y				Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217				Y		Y					Y					Y	Y		Y	Y	Y					Y					Y		Y	Y	
PCDDF		ATM 16130	MLA-217						Y										Y										Y								
PCDDF	1,2,3,4,7,8-HxCDD	EPA 1613	MLA-017		Y				Y						Y				Y						Y				Y				Y		Y	Y	
PCDDF		EPA 8290A	MLA-017		Y				Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y				
PCDDF		SGS AXYS MLA-017	MLA-017	Y			Y		Y									Y	Y				Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217				Y		Y					Y					Y	Y		Y	Y	Y					Y					Y		Y	Y	
PCDDF		ATM 16130	MLA-217						Y										Y										Y								
PCDDF	1,2,3,4,7,8-HxCDF	EPA 1613	MLA-017		Y				Y						Y				Y						Y				Y				Y		Y	Y	
PCDDF		EPA 8290A	MLA-017		Y				Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y				
PCDDF		SGS AXYS MLA-017	MLA-017	Y			Y		Y									Y	Y				Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217				Y		Y					Y					Y	Y		Y	Y	Y					Y					Y		Y	Y	
PCDDF		ATM 16130	MLA-217						Y										Y										Y								

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids												Tissue and Tissue Flora											Urine	Water	Water, Non-Potable											AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCDDF	1,2,3,6,7,8-HxCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y		Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y					
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y								
PCDDF	1,2,3,6,7,8-HxCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y		Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y					
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y								
PCDDF	1,2,3,7,8,9-HxCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y		Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y					
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y								
PCDDF	1,2,3,7,8,9-HxCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y		Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y					
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y								
PCDDF	1,2,3,7,8-PeCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y		Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y					
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y								
PCDDF	1,2,3,7,8-PeCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y		Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y					
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y								
PCDDF	2,3,4,6,7,8-HxCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y		Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y					
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y								
PCDDF	2,3,4,7,8-PeCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y		Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y					
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y								
PCDDF	2,3,7,8-TCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y		Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y					
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y								
PCDDF	2,3,7,8-TCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y		Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y					
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y								
PCDDF	OCDD	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y		Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y					
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y								
PCDDF	OCDF	EPA 1613	MLA-017		Y					Y						Y				Y						Y			Y	Y	Y		Y	Y		Y	Y		
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y	Y	Y					Y		Y	Y			Y				Y				Y					
PCDDF		SGS AXYS MLA-017	MLA-017	Y				Y		Y									Y	Y					Y						Y								
PCDDF		SGS AXYS MLA-217	MLA-217					Y		Y					Y				Y	Y		Y	Y		Y	Y					Y			Y		Y	Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y								
PCDDF	Total HpCDD	EPA 1613	MLA-017		Y					Y										Y						Y			Y	Y	Y								
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y									
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y											Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y				Y	Y		Y	Y		Y	Y					Y						Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y								
PCDDF	Total HpCDF	EPA 1613	MLA-017		Y					Y										Y						Y			Y	Y	Y								
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y									
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y											Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y				Y	Y		Y	Y		Y	Y					Y						Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y								
PCDDF	Total HxCDD	EPA 1613	MLA-017		Y					Y										Y						Y			Y	Y	Y								
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y									
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y											Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y				Y	Y		Y	Y		Y	Y					Y						Y		
PCDDF		ATM 16130	MLA-217							Y										Y											Y								
PCDDF	Total HxCDF	EPA 1613	MLA-017		Y					Y										Y						Y			Y	Y	Y								

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable											AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y						Y		
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y				Y	Y		Y	Y		Y	Y				Y				Y		Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	Total PCDD	EPA 1613	MLA-017		Y																					Y												
PCDDF		EPA 8290A	MLA-017		Y																					Y												
PCDDF	Total PCDD/F	EPA 1613	MLA-017		Y																					Y												
PCDDF		EPA 8290A	MLA-017		Y																					Y												
PCDDF	Total PCDF	EPA 1613	MLA-017		Y																					Y												
PCDDF		EPA 8290A	MLA-017		Y																					Y												
PCDDF	Total PeCDD	EPA 1613	MLA-017		Y					Y										Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y						Y		
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y					Y		Y	Y			Y				Y					Y		Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	Total PeCDF	EPA 1613	MLA-017		Y					Y										Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y						Y		
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y					Y		Y	Y			Y				Y					Y		Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	Total TCDD	EPA 1613	MLA-017		Y					Y										Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y						Y		
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y					Y		Y	Y			Y				Y					Y		Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PCDDF	Total TCDF	EPA 1613	MLA-017		Y					Y										Y						Y			Y	Y	Y							
PCDDF		EPA 8290A	MLA-017		Y					Y	Y		Y		Y					Y		Y	Y			Y				Y						Y		
PCDDF		SGS AXYS MLA-017	MLA-017							Y										Y										Y								
PCDDF		SGS AXYS MLA-217	MLA-217							Y					Y					Y		Y	Y			Y				Y					Y		Y		
PCDDF		ATM 16130	MLA-217							Y										Y										Y								
PFAS	"Per- and Polyfluorinated Alkyl Substances (PFAS)" category (CA only)	DoD QSM Version 5,1 (or new	MLA-110																																			
PFAS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonate (11Cl-PF3OUdS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y										Y	Y									Y	Y								Y	Y
PFAS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonate (11Cl-PF3OUdS)	SGS AXYS MLA-110	MLA-110	Y				Y											Y						Y												
PFAS	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	SGS AXYS MLA-110	MLA-110			Y				Y						Y	Y			Y							Y			Y					Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y									Y	Y								Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y			Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y			Y				Y		Y	Y
PFAS	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	SGS AXYS MLA-110	MLA-110			Y				Y		Y				Y	Y				Y	Y					Y				Y					Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y									Y	Y								Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110		Y	Y	Y			Y		Y	Y			Y	Y	Y		Y	Y	Y	Y			Y	Y	Y			Y					Y	Y
PFAS	4,8-dioxa-3H-perfluorononanoate (ADONA)	SGS AXYS MLA-110	MLA-110			Y	Y										Y	Y									Y	Y								Y	Y
PFAS		DoD QSM Version 5,3	MLA-110			Y											Y										Y	Y								Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y											Y										Y									Y	
PFAS		EPA 1633 draft	MLA-110			Y											Y										Y									Y	
PFAS	4:2 Fluorotelomersulfonate (4:2 FTS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y				Y			Y	Y		Y						Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y									Y	Y								Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y			Y		Y	Y			Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y			Y					Y	Y
PFAS	6:2 Fluorotelomersulfonate (6:2 FTS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y				Y			Y	Y		Y						Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y									Y	Y								Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y			Y					Y	Y
PFAS	8:2 Fluorotelomersulfonate (8:2 FTS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y				Y			Y	Y		Y						Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y									Y	Y								Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y			Y					Y	Y
PFAS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonate (9Cl-PF3ONS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y										Y	Y									Y	Y								Y	Y
PFAS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonate (9Cl-PF3ONS)	SGS AXYS MLA-110	MLA-110	Y				Y											Y						Y												
PFAS	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	SGS AXYS MLA-110	MLA-110			Y				Y						Y	Y			Y							Y			Y					Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y									Y	Y								Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y			Y					Y	Y
PFAS	Dodecafluoro-3H-4,8-dioxanonanoate (NaDONA)	SGS AXYS MLA-110	MLA-110	Y				Y											Y						Y												
PFAS		EPA 1633 draft	MLA-110									Y										Y										Y						
PFAS	Hexafluoropropylene oxide dimer acid (HFPO-DA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y								Y	Y			Y				Y		Y										Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y							Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y									Y	Y								Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y			Y					Y	Y
PFAS	Hexafluoropropylene oxide dimer acid, anion and acid (HFPO-DA)	SGS AXYS MLA-110	MLA-110			Y	Y										Y	Y									Y	Y								Y	Y
PFAS	Hexaflurorpropylene oxide dimer acid (HFPO-DA)	SGS AXYS MLA-110	MLA-110	Y						Y		Y								Y	Y									Y		Y					
PFAS	N-Ethylperfluorooctane sulfonamide (EtFOSAm)	SGS AXYS MLA-110	MLA-110							Y										Y										Y							
PFAS		DoD QSM Version 5,3	MLA-110						Y																					Y							
PFAS		DoD QSM Version 5,4	MLA-110						Y																					Y							

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable											AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
		EPA 1633 draft										Y									Y											Y						
PFAS	N-Ethylperfluorooctanesulfonamide (N-EtFOSA)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y								Y	Y	Y	Y					Y			Y	Y								Y	Y	Y
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y											Y									Y	Y										Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y											Y	Y									Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y						Y	Y	Y	Y	Y					Y	Y	Y	Y		Y						Y	Y	Y
PFAS	N-Ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y								Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	N-Ethylperfluorooctanesulfonamidoethanol (N-EtFOSE)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y								Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y				Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y				Y	Y	Y
PFAS	N-Methylperfluorooctanesulfonamide (N-MeFOSA)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y								Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y				Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y				Y	Y	Y
PFAS	N-Methylperfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y								Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	Y
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y			Y								Y									Y	Y		Y								Y	
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y				Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y				Y	Y	Y
PFAS	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-060	MLA-060																																			
PFAS		SGS AXYS MLA-041	MLA-041																																			
PFAS		SGS AXYS MLA-043	MLA-043																																			
PFAS		SGS AXYS MLA-042	MLA-042	Y																																		
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y			Y	Y					Y			Y			Y					Y		
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y		Y						Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorobutanoate (PFBA)	SGS AXYS MLA-060	MLA-060																																			
PFAS		SGS AXYS MLA-041	MLA-041																																			
PFAS		SGS AXYS MLA-043	MLA-043																																			
PFAS		SGS AXYS MLA-042	MLA-042	Y																																		
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y			Y	Y					Y			Y			Y					Y		
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y		Y						Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y		Y	Y					Y		Y			Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y		Y						Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110		Y	Y	Y										Y	Y									Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorodecanoate (PFDA)	SGS AXYS MLA-060	MLA-060																																			
PFAS		SGS AXYS MLA-041	MLA-041																																			
PFAS		SGS AXYS MLA-043	MLA-043																																			
PFAS		SGS AXYS MLA-042	MLA-042	Y																																		
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y		Y	Y					Y		Y			Y						Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y								Y	Y		Y						Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-110	MLA-110	Y		Y	Y	Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	Y
PFAS		DoD QSM Version 5.3	MLA-110			Y											Y										Y										Y	
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y										Y	Y									Y	Y									Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y				Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y				Y	Y	Y
PFAS	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-060	MLA-060																																			
PFAS		SGS AXYS MLA-041	MLA-041																																			
PFAS		SGS AXYS MLA-043	MLA-043																																			
PFAS		SGS AXYS MLA-042	MLA-042	Y																																		
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y		Y						Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable											AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PFAS	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-060	MLA-060																																	
PFAS		SGS AXYS MLA-041	MLA-041																																	
PFAS		SGS AXYS MLA-043	MLA-043																																	
PFAS		SGS AXYS MLA-042	MLA-042	Y																																
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y		Y	Y	Y	Y					Y		Y	Y		Y					Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y								Y	Y							Y	Y	Y	Y	Y							Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-060	MLA-060																																	
PFAS		SGS AXYS MLA-041	MLA-041																																	
PFAS		SGS AXYS MLA-043	MLA-043																																	
PFAS		SGS AXYS MLA-042	MLA-042	Y																																
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y		Y	Y	Y	Y					Y		Y	Y		Y					Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y								Y	Y							Y	Y	Y	Y	Y							Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-060	MLA-060																																	
PFAS		SGS AXYS MLA-041	MLA-041																																	
PFAS		SGS AXYS MLA-043	MLA-043																																	
PFAS		SGS AXYS MLA-042	MLA-042	Y																																
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y		Y	Y	Y	Y					Y		Y	Y		Y					Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y								Y	Y							Y	Y	Y	Y	Y							Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y		Y	Y	Y	Y					Y		Y	Y		Y					Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y								Y	Y							Y	Y	Y	Y	Y							Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorononanoate (PFNA)	SGS AXYS MLA-060	MLA-060																																	
PFAS		SGS AXYS MLA-041	MLA-041																																	
PFAS		SGS AXYS MLA-043	MLA-043																																	
PFAS		SGS AXYS MLA-042	MLA-042	Y																																
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y		Y	Y	Y	Y					Y		Y	Y		Y					Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y								Y	Y							Y	Y	Y	Y	Y							Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorooctanesulfonamide (PFOSA), a.k.a. FOSA	SGS AXYS MLA-060	MLA-060																																	
PFAS		SGS AXYS MLA-041	MLA-041																																	
PFAS		SGS AXYS MLA-043	MLA-043																																	
PFAS		SGS AXYS MLA-042	MLA-042	Y																																
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y		Y	Y	Y	Y					Y		Y	Y		Y					Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y								Y	Y							Y	Y	Y	Y	Y							Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-060	MLA-060																																	
PFAS		SGS AXYS MLA-041	MLA-041																																	
PFAS		SGS AXYS MLA-043	MLA-043																																	
PFAS		SGS AXYS MLA-042	MLA-042	Y																																
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y		Y	Y	Y	Y					Y		Y	Y		Y					Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y								Y	Y							Y	Y	Y	Y	Y							Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS		DoD AFFF01 Rev 1.0	MLA-110										Y																					Y			Y	Y
PFAS	Perfluorooctanoate (PFOA)	SGS AXYS MLA-060	MLA-060																																	
PFAS		SGS AXYS MLA-041	MLA-041																																	
PFAS		SGS AXYS MLA-043	MLA-043																																	
PFAS		SGS AXYS MLA-042	MLA-042	Y																																
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y		Y	Y	Y	Y					Y		Y	Y		Y					Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y								Y	Y							Y	Y	Y	Y	Y							Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS		DoD AFFF01 Rev 1.0	MLA-110																																	Y	Y
PFAS	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y					Y		Y	Y	Y	Y					Y		Y	Y		Y					Y	Y	
PFAS		DoD QSM Version 5.3	MLA-110		Y	Y	Y		Y								Y	Y							Y	Y	Y	Y	Y							Y	Y
PFAS		DoD QSM Version 5.4	MLA-110			Y	Y		Y								Y	Y									Y	Y	Y							Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-060	MLA-060																																	
PFAS		SGS AXYS MLA-041	MLA-041																																	
PFAS		SGS AXYS MLA-043	MLA-043																																	

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SGS AXYS Analytical Services Ltd.
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				Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-060	MLA-060																																		
PFAS		SGS AXYS MLA-041	MLA-041																																		
PFAS		SGS AXYS MLA-043	MLA-043																																		
PFAS		SGS AXYS MLA-042	MLA-042	Y																																	
PFAS		SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	4,4,5,5,6,6,6-heptafluorohexanoic acid (3:3 FTCA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	2H,2H,3H,3H-perfluorooctanoic acid (5:3 FTCA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	2H,2H,3H,3H-perfluorodecanoic acid (7:3 FTCA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluoro-3-methoxypropanoic acid (PFMPA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluoro-4-methoxybutanoic acid (PFMBA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PFAS	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	SGS AXYS MLA-110	MLA-110	Y		Y		Y		Y						Y	Y	Y	Y	Y					Y		Y	Y		Y						Y	Y	
PFAS		DoD QSM Version 5,3	MLA-110		Y	Y	Y		Y								Y	Y								Y	Y	Y								Y	Y
PFAS		DoD QSM Version 5,4	MLA-110			Y	Y		Y								Y	Y									Y	Y								Y	Y
PFAS		EPA 1633 draft	MLA-110	Y	Y	Y	Y	Y		Y		Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y		Y		Y	Y			Y	Y	Y
PPCP	1,7-Dimethylxanthine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	10-hydroxy-amitriptyline	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	2-hydroxy-ibuprofen	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	4-Epianhydrochlortetracycline (EACTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	4-Epianhydrotetracycline (EATC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	4-Epichlortetracycline (ECTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	4-Epioxytetracycline (EOTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	4-Epitetracycline (ETC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Acetaminophen	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Albuterol	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Alprazolam	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Amitriptyline	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Amlodipine	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Amphetamine	SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Anhydrochlortetracycline (ACTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												
PPCP	Anhydrotetracycline (ATC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y												

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				Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PPCP	Atenolol	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Atorvastatin	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Azithromycin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Benzoylecgonine	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Benztropine	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Betamethasone	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Bisphenol A	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Caffeine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Carbadox	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Carbamazepine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Cefotaxime	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Chlortetracycline (CTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Cimetidine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Ciprofloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Clarithromycin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Clinafloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Clonidine	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Cloxacillin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Cocaine	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Codeine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Cotinine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	DEET (N,N-diethyl-m-toluamide)	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Dehydronifedipine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Demeclocycline	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Desmethyldiltiazem	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Diazepam	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Digoxigenin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Digoxin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Diltiazem	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Diphenhydramine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Doxycycline	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Enalapril	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Enrofloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Erythromycin	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Erythromycin anydrate	EPA 1694	MLA-075								Y																				Y						
PPCP	Flumequine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Fluocinonide	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Fluoxetine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Fluticasone propionate	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Furosemide	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Gemfibrozil	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Glipizide	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Glyburide	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Hydrochlorothiazide	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Hydrocodone	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Hydrocortisone	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Ibuprofen	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Isochlortetracycline (ICTC)	EPA 1694	MLA-075								Y																				Y						

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				Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Lincomycin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Lomefloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Meprobamate	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Metformin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Methylprednisolone	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Metoprolol	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Miconazole	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Minocycline	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Naproxen	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Norfloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Norfluoxetine	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Norgestimate	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Norverapamil	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Ofloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Ormetoprim	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Oxacillin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Oxolinic acid	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Oxycodone	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Oxytetracycline (OTC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Paroxetine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Penicillin G	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Penicillin V	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Prednisolone	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Prednisone	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Promethazine	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Propoxyphene	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Propranolol	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Ranitidine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Roxithromycin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Sarafloxacin	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Sertraline	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Simvastatin	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Sulfachloropyridazine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Sulfadiazine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Sulfadimethoxine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Sulfamerazine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Sulfamethazine	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Sulfamethizole	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Sulfamethoxazole	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Sulfanilamide	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Sulfathiazole	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Tetracycline (TC)	EPA 1694	MLA-075								Y																				Y						
PPCP		SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Theophylline	SGS AXYS MLA-075	MLA-075				Y																		Y												
PPCP	Thiabendazole	EPA 1694	MLA-075								Y																				Y						

Accreditation Scope

SGS AXYS Analytical Services Ltd.
file ref.: ACC-103 Rev. 70

				Serum	Solids												Tissue and Tissue Flora							Urine	Water	Water, Non-Potable										AFFF	
Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Trenbolone	SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Trenbolone acetate	SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Triamterene	SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Triclocarban	EPA 1694	MLA-075								Y																					Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Triclosan	EPA 1694	MLA-075								Y																					Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Trimethoprim	EPA 1694	MLA-075								Y																					Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Tylosin	EPA 1694	MLA-075								Y																					Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Valsartan	SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Verapamil	SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Virginiamycin	EPA 1694	MLA-075								Y																					Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
PPCP	Warfarin	EPA 1694	MLA-075								Y																					Y						
PPCP		SGS AXYS MLA-075	MLA-075					Y																	Y													
TOP	Perfluorobutanesulfonate (PFBS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorobutanoate (PFBA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorodecanesulfonate (PFDS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorodecanoate (PFDA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorododecanesulfonate (PFDoS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorododecanoate (PFDoA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluoroheptanesulfonate (PFHpS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluoroheptanoate (PFHpA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorohexanesulfonate (PFHxS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorohexanoate (PFHxA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorononanesulfonate (PFNS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorononanoate (PFNA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorooctanesulfonate (PFOS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorooctanoate (PFOA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluoropentanesulfonate (PFPeS)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluoropentanoate (PFPeA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorotetradecanoate (PFTeDA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluorotridecanoate (PFTrDA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
TOP	Perfluoroundecanoate (PFUnA)	SGS AXYS MLA-111	MLA-111					Y																	Y													
Note *	Analysis of pesticides and PCBs in non-potable water samples by SGS AXYS method MLA-007, with the exception of NPDES or State permitted discharges and Stormwater applications, may fall within the scope of Washington State Department of Ecology solids matrix accreditation, subject to approval of the Ecology Project Manager.																																				
Note **	PFAS by LC-MS/MS compliant with US DoD QSM 5.3 table B-15 and US DoD QSM 5.4 table B-24																																				

Legend

Y	Accreditation scope
AFFF	Aqueous film forming foam
BFR	Brominated flame retardants (non-PBDPE)
BPA and mPE	Bisphenol A and mono-Phthalate Esters
OC Pesticides	Organochlorine Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PBDPE	Polybrominated diphenylethers
PCB	Polychlorinated Biphenyls
PCDDF	Polychlorinated dibenzodioxins/furans
PFAS	Per- and Polyfluoroalkyl Substances
PPCP	Pharmaceutical and Personal Care Products
TOP	Total Oxidizable Precursors
California WB	California Water Boards, Lab ID 2911
Florida DOH	Florida Department of Health, Lab ID E871007, (NELAC Standard)
Pennsylvania DEP	Pennsylvania Department of Environmental Protection
Minnesota DOH	Minnesota Department of Health, Lab ID 232-999-430, (NELAC Standard)
New Jersey DEP	New Jersey Department of Environmental Protection, Lab ID CANA005, (NELAC Standard)
New York DOH	New York Department of Health, Lab ID 11674, (NELAC Standard)
Washington DE	Washington Department of Ecology, Lab ID C404
Virginia DGS	Virginia Department of General Services, Division of Consolidated Laboratory Services, Lab ID 460224, (NELAC Standard)
Alaska DEC	Alaska Department of Environmental Conservation, Contaminated Sites Laboratory Approval 17-014
Maine DOH	Maine Center for Disease Control and Prevention, Department of Health and Human Services, Lab ID CN00003

Accreditation Scope

SGS AXYS Analytical Services Ltd.
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Compound Class	Compound	Accredited Method ID	SGS AXYS Method ID	Serum	Solids											Tissue and Tissue Flora							Urine	Water	Water, Non-Potable									AFFF	
				CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	CALA	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Virginia DGS	Washington DE	ANAB DoD **	ANAB ISO 17025	CALA	Florida DOH	Minnesota DOH	New Jersey DEP	Virginia DGS	CALA	CALA	Alaska DEC	ANAB DoD **	ANAB ISO 17025	California WB	Florida DOH	Maine DOH	Minnesota DOH	New Jersey DEP	New York DOH	Pennsylvania DEP	Virginia DGS	Washington DE *	ANAB DoD **	ANAB ISO 17025

ANAB DoD — ANSI National Accreditation Board, certificate ADE-1861, (US DoD QSM 5.3 and 5.4 Standard)

CALA — Canadian Association for Laboratory Accreditation Inc., Lab ID A2637, (ISO/IEC 17025:2017 Standard)