

Annual PFAS Monitoring Report Rocky Flats Site, Colorado Calendar Year 2023

April 2024



**U.S. DEPARTMENT OF
ENERGY**

Legacy
Management

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Abbreviations

CAS	Chemical Abstracts Service
CY	calendar year
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
ng/L	nanograms per liter
PFAS	per- and polyfluoroalkyl substances
PFOA	perfluorooctanoic acid
PFOS	perfluorooctane sulfonate
PLFTS	Present Landfill Treatment System
SAP	Sampling and Analysis Plan
WQCC	Water Quality Control Commission

1.0 Introduction

Per- and polyfluoroalkyl substances (PFAS) are a group of thousands of human-made chemicals that have been in use since the 1930s and are found in a variety of industrial and commercial products. Common applications include cosmetics, food packaging, stain-resistant and water-resistant articles and treatments, nonstick coatings such as Teflon, and many others. In addition, PFAS have been used in metallurgy and have been important ingredients in aqueous film-forming foam (widely referred to by its abbreviation, “AFFF”) used in firefighting. Some PFAS have been identified as potentially harmful to human health and are being investigated at facilities across the nation.

In consultation with the Colorado Department of Public Health and Environment and the U.S. Environmental Protection Agency (EPA), the U.S. Department of Energy (DOE) developed a Sampling and Analysis Plan (SAP), *Sampling Plan for PFOA/PFOS at the Rocky Flats Site, Colorado* (DOE 2019), that described a limited sampling program at the Rocky Flats Site, Colorado. Eight locations were sampled to screen groundwater and surface water for the presence of the two PFAS that have received the greatest scrutiny, perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). These compounds were detected in samples collected in 2019 from the Site (DOE 2020). Two of the locations produced samples with concentrations exceeding EPA’s nonenforceable drinking water health advisory limit, at that time 70 nanograms per liter (ng/L) (or parts per trillion) for the sum of the concentrations of PFOA + PFOS. These two locations are a monitoring well near the former Rocky Flats Fire Department and associated training area and the influent to the Present Landfill Treatment System (PLFTS) that treats seepage from the former landfill.

Based on the 2019 screening results, DOE developed a new SAP in 2021, *Sampling and Analysis Plan for PFAS at the Rocky Flats Site, Colorado* (DOE 2021), that specifies additional sampling to further assess the presence of PFAS at the Site. The SAP describes the special clothing, sampling preparations, sampling staff preparations, and other special requirements that are specific to collecting samples for the analysis of PFAS. The new SAP increases the number of sample locations from 8 to 12 (Figure 1). The additional monitoring locations are near the former fire department and at the PLFTS—the two locations that presented the highest concentrations of PFOA + PFOS in 2019. The target analytes were increased to 28 PFAS, including PFOA, PFOS, and other PFAS listed in Colorado Water Quality Control Commission (WQCC) Policy 20-1 (WQCC 2020), hereafter called the Colorado WQCC Policy, as well as three PFAS that are not listed in that policy. This sampling would be conducted quarterly for a total of 8 quarters (2 years). Results are provided in quarterly reports; the report for the fourth quarter of each calendar year (CY) is combined with an annual report. The quarterly reports are brief data summaries, and the annual reports include additional information.

Sampling as described in this SAP began in the third quarter of CY 2021, and the eighth quarterly sampling event took place in the second quarter of 2023. Although it was planned to be performed for eight quarters, sampling continued in accordance with that SAP through the third quarter of 2023 (i.e., a ninth consecutive quarter of sampling).

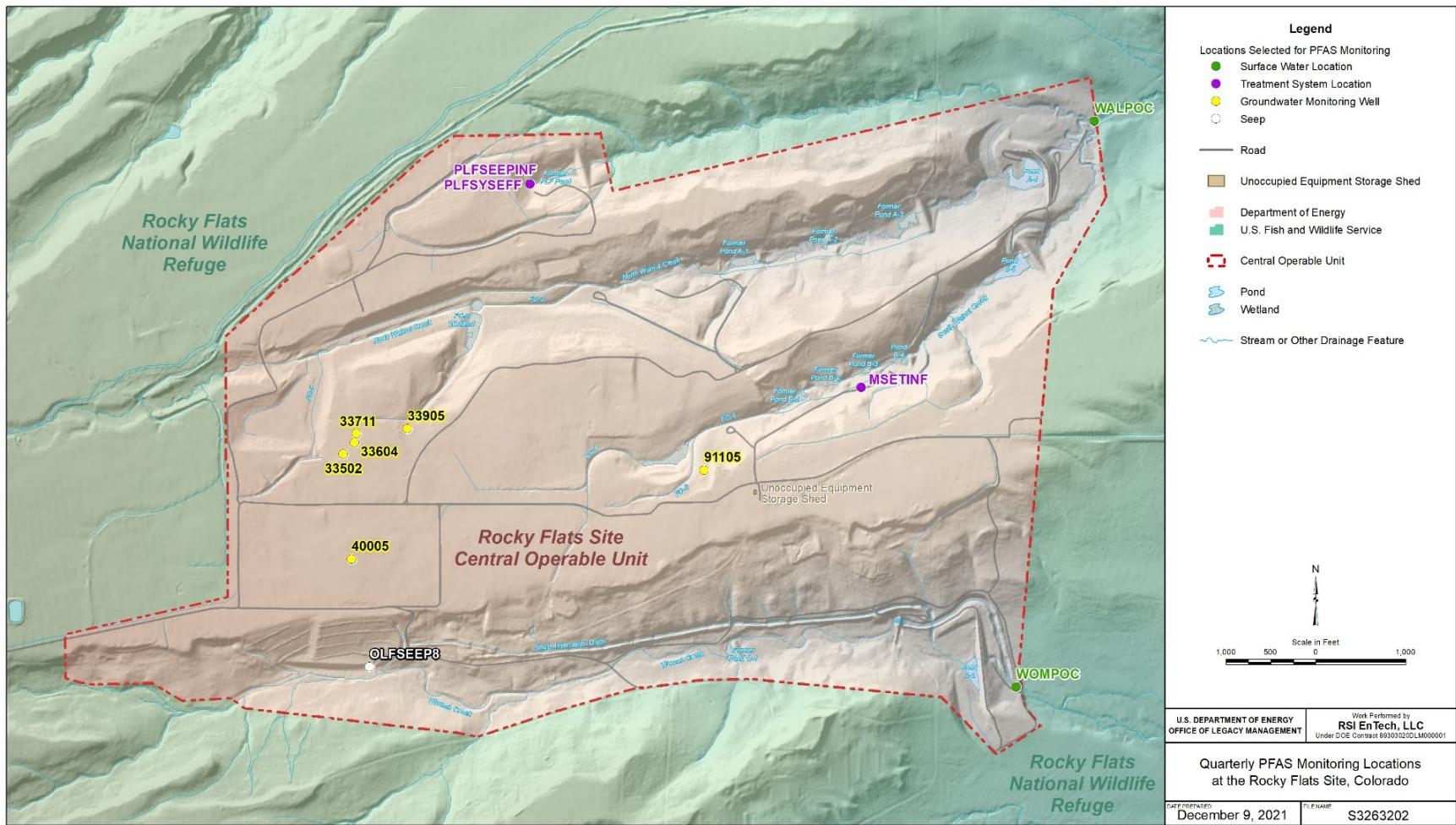


Figure 1. Central Operable Unit with PFAS Sampling Locations

The SAP was revised again in the fourth quarter of 2023 via the attachment of Interim Directive ID-23-08, which reduced the number of sample locations to six but included the collection of split samples to allow a statistical comparison of results obtained through two different analytical methods. Split samples were first collected from the six selected locations in the second quarter of 2023 at DOE's initiative. In that and the following (third) quarter of 2023, the other six locations were still sampled, but those samples were analyzed only using the original analytical method. The number of PFAS sampling locations was then reduced via the interim directive, and only the selected six locations identified in the interim directive (DOE 2023) were sampled using the split sampling approach.

The reason for this split sampling is to support a statistical comparison of analytical data generated through the two analytical methods, modified EPA Method 537.1 and EPA Method 1633 (see the PFAS SAP ID, DOE 2023). The former method was used starting in 2019 and is a modification of a drinking water method that has not been formally approved for use with environmental matrices such as groundwater and surface water. The latter method was finalized and approved for use with environmental matrices in 2023. The statistical comparison will use the Mann-Whitney U test or analysis of variance methods, which requires a minimum of four rounds of sample data. The fourth quarter of split sampling will take place in the first quarter of 2024. Results of the comparison will be provided in the corresponding quarterly report, which will be expanded accordingly.

Table 1 summarizes the locations that have been sampled for PFAS through the end of CY 2023 and which SAP(s) drove this sampling.

Table 1. Summary of Planned Quarterly PFAS Sampling at the Rocky Flats Site Through 2023

Location	General Description	SAP
33502	Monitoring well near former fire training area and Oil Burn Pit #1	1, 2, 3
33604	Monitoring well near former fire training area and Oil Burn Pit #1	2
33711	Monitoring well farther downgradient of former fire training area	2
33905	Monitoring well farther downgradient of former fire training area	2, 3
40005	Monitoring well near former Building 444	1, 2
91105	Monitoring well near former Oil Burn Pit # 2	1, 2
OLFSEEP8	Seep at base of OLF hillside	1, 2, 3
MSETINF	Influent to East Trenches Plume Treatment System	1, 2
PLFSEEPINF	Seep portion of influent to PLFTS	1, 2
PLFSYSEFF	Effluent from PLFTS	2, 3
WOMPOC	Woman Creek Point of Compliance	1, 2, 3
WALPOC	Walnut Creek Point of Compliance	1, 2, 3

Notes: 1 = initial PFAS SAP (DOE 2019), 2 = expanded PFAS SAP (DOE 2021), 3 = PFAS SAP interim directive (DOE 2023).

Abbreviation: OLF = Original Landfill

2.0 Monitoring Highlights: Fourth Quarter CY 2023

The WALPOC monitoring location was dry. All other locations were successfully sampled. Sampling events are summarized in Table 2.

Table 2. PFAS Samples Collected in Fourth Quarter 2023

Location ID		Sample ID	Sample Date and Time	Sample Type	Analytical Method ^b
Actual	Dummy ^a				
33502	2783	RFS01-15.2310028-002	10/11/2023 9:28	D	537.1
33502	2785	RFS01-15.2310028-004	10/11/2023 8:41	E	537.1
33502		RFS01-15.2310028-007	10/11/2023 9:28	F	537.1
33502	2783	RFS01-18.2310002-002	10/11/2023 9:28	D	1633
33502	2784	RFS01-18.2310002-003	10/11/2023 8:41	E	1633
33502		RFS01-18.2310002-006	10/11/2023 9:28	F	1633
33905		RFS01-15.2310028-010	10/11/2023 10:40	F	537.1
33905		RFS01-18.2310002-007	10/11/2023 10:40	F	1633
OLFSEEP8		RFS01-15.2310028-014	10/11/2023 11:18	F	537.1
OLFSEEP8		RFS01-18.2310002-008	10/11/2023 11:18	F	1633
PLFSYSEFF	2788	RFS01-15.2310028-006	10/11/2023 12:20	FB	537.1
PLFSYSEFF	2785	RFS01-18.2310002-004	10/11/2023 12:20	FB	1633
PLFSYSEFF		RFS01-15.2310028-016	10/11/2023 12:31	F	537.1
PLFSYSEFF		RFS01-18.2310002-010	10/11/2023 12:31	F	1633
WOMPOC	2795	RFS01-15.2310029-003	10/25/2023 9:57	D	537.1
WOMPOC		RFS01-15.2310029-018	10/25/2023 9:57	F	537.1
WOMPOC	2794	RFS01-18.2310003-001	10/25/2023 9:57	D	1633
WOMPOC		RFS01-18.2310003-012	10/25/2023 9:57	F	1633

Notes:

^a "Dummy" location codes are assigned to quality assurance/quality control samples (sample types D, E, FB) that are physically collected at the actual locations indicated. Refer to the PFAS SAP ID for additional information on sample types.

^b Analytical methods include modified EPA Method 537.1 (referred to in data tables as PFC_IDA_DOD5.3) and EPA Method 1633.

Abbreviations:

D = duplicate
E = equipment rinse
F = field
FB = field blank

3.0 Analytical Data: Fourth Quarter CY 2023

Analytical data for the fourth quarter of CY 2023 are provided in Table 5 (for results using modified analytical Method 537.1) and Table 6 (results using Method 1633), and field parameter data are provided in Table 7. All three tables are attached at the end of this report.

During data validation, six analytical results were assigned the qualifier "R" (rejected). Rejected data are not used for any assessments or decision making; however, they are included in the tables

of analytical data (Table 5 and Table 6). All six results were for location 33502, where quality assurance/quality control field and duplicate samples were collected. Five of these rejected results are from analysis via modified Method 537.1; the laboratory qualified the results as nondetects (“U” qualifier), but that was because the 50-fold sample dilution factor for one of the samples was too high, potentially resulting in bias nondetects. The other sample in this pair was not diluted, and the analytical results were within their historical ranges. The sixth R qualifier was assigned to a result obtained using Method 1633. The reason this value was rejected was that the isotope dilution analyte recovery was much lower than the acceptance limit; reextraction achieved the same poor recovery.

4.0 Summary of PFAS Monitoring at Rocky Flats in CY 2023

Surface water location WALPOC was successfully sampled in the second quarter but was dry for the other three quarters of 2023. This location was actually sampled twice in the second quarter because of concerns that flow present early in the quarter might no longer be present when the other locations were sampled. Although not necessary, a second sample was collected to coincide temporally with samples from the other locations. Surface water location WOMPOC was dry in the first quarter but was successfully sampled in the other three quarters of 2023. All other designated locations (Figure 1) produced sufficient water for sampling. Other than the dry surface water locations, there were no difficulties in collecting samples. Table 3 summarizes the samples that were collected for PFAS analysis in 2023.

Table 3. Summary of PFAS Samples Collected in 2023

Location ID		Sample ID	Sample Date and Time	Sample Type	Analytical Method ^b
Actual	Dummy ^a				
33502		RFS01-15.2301019-007	2/8/2023 11:24	F	537.1
33502	2783	RFS01-15.2301019-002	2/8/2023 11:24	D	537.1
33502	2785	RFS01-15.2301019-004	2/8/2023 11:36	FB	537.1
33604		RFS01-15.2301019-015	2/8/2023 12:11	F	537.1
33604	2788	RFS01-15.2301019-006	2/8/2023 11:50	E	537.1
33711		RFS01-15.2301019-016	2/8/2023 12:39	F	537.1
33905		RFS01-15.2301019-017	2/8/2023 13:16	F	537.1
40005		RFS01-15.2301019-008	2/8/2023 10:38	F	537.1
91105		RFS01-15.2301019-009	2/8/2023 14:22	F	537.1
MSETINF		RFS01-15.2301019-010	2/8/2023 14:41	F	537.1
MSETINF	2784	RFS01-15.2301019-003	2/8/2023 14:41	D	537.1
OLFSEEP8		RFS01-15.2301019-011	2/8/2023 9:40	F	537.1
PLFSEEPINF		RFS01-15.2301019-012	2/8/2023 15:30	F	537.1
PLFSYSEFF		RFS01-15.2301019-018	2/8/2023 15:24	F	537.1
WOMPOC		RFS01-15.2301019-014	2/8/2023 8:43	F	537.1
WOMPOC	2770	RFS01-15.2301019-001	2/8/2023 8:43	D	537.1
33502		RFS01-15.2305022-007	5/15/2023 10:11	F	537.1
33502	2784	RFS01-15.2305022-003	5/15/2023 10:11	D	537.1
33604		RFS01-15.2305022-015	5/15/2023 10:56	F	537.1

Table 3. Summary of PFAS Samples Collected in 2023 (continued)

Location ID		Sample ID	Sample Date and Time	Sample Type	Analytical Method ^b
Actual	Dummy ^a				
33711		RFS01-15.2305022-016	5/15/2023 11:29	F	537.1
33905		RFS01-15.2305022-017	5/15/2023 12:11	F	537.1
40005		RFS01-15.2305022-008	5/15/2023 13:36	F	537.1
91105		RFS01-15.2305022-009	5/15/2023 9:21	F	537.1
91105	2785	RFS01-15.2305022-004	5/15/2023 8:54	FB	537.1
91105	2786	RFS01-15.2305022-005	5/15/2023 8:57	E	537.1
MSETINF		RFS01-15.2305022-010	5/16/2023 9:15	F	537.1
MSETINF	2783	RFS01-15.2305022-002	5/16/2023 9:15	D	537.1
OLFSEEP8		RFS01-15.2305022-011	5/15/2023 14:03	F	537.1
PLFSEEPINF		RFS01-15.2305022-012	5/15/2023 15:18	F	537.1
PLFSYSEFF		RFS01-15.2305022-018	5/15/2023 15:10	F	537.1
WALPOC		RFS01-15.2304021-013	4/27/2023 9:14	F	537.1
WALPOC	2770	RFS01-15.2304021-001	4/27/2023 9:14	D	537.1
WALPOC		RFS01-15.2305022-019	5/16/2023 9:56	F	537.1
WOMPOC		RFS01-15.2305022-014	5/16/2023 8:23	F	537.1
WOMPOC	2770	RFS01-15.2305022-001	5/16/2023 8:23	D	537.1
WOMPOC	2770	RFS01-15.2305023-001	5/16/2023 8:23	D	1633
33502	2783	RFS01-15.2305023-002	5/15/2023 10:11	D	1633
33502		RFS01-15.2305023-007	5/15/2023 10:11	F	1633
WALPOC		RFS01-15.2305023-010	5/16/2023 9:56	F	1633
OLFSEEP8		RFS01-15.2305023-011	5/15/2023 14:03	F	1633
WOMPOC		RFS01-15.2305023-014	5/16/2023 8:23	F	1633
PLFSYSEFF		RFS01-15.2305023-015	5/15/2023 15:10	F	1633
33905		RFS01-15.2305023-016	5/15/2023 12:11	F	1633
33502		RFS01-15.2307024-007	7/19/2023 10:50	F	537.1
33502	2788	RFS01-15.2307024-006	7/19/2023 10:30	E	537.1
33604		RFS01-15.2307024-015	7/19/2023 11:30	F	537.1
33711		RFS01-15.2307024-016	7/19/2023 12:00	F	537.1
33905		RFS01-15.2307024-017	7/19/2023 12:40	F	537.1
40005		RFS01-15.2307024-008	7/19/2023 9:50	F	537.1
40005	2783	RFS01-15.2307024-002	7/19/2023 9:50	D	537.1
40005	2785	RFS01-15.2307024-004	7/19/2023 9:30	FB	537.1
91105		RFS01-15.2307024-009	7/19/2023 13:20	F	537.1
MSETINF		RFS01-15.2307024-010	7/20/2023 8:30	F	537.1
MSETINF	2784	RFS01-15.2307024-003	7/20/2023 8:30	D	537.1
OLFSEEP8		RFS01-15.2307024-011	7/19/2023 8:45	F	537.1
OLFSEEP8	2770	RFS01-15.2307024-001	7/19/2023 8:45	D	537.1
PLFSEEPINF		RFS01-15.2307024-012	7/20/2023 9:10	F	537.1
PLFSYSEFF		RFS01-15.2307024-018	7/20/2023 9:00	F	537.1
OLFSEEP8	2770	RFS01-15.2307025-001	7/19/2023 8:45	D	1633

Table 3. Summary of PFAS Samples Collected in 2023 (continued)

Location ID		Sample ID	Sample Date and Time	Sample Type	Analytical Method ^b
Actual	Dummy ^a				
40005	2783	RFS01-15.2307025-002	7/19/2023 9:50	D	1633
33502		RFS01-15.2307025-007	7/19/2023 10:50	F	1633
40005		RFS01-15.2307025-008	7/19/2023 9:50	F	1633
OLFSEEP8		RFS01-15.2307025-011	7/19/2023 8:45	F	1633
33905		RFS01-15.2307025-017	7/19/2023 12:40	F	1633
PLFSYSEFF		RFS01-15.2307025-018	7/20/2023 9:00	F	1633
33502	2783	RFS01-15.2310028-002	10/11/2023 9:28	D	537.1
33502	2785	RFS01-15.2310028-004	10/11/2023 8:41	E	537.1
33502		RFS01-15.2310028-007	10/11/2023 9:28	F	537.1
33502	2783	RFS01-18.2310002-002	10/11/2023 9:28	D	1633
33502	2784	RFS01-18.2310002-003	10/11/2023 8:41	E	1633
33502		RFS01-18.2310002-006	10/11/2023 9:28	F	1633
33905		RFS01-15.2310028-010	10/11/2023 10:40	F	537.1
33905		RFS01-18.2310002-007	10/11/2023 10:40	F	1633
OLFSEEP8		RFS01-15.2310028-014	10/11/2023 11:18	F	537.1
OLFSEEP8		RFS01-18.2310002-008	10/11/2023 11:18	F	1633
PLFSYSEFF	2788	RFS01-15.2310028-006	10/11/2023 12:20	FB	537.1
PLFSYSEFF	2785	RFS01-18.2310002-004	10/11/2023 12:20	FB	1633
PLFSYSEFF		RFS01-15.2310028-016	10/11/2023 12:31	F	537.1
PLFSYSEFF		RFS01-18.2310002-010	10/11/2023 12:31	F	1633
WOMPOC	2795	RFS01-15.2310029-003	10/25/2023 9:57	D	537.1
WOMPOC		RFS01-15.2310029-018	10/25/2023 9:57	F	537.1
WOMPOC	2794	RFS01-18.2310003-001	10/25/2023 9:57	D	1633
WOMPOC		RFS01-18.2310003-012	10/25/2023 9:57	F	1633

Notes:

^a "Dummy" location codes are assigned to quality assurance/quality control samples (sample types D, E, FB) that are physically collected at the actual locations indicated. Refer to the PFAS SAP ID for additional information on sample types.

^b Analytical methods include modified EPA Method 537.1 (referred to in data tables as PFC_IDA_DOD5.3) and EPA Method 1633.

Abbreviations:

- D = duplicate
- E = equipment rinse
- F = field
- FB = field blank

Analytical results for PFOA and PFOS in 2023 were similar to those obtained since 2019, the first year of PFAS monitoring. Because of the early recognition of health concerns associated with PFOA and PFOS, those were the only PFAS analyzed in 2019, while the samples collected starting in 2021 were additionally analyzed for other compounds identified in the Colorado WQCC Policy (WQCC 2020). Table 4 summarizes concentrations of PFOA and PFOS in samples collected in 2019, 2021, 2022, and 2023; the concentrations reported for a given location are fairly similar over time.

Table 4. Summary of PFOA and PFOS Data for 2019, 2021, 2022, and 2023

Monitoring Wells													
Location	33502		33604		33711		33905		40005		91105		
Quarter/ Year	PFOA	PFOS	PFOA	PFOS	PFOA	PFOS	PFOA	PFOS	PFOA	PFOS	PFOA	PFOS	
2/19	120	310	NS	NS	NS	NS	NS	NS	21	24 (J)	0.9 (J)	0.99 (U)	
4/19	70 (J)	240	NS	NS	NS	NS	NS	NS	19	24	0.55 (J)	1.1 (U)	
3/21	66 (J)	250 (J)	38	8.1	13	7 (J)	32	140	16	22	1.3 (J)	1 (U)	
4/21	73 (J)	270 (J)	45	6.7	12	6.2	35	110	16	24	1.4 (J)	1.1 (J)	
1/22	72	250	47	5.5	11	6.4	27	150 (J)	18	22	1.4 (J)	1.3 (J)	
2/22	100	310	57	13 (J)	6.7	3.6	26	140	18	26	1.1 (J)	2.9 (J)	
3/22	93	260	58	13 (J)	7.6	4.5	28	140	17	25	0.96 (J)	1.2 (J)	
4/22	97 (HJ)	280 (HJ)	89 (HJ)	22 (HJ)	11 (HJ)	5 (HJ)	31 (HJ)	150 (HJ)	19 (HJ)	31 (HJ)	0.68 (HJ)	0.53 (UHJ)	
1/23	88	260	49	15 (J)	22	10 (J)	27	140	18	27	0.76 (J)	0.77 (J)	
2/23	96	290	58	15 (J)	12	8.6 (J)	13	54 (J)	18	29	0.73 (J)	0.55 (U)	
3/23	90	260	59	20 (J)	14	6.1	44	140	20	24	1.8 (J)	2.1 (J)	
4/23	82 (J)	240	NS	NS	NS	NS	35	110	NS	NS	NS	NS	
Treatment System and Surface Water Locations													
Location	MSETINF		PLFSEEPINF		PLFSYSEFF		OLFSEEP8		WOMPOC		WALPOC		
Quarter/ Year	PFOA	PFOS	PFOA	PFOS	PFOA	PFOS	PFOA	PFOS	PFOA	PFOS	PFOA	PFOS	
2/19	2 (J)	1 (U)	69 (H)	23 (H)	NS	NS	7.4	3.4 (J)	1.6 (J)	1.2 (J)	13	18	
4/19	1.1 (J)	1 (U)	59	20	NS	NS	7.3	3.3 (J)	1.1 (U)	1.5 (J)	1.3 (J)	2.3 (J)	
3/21	1.3 (J)	1 (U)	55 (J)	21 (J)	40 (J)	17 (J)	12	4.3	*	*	*	*	
4/21	1.3 (J)	1 (J)	50 (J)	17 (J)	45 (J)	15	5.9 (J)	2.1 (J)	0.54 (U)	0.56 (U)	*	*	
1/22	1.4 (J)	0.91 (J)	47	14	44	13 (J)	6.6	2.1 (J)	*	*	*	*	
2/22	1.3 (J)	0.89 (J)	53	18	41	14	7	2.4 (J)	0.55 (J)	0.75 (J)	7.6	14 (J)	
3/22	1.1 (J)	0.52 (U)	54	18	43	17	8	2.1	1.5 (JX)	1.9 (J)	*	*	
4/22	1.3 (HJ)	0.55 (UHJ)	68 (HJ)	21 (HJ)	58 (HJ)	18 (HJ)	2.2 (HJ)	0.56 (UHJ)	1.4 (HJ)	0.56 (UHJ)	*	*	
1/23	1.1 (J)	0.56 (U)	60	19	44	15	7.4	2 (J)	0.49 (U)	0.5 (U)	*	*	
2/23	1.1 (J)	0.54 (U)	90 (J)	27	47	16	5.3	0.55 (U)	2.2	0.53 (U)	6.1**	9.8**	
3/23	1.3 (J)	0.66 (J)	74	27	55	19	10	3.8 (J)	*	*	*	*	
4/23	NS	NS	NS	NS	46 (J)	16	5.6 (J)	1.7 (J)	0.56 (U)	2.3	*	*	

Notes:

Results represent only "field" samples, not field duplicates, and only data generated using modified Method 537.1. Qualifiers: H = hold time concerns, J = estimated result, U = not detected at the listed detection limit, X indicates presumptive evidence of a compound, * = location was dry, ** WALPOC was sampled twice in this quarter, but only results from the sample that was collected when the other locations were sampled are shown.

Abbreviation: NS = location was not scheduled for sampling

One deviation from the 2021 SAP occurred in 2021, 2022, and 2023. While the SAP lists 28 PFAS to be analyzed, one of these compounds was not analyzed. The omitted compound is also not included in the list of 25 PFAS in the Colorado WQCC Policy (WQCC 2020, Table 1),

which formed the basis for the target analytes listed in the 2021 SAP (Table 3). The omitted compound is ammonium perfluoro-2-methyl-3-oxahexanoate (HFPO-DA, GenX; Chemical Abstracts Service [CAS] No. 62037-80-3), a PFAS salt that the laboratory does not analyze. However, the acid form was analyzed; it is listed by the laboratory under the name perfluoro-2-propoxypropionic acid (GenX, CAS No. 13252-13-6; also known by other names).

5.0 References

DOE (U.S. Department of Energy), 2019. *Sampling Plan for PFOA/PFOS at the Rocky Flats Site, Colorado*, LMS/RFS/S22080, Office of Legacy Management, April.

DOE (U.S. Department of Energy), 2020. *Summary Report: Results of Assessment for PFOA/PFOS at the Rocky Flats Site, Colorado*, LMS/RFS/S29191, Office of Legacy Management, April.

DOE (U.S. Department of Energy), 2021. *Sampling and Analysis Plan for PFAS at the Rocky Flats Site, Colorado*, LMS/RFS/S33207, Office of Legacy Management, July.

DOE (U.S. Department of Energy), 2023. *Interim Directive ID-23-08 to Sampling and Analysis Plan for PFAS at the Rocky Flats Site, Colorado*, LMS/RFS/S33207, Office of Legacy Management, October 11.

Sampling and Analysis Plan for PFAS at the Rocky Flats Site, Colorado, LMS/RFS/S33207, continually updated, prepared by the LMS contractor for the U.S. Department of Energy Office of Legacy Management.

WQCC (Water Quality Control Commission), 2020. *Policy for Interpreting the Narrative Water Quality Standards for Per- and Polyfluoroalkyl Substances (PFAS)*, Policy 20-1, 5 CCR 1002-31 Section 31.11(1)(a)(iv) and 5 CCR 1002-41 Section 41.5(A)(1), Colorado Department of Public Health and Environment, approved July 14, expires July 31, 2025.

Table 5. Analytical Results for Water Samples Obtained Using Modified Method 537.1

Location Code	Location Type	Date Sampled	Sample Code	CAS No.	Analyte	Sample Type	Result (ng/L)	Lab Qualifier	Data Validation Qualifier	Detection Limit (ng/L)	Analytical Method
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	E	0.34	U		0.34	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	27619-97-2	6:2 fluorotelomersulfonic acid	E	0.36	U		0.36	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	39108-34-4	8:2 fluorotelomersulfonic acid	E	0.59	U		0.59	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid	E	0.33	U		0.33	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	2355-31-9	N-methyl perfluorooctanesulfonamidoacetic acid	E	0.44	U		0.44	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	13252-13-6	Perfluoro-2-propoxypropionic acid	E	0.66	U		0.66	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	375-73-5	Perfluorobutanesulfonic acid (PFBS)	E	0.33	U		0.33	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	375-22-4	Perfluorobutanoic acid (PFBA)	E	0.23	U		0.23	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	335-77-3	Perfluorodecanesulfonic acid (PFDS)	E	0.53	U		0.53	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	335-76-2	Perfluorodecanoic acid (PFDA)	E	0.32	U		0.32	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	307-55-1	Perfluorododecanoic acid (PFDoA)	E	0.4	U		0.4	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	E	0.68	U		0.68	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	375-85-9	Perfluoroheptanoic acid (PFHpA)	E	0.46	U		0.46	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	E	0.36	U		0.36	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	307-24-4	Perfluorohexanoic acid (PFHxA)	E	0.53	U		0.53	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	67905-19-5	Perfluoro-n-hexadecanoic acid (PFHxDA)	E	0.5	U		0.5	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	16517-11-6	Perfluoro-n-octadecanoic acid (PFODA)	E	0.54	U H	J	0.54	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	16517-11-6	Perfluoro-n-octadecanoic acid (PFODA)	E	0.57	U N	J	0.57	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	68259-12-1	Perfluorononane Sulfonic acid (PFNS)	E	0.63	U		0.63	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	375-95-1	Perfluorononanoic acid (PFNA)	E	0.54	U		0.54	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	754-91-6	Perfluoroocatane Sulfonamide (FOSA)	E	0.5	U		0.5	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	E	0.55	U		0.55	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	335-67-1	Perfluorooctanoic acid (PFOA)	E	0.54	U		0.54	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	E	0.49	U		0.49	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	2706-90-3	Perfluoropentanoic acid (PFPeA)	E	0.23	U		0.23	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	376-06-7	Perfluorotetradecanoic acid (PFTeA)	E	0.49	U		0.49	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	E	0.66	U		0.66	PFC_IDA_DOD5.3
2785	QC	10/11/2023 8:41	RFS01-15.2310028-004	2058-94-8	Perfluoroundecanoic acid (PFUnA)	E	0.7	U		0.7	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	FB	0.34	U		0.34	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	27619-97-2	6:2 fluorotelomersulfonic acid	FB	0.36	U		0.36	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	39108-34-4	8:2 fluorotelomersulfonic acid	FB	0.59	U		0.59	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid	FB	0.32	U		0.32	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	2355-31-9	N-methyl perfluorooctanesulfonamidoacetic acid	FB	0.44	U		0.44	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	13252-13-6	Perfluoro-2-propoxypropionic acid	FB	0.66	U		0.66	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	375-73-5	Perfluorobutanesulfonic acid (PFBS)	FB	0.32	U		0.32	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	375-22-4	Perfluorobutanoic acid (PFBA)	FB	0.23	U		0.23	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	335-77-3	Perfluorodecanesulfonic acid (PFDS)	FB	0.52	U		0.52	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	335-76-2	Perfluorodecanoic acid (PFDA)	FB	0.31	U		0.31	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	307-55-1	Perfluorododecanoic acid (PFDoA)	FB	0.4	U		0.4	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	FB	0.68	U		0.68	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	375-85-9	Perfluoroheptanoic acid (PFHpA)	FB	0.46	U		0.46	PFC_IDA_DOD5.3

Table 5. Analytical Results for Water Samples Obtained Using Modified Method 537.1 (continued)

Location Code	Location Type	Date Sampled	Sample Code	CAS No.	Analyte	Sample Type	Result (ng/L)	Lab Qualifier	Data Validation Qualifier	Detection Limit (ng/L)	Analytical Method
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	FB	0.36	U		0.36	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	307-24-4	Perfluorohexanoic acid (PFHxA)	FB	0.52	U		0.52	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	67905-19-5	Perfluoro-n-hexadecanoic acid (PFHxDA)	FB	0.49	U		0.49	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	16517-11-6	Perfluoro-n-octadecanoic acid (PFODA)	FB	0.58	U H	J	0.58	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	16517-11-6	Perfluoro-n-octadecanoic acid (PFODA)	FB	0.57	U N	J	0.57	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	68259-12-1	Perfluorononane Sulfonic acid (PFNS)	FB	0.63	U		0.63	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	375-95-1	Perfluorononanoic acid (PFNA)	FB	0.53	U		0.53	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	754-91-6	Perfluoroocatane Sulfonamide (FOSA)	FB	0.49	U		0.49	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	1763-23-1	Perfluoroctanesulfonic acid (PFOS)	FB	0.55	U		0.55	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	335-67-1	Perfluoroctanoic acid (PFOA)	FB	0.53	U		0.53	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	FB	0.49	U		0.49	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	2706-90-3	Perfluoropentanoic acid (PFPeA)	FB	0.23	U		0.23	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	376-06-7	Perfluorotetradecanoic acid (PFTeA)	FB	0.49	U		0.49	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	FB	0.66	U		0.66	PFC_IDA_DOD5.3
2788	QC	10/11/2023 12:20	RFS01-15.2310028-006	2058-94-8	Perfluoroundecanoic acid (PFUnA)	FB	0.69	U		0.69	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	D	0.32	U		0.32	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	F	18	U		18	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	27619-97-2	6:2 fluorotelomersulfonic acid	D	39			0.33	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	27619-97-2	6:2 fluorotelomersulfonic acid	F	37	J		19	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	39108-34-4	8:2 fluorotelomersulfonic acid	D	14			0.54	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	39108-34-4	8:2 fluorotelomersulfonic acid	F	31	U	R	31	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid	D	0.3	U		0.3	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid	F	17	U		17	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	2355-31-9	N-methyl perfluorooctanesulfonamidoacetic acid	D	0.4	U		0.4	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	2355-31-9	N-methyl perfluorooctanesulfonamidoacetic acid	F	23	U		23	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	13252-13-6	Perfluoro-2-propoxypropionic acid	D	0.6	U		0.6	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	13252-13-6	Perfluoro-2-propoxypropionic acid	F	35	U		35	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	375-73-5	Perfluorobutanesulfonic acid (PFBS)	D	0.3	U		0.3	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	375-73-5	Perfluorobutanesulfonic acid (PFBS)	F	17	U		17	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	375-22-4	Perfluorobutanoic acid (PFBA)	D	55		J	2.1	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	375-22-4	Perfluorobutanoic acid (PFBA)	F	76	J	J	12	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	335-77-3	Perfluorodecanesulfonic acid (PFDS)	D	0.48	U		0.48	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	335-77-3	Perfluorodecanesulfonic acid (PFDS)	F	28	U		28	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	335-76-2	Perfluorodecanoic acid (PFDA)	D	2.9		J	0.29	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	335-76-2	Perfluorodecanoic acid (PFDA)	F	17	U	R	17	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	307-55-1	Perfluorododecanoic acid (PFDoA)	D	0.37	U		0.37	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	307-55-1	Perfluorododecanoic acid (PFDoA)	F	21	U		21	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	D	3.5		J	0.62	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	F	36	U	R	36	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	375-85-9	Perfluoroheptanoic acid (PFHpA)	D	79			0.42	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	375-85-9	Perfluoroheptanoic acid (PFHpA)	F	90	J		24	PFC_IDA_DOD5.3

Table 5. Analytical Results for Water Samples Obtained Using Modified Method 537.1 (continued)

Location Code	Location Type	Date Sampled	Sample Code	CAS No.	Analyte	Sample Type	Result (ng/L)	Lab Qualifier	Data Validation Qualifier	Detection Limit (ng/L)	Analytical Method
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	D	120			0.33	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	F	130			19	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	307-24-4	Perfluorohexanoic acid (PFHxA)	D	100		J	0.48	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	307-24-4	Perfluorohexanoic acid (PFHxA)	F	110		J	28	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	67905-19-5	Perfluoro-n-hexadecanoic acid (PFHxDA)	D	0.46	U		0.46	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	67905-19-5	Perfluoro-n-hexadecanoic acid (PFHxDA)	F	26	U		26	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	16517-11-6	Perfluoro-n-octadecanoic acid (PFODA)	D	0.53	U H	J	0.53	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	16517-11-6	Perfluoro-n-octadecanoic acid (PFODA)	D	0.53	U N	J	0.53	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	16517-11-6	Perfluoro-n-octadecanoic acid (PFODA)	F	30	U H	J	30	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	16517-11-6	Perfluoro-n-octadecanoic acid (PFODA)	F	30	U N	J	30	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	68259-12-1	Perfluorononane Sulfonic acid (PFNS)	D	0.58	U		0.58	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	68259-12-1	Perfluorononane Sulfonic acid (PFNS)	F	33	U		33	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	375-95-1	Perfluorononanoic acid (PFNA)	D	9.4			0.49	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	375-95-1	Perfluorononanoic acid (PFNA)	F	28	U	R	28	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	754-91-6	Perfluoroocatane Sulfonamide (FOSA)	D	0.46	U		0.46	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	754-91-6	Perfluoroocatane Sulfonamide (FOSA)	F	26	U		26	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	1763-23-1	Perfluoroctanesulfonic acid (PFOS)	D	220			0.51	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	1763-23-1	Perfluoroctanesulfonic acid (PFOS)	F	240			29	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	335-67-1	Perfluoroctanoic acid (PFOA)	D	76			0.49	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	335-67-1	Perfluoroctanoic acid (PFOA)	F	82	J		28	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	D	22		J	0.45	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	F	26	U	R	26	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	2706-90-3	Perfluoropentanoic acid (PFPeA)	D	130		J	0.21	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	2706-90-3	Perfluoropentanoic acid (PFPeA)	F	160		J	12	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	376-06-7	Perfluorotetradecanoic acid (PFTeA)	D	0.45	U		0.45	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	376-06-7	Perfluorotetradecanoic acid (PFTeA)	F	26	U		26	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	D	0.6	U		0.6	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	F	35	U		35	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-002	2058-94-8	Perfluoroundecanoic acid (PFUnA)	D	0.64	U		0.64	PFC_IDA_DOD5.3
33502	WL	10/11/2023 9:28	RFS01-15.2310028-007	2058-94-8	Perfluoroundecanoic acid (PFUnA)	F	37	U		37	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	F	0.33	U		0.33	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	27619-97-2	6:2 fluorotelomersulfonic acid	F	0.91	J		0.35	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	39108-34-4	8:2 fluorotelomersulfonic acid	F	0.57	U		0.57	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid	F	0.31	U		0.31	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	2355-31-9	N-methyl perfluorooctanesulfonamidoacetic acid	F	0.42	U		0.42	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	13252-13-6	Perfluoro-2-propoxypropionic acid	F	0.63	U		0.63	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	375-73-5	Perfluorobutanesulfonic acid (PFBS)	F	22			0.31	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	375-22-4	Perfluorobutanoic acid (PFBA)	F	34			0.22	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	335-77-3	Perfluorodecanesulfonic acid (PFDS)	F	0.5	U		0.5	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	335-76-2	Perfluorodecanoic acid (PFDA)	F	0.55	J	J	0.3	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	307-55-1	Perfluorododecanoic acid (PFDoA)	F	0.38	U		0.38	PFC_IDA_DOD5.3

Table 5. Analytical Results for Water Samples Obtained Using Modified Method 537.1 (continued)

Location Code	Location Type	Date Sampled	Sample Code	CAS No.	Analyte	Sample Type	Result (ng/L)	Lab Qualifier	Data Validation Qualifier	Detection Limit (ng/L)	Analytical Method
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	F	2.7			0.65	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	375-85-9	Perfluoroheptanoic acid (PFHpA)	F	40			0.44	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	F	170			0.35	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	307-24-4	Perfluorohexanoic acid (PFHxA)	F	69			0.5	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	67905-19-5	Perfluoro-n-hexadecanoic acid (PFHxDA)	F	0.48	U		0.48	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	16517-11-6	Perfluoro-n-octadecanoic acid (PFODA)	F	0.55	U H	J	0.55	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	16517-11-6	Perfluoro-n-octadecanoic acid (PFODA)	F	0.55	U N	J	0.55	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	68259-12-1	Perfluorononane Sulfonic acid (PFNS)	F	0.6	U		0.6	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	375-95-1	Perfluorononanoic acid (PFNA)	F	4			0.51	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	754-91-6	Perfluoroocatane Sulfonamide (FOSA)	F	0.48	U		0.48	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	F	110			0.53	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	335-67-1	Perfluorooctanoic acid (PFOA)	F	35			0.51	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	F	24			0.47	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	2706-90-3	Perfluoropentanoic acid (PFPeA)	F	85			0.22	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	376-06-7	Perfluorotetradecanoic acid (PFTeA)	F	0.47	U		0.47	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	F	0.63	U		0.63	PFC_IDA_DOD5.3
33905	WL	10/11/2023 10:40	RFS01-15.2310028-010	2058-94-8	Perfluoroundecanoic acid (PFUnA)	F	0.67	U		0.67	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	F	0.39	U		0.39	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	27619-97-2	6:2 fluorotelomersulfonic acid	F	0.41	U		0.41	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	39108-34-4	8:2 fluorotelomersulfonic acid	F	0.68	U		0.68	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid	F	0.37	U		0.37	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	2355-31-9	N-methyl perfluorooctanesulfonamidoacetic acid	F	0.5	U		0.5	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	13252-13-6	Perfluoro-2-propoxypropionic acid	F	0.75	U		0.75	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	375-73-5	Perfluorobutanesulfonic acid (PFBS)	F	8.3			0.37	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	375-22-4	Perfluorobutanoic acid (PFBA)	F	22			0.26	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	335-77-3	Perfluorodecanesulfonic acid (PFDS)	F	0.6	U		0.6	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	335-76-2	Perfluorodecanoic acid (PFDA)	F	0.36	U		0.36	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	307-55-1	Perfluorododecanoic acid (PFDoA)	F	0.46	U		0.46	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	F	0.77	U		0.77	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	375-85-9	Perfluoroheptanoic acid (PFHpA)	F	4.1			0.52	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	F	9.8			0.41	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	307-24-4	Perfluorohexanoic acid (PFHxA)	F	9			0.6	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	67905-19-5	Perfluoro-n-hexadecanoic acid (PFHxDA)	F	0.57	U		0.57	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	16517-11-6	Perfluoro-n-octadecanoic acid (PFODA)	F	0.53	U H	J	0.53	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	16517-11-6	Perfluoro-n-octadecanoic acid (PFODA)	F	0.65	U N	J	0.65	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	68259-12-1	Perfluorononane Sulfonic acid (PFNS)	F	0.72	U		0.72	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	375-95-1	Perfluorononanoic acid (PFNA)	F	0.61	U		0.61	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	754-91-6	Perfluoroocatane Sulfonamide (FOSA)	F	0.57	U		0.57	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	F	1.7	J		0.63	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	335-67-1	Perfluorooctanoic acid (PFOA)	F	5.6		J	0.61	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	F	5.1			0.56	PFC_IDA_DOD5.3

Table 5. Analytical Results for Water Samples Obtained Using Modified Method 537.1 (continued)

Location Code	Location Type	Date Sampled	Sample Code	CAS No.	Analyte	Sample Type	Result (ng/L)	Lab Qualifier	Data Validation Qualifier	Detection Limit (ng/L)	Analytical Method
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	2706-90-3	Perfluoropentanoic acid (PFPeA)	F	17			0.26	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	376-06-7	Perfluorotetradecanoic acid (PFTeA)	F	0.56	U		0.56	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	F	0.75	U		0.75	PFC_IDA_DOD5.3
OLFSEEP8	SL	10/11/2023 11:18	RFS01-15.2310028-014	2058-94-8	Perfluoroundecanoic acid (PFUnA)	F	0.8	U		0.8	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	F	1.8	U		1.8	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	27619-97-2	6:2 fluorotelomersulfonic acid	F	1.9	U		1.9	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	39108-34-4	8:2 fluorotelomersulfonic acid	F	3.1	U		3.1	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid	F	24	J		1.7	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	2355-31-9	N-methyl perfluorooctanesulfonamidoacetic acid	F	2.3	U		2.3	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	13252-13-6	Perfluoro-2-propoxypropionic acid	F	3.5	U		3.5	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	375-73-5	Perfluorobutanesulfonic acid (PFBS)	F	1.7	U		1.7	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	375-22-4	Perfluorobutanoic acid (PFBA)	F	54			1.2	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	335-77-3	Perfluorodecanesulfonic acid (PFDS)	F	2.8	U		2.8	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	335-76-2	Perfluorodecanoic acid (PFDA)	F	1.7	U		1.7	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	307-55-1	Perfluorododecanoic acid (PFDoA)	F	2.1	U		2.1	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	F	3.6	U		3.6	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	375-85-9	Perfluoroheptanoic acid (PFHpA)	F	9.9	J	J	2.4	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	F	9.2	J		1.9	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	307-24-4	Perfluorohexanoic acid (PFHxA)	F	23		J	2.8	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	67905-19-5	Perfluoro-n-hexadecanoic acid (PFHxDA)	F	2.6	U		2.6	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	16517-11-6	Perfluoro-n-octadecanoic acid (PFODA)	F	0.53	U H	J	0.53	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	16517-11-6	Perfluoro-n-octadecanoic acid (PFODA)	F	3	U N	J	3	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	68259-12-1	Perfluorononane Sulfonic acid (PFNS)	F	3.3	U		3.3	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	375-95-1	Perfluorononanoic acid (PFNA)	F	2.8	U		2.8	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	754-91-6	Perfluoroocatane Sulfonamide (FOSA)	F	2.6	U		2.6	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	F	16			2.9	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	335-67-1	Perfluorooctanoic acid (PFOA)	F	46		J	2.8	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	F	2.6	U		2.6	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	2706-90-3	Perfluoropentanoic acid (PFPeA)	F	13		J	1.2	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	376-06-7	Perfluorotetradecanoic acid (PFTeA)	F	2.6	U		2.6	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	F	3.5	U		3.5	PFC_IDA_DOD5.3
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-15.2310028-016	2058-94-8	Perfluoroundecanoic acid (PFUnA)	F	3.7	U		3.7	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	F	0.36	U		0.36	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	D	0.37	U		0.37	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	27619-97-2	6:2 fluorotelomersulfonic acid	F	0.38	U		0.38	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	27619-97-2	6:2 fluorotelomersulfonic acid	D	0.39	U		0.39	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	39108-34-4	8:2 fluorotelomersulfonic acid	F	0.62	U		0.62	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	39108-34-4	8:2 fluorotelomersulfonic acid	D	0.63	U		0.63	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid	F	0.34	U		0.34	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid	D	0.35	U		0.35	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	2355-31-9	N-methyl perfluorooctanesulfonamidoacetic acid	F	0.46	U		0.46	PFC_IDA_DOD5.3

Table 5. Analytical Results for Water Samples Obtained Using Modified Method 537.1 (continued)

Location Code	Location Type	Date Sampled	Sample Code	CAS No.	Analyte	Sample Type	Result (ng/L)	Lab Qualifier	Data Validation Qualifier	Detection Limit (ng/L)	Analytical Method
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	2355-31-9	N-methyl perfluorooctanesulfonamidoacetic acid	D	0.47	U		0.47	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	13252-13-6	Perfluoro-2-propoxypropionic acid	F	0.69	U		0.69	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	13252-13-6	Perfluoro-2-propoxypropionic acid	D	0.71	U		0.71	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	375-73-5	Perfluorobutanesulfonic acid (PFBS)	F	0.57	J		0.34	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	375-73-5	Perfluorobutanesulfonic acid (PFBS)	D	0.58	J		0.35	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	375-22-4	Perfluorobutanoic acid (PFBA)	F	0.49	J		0.24	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	375-22-4	Perfluorobutanoic acid (PFBA)	D	0.49	J		0.25	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	335-77-3	Perfluorodecanesulfonic acid (PFDS)	F	0.55	U		0.55	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	335-77-3	Perfluorodecanesulfonic acid (PFDS)	D	0.56	U		0.56	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	335-76-2	Perfluorodecanoic acid (PFDA)	F	0.33	U		0.33	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	335-76-2	Perfluorodecanoic acid (PFDA)	D	0.34	U		0.34	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	307-55-1	Perfluorododecanoic acid (PFDoA)	F	0.42	U		0.42	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	307-55-1	Perfluorododecanoic acid (PFDoA)	D	0.43	U		0.43	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	F	0.71	U		0.71	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	D	0.73	U		0.73	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	375-85-9	Perfluoroheptanoic acid (PFHpA)	F	0.48	U		0.48	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	375-85-9	Perfluoroheptanoic acid (PFHpA)	D	0.49	U		0.49	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	F	0.45	J		0.38	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	D	0.39	U		0.39	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	307-24-4	Perfluorohexanoic acid (PFHxA)	F	0.55	U		0.55	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	307-24-4	Perfluorohexanoic acid (PFHxA)	D	0.56	U		0.56	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	67905-19-5	Perfluoro-n-hexadecanoic acid (PFHxDA)	F	0.52	U		0.52	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	67905-19-5	Perfluoro-n-hexadecanoic acid (PFHxDA)	D	0.53	U		0.53	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	16517-11-6	Perfluoro-n-octadecanoic acid (PFODA)	F	0.6	U		0.6	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	16517-11-6	Perfluoro-n-octadecanoic acid (PFODA)	D	0.61	U		0.61	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	68259-12-1	Perfluorononane Sulfonic acid (PFNS)	F	0.66	U		0.66	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	68259-12-1	Perfluorononane Sulfonic acid (PFNS)	D	0.68	U		0.68	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	375-95-1	Perfluorononanoic acid (PFNA)	F	0.56	U		0.56	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	375-95-1	Perfluorononanoic acid (PFNA)	D	0.57	U		0.57	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	754-91-6	Perfluoroocatane Sulfonamide (FOSA)	F	0.52	U		0.52	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	754-91-6	Perfluoroocatane Sulfonamide (FOSA)	D	0.53	U		0.53	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	F	2.3			0.58	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	D	0.59	U		0.59	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	335-67-1	Perfluorooctanoic acid (PFOA)	F	0.56	U		0.56	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	335-67-1	Perfluorooctanoic acid (PFOA)	D	0.57	U		0.57	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	F	0.51	U		0.51	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	D	0.52	U		0.52	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	2706-90-3	Perfluoropentanoic acid (PFPeA)	F	0.31	J		0.24	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	2706-90-3	Perfluoropentanoic acid (PFPeA)	D	0.31	J		0.25	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	376-06-7	Perfluorotetradecanoic acid (PFTeA)	F	0.51	U		0.51	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	376-06-7	Perfluorotetradecanoic acid (PFTeA)	D	0.52	U		0.52	PFC_IDA_DOD5.3

Table 5. Analytical Results for Water Samples Obtained Using Modified Method 537.1 (continued)

Location Code	Location Type	Date Sampled	Sample Code	CAS No.	Analyte	Sample Type	Result (ng/L)	Lab Qualifier	Data Validation Qualifier	Detection Limit (ng/L)	Analytical Method
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	F	0.69	U		0.69	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	D	0.71	U		0.71	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-018	2058-94-8	Perfluoroundecanoic acid (PFUnA)	F	0.73	U		0.73	PFC_IDA_DOD5.3
WOMPOC	SL	10/25/2023 9:57	RFS01-15.2310029-003	2058-94-8	Perfluoroundecanoic acid (PFUnA)	D	0.75	U		0.75	PFC_IDA_DOD5.3

Abbreviations:

CAS No. = Chemical Abstracts Service registry number

D = duplicate

E = equipment rinse

F = field

FB = field blank

H = sample was prepped or analyzed beyond the specified holding time

J = estimated

N = recovery exceeds control limits

QC = quality control sample (dummy location code)

R = rejected

SL = surface location

TS = treatment system

U = analytical result below detection limit

WL = well

Table 6. Analytical Results for Water Samples Obtained Using Method 1633

Location Code	Location Type	Date Sampled	Sample Code	CAS No.	Analyte	Sample Type	Result (ng/L)	Lab Qualifier	Data Validation Qualifier	Detection Limit (ng/L)	Analytical Method
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	763051-92-9	11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid	E	1.1	U		1.1	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	914637-49-3	2H,2H,3H,3H-Perfluorooctanoic acid	E	4.7	U		4.7	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	812-70-4	3-Perfluoroheptyl propanoic acid	E	5	U		5	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	356-02-5	3-Perfluoropropyl propanoic acid	E	1.6	U		1.6	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (DONA)	E	0.39	U		0.39	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	E	0.62	U		0.62	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	27619-97-2	6:2 fluorotelomersulfonic acid	E	0.53	U		0.53	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	39108-34-4	8:2 fluorotelomersulfonic acid	E	0.7	U		0.7	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	756426-58-1	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	E	0.99	U		0.99	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	4151-50-2	N-ethyl perfluoroctanesulfonamide	E	0.18	U		0.18	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	2991-50-6	N-ethyl perfluoroctanesulfonamidoacetic acid	E	0.33	U		0.33	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	1691-99-2	N-ethyl perfluoroctanesulfonamidoethanol	E	1	U		1	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	31506-32-8	N-methyl perfluoroctanesulfonamide	E	0.28	U		0.28	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	2355-31-9	N-methyl perfluoroctanesulfonamidoacetic acid	E	0.38	U		0.38	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	24448-09-7	N-methyl perfluoroctanesulfonamidoethanol	E	0.97	U		0.97	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	151772-58-6	Nonafuoro-3,6-dioxaheptanoic acid	E	0.35	U		0.35	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid	E	0.31	U		0.31	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	13252-13-6	Perfluoro-2-propoxypropionic acid	E	0.43	U		0.43	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	377-73-1	Perfluoro-3-methoxypropanoic acid	E	0.45	U		0.45	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	863090-89-5	Perfluoro-4-methoxybutanoic acid	E	0.44	U		0.44	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	375-73-5	Perfluorobutanesulfonic acid (PFBS)	E	0.15	U		0.15	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	375-22-4	Perfluorobutanic acid (PFBA)	E	0.54	U		0.54	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	335-77-3	Perfluorodecanesulfonic acid (PFDS)	E	0.22	U		0.22	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	335-76-2	Perfluorodecanoic acid (PFDA)	E	0.079	U		0.079	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	79780-39-5	Perfluorododecanesulfonic acid	E	0.2	U		0.2	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	307-55-1	Perfluorododecanoic acid (PFDoA)	E	0.33	U		0.33	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	375-92-8	Perfluoroheptanesulfonic Acid (PFHps)	E	0.36	U		0.36	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	375-85-9	Perfluoroheptanoic acid (PFHpA)	E	0.18	U		0.18	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	E	0.22	U		0.22	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	307-24-4	Perfluorohexanoic acid (PFHxA)	E	0.1	U		0.1	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	68259-12-1	Perfluororonane Sulfonic acid (PFNS)	E	0.14	U		0.14	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	375-95-1	Perfluororonanoic acid (PFNA)	E	0.16	U		0.16	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	754-91-6	Perfluoroocatane Sulfonamide (FOSA)	E	0.096	U		0.096	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	E	0.29	U		0.29	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	335-67-1	Perfluorooctanoic acid (PFOA)	E	0.59	U		0.59	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	E	0.14	U		0.14	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	2706-90-3	Perfluoropentanoic acid (PFPeA)	E	0.34	U		0.34	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	376-06-7	Perfluorotetradecanoic acid (PFTeA)	E	0.19	U		0.19	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	E	0.15	U		0.15	EPA 1633
2784	QC	10/11/2023 8:41	RFS01-18.2310002-003	2058-94-8	Perfluoroundecanoic acid (PFUnA)	E	0.25	U		0.25	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	763051-92-9	11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid	FB	1.1	U		1.1	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	914637-49-3	2H,2H,3H,3H-Perfluorooctanoic acid	FB	4.7	U		4.7	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	812-70-4	3-Perfluoroheptyl propanoic acid	FB	5.1	U		5.1	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	356-02-5	3-Perfluoropropyl propanoic acid	FB	1.6	U		1.6	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (DONA)	FB	0.4	U		0.4	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	FB	0.63	U		0.63	EPA 1633

Table 6. Analytical Results for Water Samples Obtained Using Method 1633 (continued)

Location Code	Location Type	Date Sampled	Sample Code	CAS No.	Analyte	Sample Type	Result (ng/L)	Lab Qualifier	Data Validation Qualifier	Detection Limit (ng/L)	Analytical Method
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	27619-97-2	6:2 fluorotelomersulfonic acid	FB	0.54	U		0.54	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	39108-34-4	8:2 fluorotelomersulfonic acid	FB	0.71	U		0.71	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	756426-58-1	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	FB	1	U		1	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	4151-50-2	N-ethyl perfluorooctanesulfonamide	FB	0.18	U		0.18	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid	FB	0.33	U		0.33	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	1691-99-2	N-ethyl perfluorooctanesulfonamidoethanol	FB	1.1	U		1.1	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	31506-32-8	N-methyl perfluorooctanesulfonamide	FB	0.28	U		0.28	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	2355-31-9	N-methyl perfluorooctanesulfonamidoacetic acid	FB	0.39	U		0.39	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	24448-09-7	N-methyl perfluorooctanesulfonamidoethanol	FB	0.98	U		0.98	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	151772-58-6	Nonfluoro-3,6-dioxaheptanoic acid	FB	0.35	U		0.35	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid	FB	0.31	U		0.31	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	13252-13-6	Perfluoro-2-propoxypropionic acid	FB	0.43	U		0.43	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	377-73-1	Perfluoro-3-methoxypropanoic acid	FB	0.46	U		0.46	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	863090-89-5	Perfluoro-4-methoxybutanoic acid	FB	0.44	U		0.44	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	375-73-5	Perfluorobutanesulfonic acid (PFBS)	FB	0.15	U		0.15	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	375-22-4	Perfluorobutanoic acid (PFBA)	FB	0.54	U		0.54	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	335-77-3	Perfluorodecanesulfonic acid (PFDS)	FB	0.22	U		0.22	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	335-76-2	Perfluorodecanoic acid (PFDA)	FB	0.08	U		0.08	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	79780-39-5	Perfluorododecanesulfonic acid	FB	0.2	U		0.2	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	307-55-1	Perfluorododecanoic acid (PFDoA)	FB	0.33	U		0.33	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	375-92-8	Perfluoroheptanesulfonic Acid (PFHps)	FB	0.37	U		0.37	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	375-85-9	Perfluoroheptanoic acid (PFHpA)	FB	0.18	U		0.18	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	FB	0.22	U		0.22	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	307-24-4	Perfluorohexanoic acid (PFHxA)	FB	0.11	U		0.11	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	68259-12-1	Perfluorononane Sulfonic acid (PFNS)	FB	0.14	U		0.14	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	375-95-1	Perfluorononanoic acid (PFNA)	FB	0.17	U		0.17	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	754-91-6	Perfluoroocatane Sulfonamide (FOSA)	FB	0.097	U		0.097	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	FB	0.3	U		0.3	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	335-67-1	Perfluorooctanoic acid (PFOA)	FB	0.6	U		0.6	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	FB	0.14	U		0.14	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	2706-90-3	Perfluoropentanoic acid (PFPeA)	FB	0.35	U		0.35	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	376-06-7	Perfluorotetradecanoic acid (PFTeA)	FB	0.19	U		0.19	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	FB	0.15	U		0.15	EPA 1633
2785	QC	10/11/2023 12:20	RFS01-18.2310002-004	2058-94-8	Perfluoroundecanoic acid (PFUnA)	FB	0.26	U		0.26	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	763051-92-9	11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid	D	1.2	U		1.2	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	763051-92-9	11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid	F	12	U		12	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	914637-49-3	2H,2H,3H,3H-Perfluorooctanoic acid	D	5	U		5	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	914637-49-3	2H,2H,3H,3H-Perfluorooctanoic acid	F	51	U		51	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	812-70-4	3-Perfluoroheptyl propanoic acid	D	5.4	U		5.4	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	812-70-4	3-Perfluoroheptyl propanoic acid	F	55	U		55	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	356-02-5	3-Perfluoropropyl propanoic acid	D	1.7	U	J	1.7	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	356-02-5	3-Perfluoropropyl propanoic acid	F	18	U		18	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (DONA)	D	0.42	U		0.42	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (DONA)	F	4.3	U		4.3	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	D	0.66	U		0.66	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	F	6.7	U		6.7	EPA 1633

Table 6. Analytical Results for Water Samples Obtained Using Method 1633 (continued)

Location Code	Location Type	Date Sampled	Sample Code	CAS No.	Analyte	Sample Type	Result (ng/L)	Lab Qualifier	Data Validation Qualifier	Detection Limit (ng/L)	Analytical Method
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	27619-97-2	6:2 fluorotelomersulfonic acid	D	45			0.57	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	27619-97-2	6:2 fluorotelomersulfonic acid	F	61	J	J	5.8	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	39108-34-4	8:2 fluorotelomersulfonic acid	D	15		J	0.74	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	39108-34-4	8:2 fluorotelomersulfonic acid	F	32	J	J	7.6	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	756426-58-1	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	D	1.1	U		1.1	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	756426-58-1	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	F	11	U		11	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	4151-50-2	N-ethyl perfluorooctanesulfonamide	D	0.19	U		0.19	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	4151-50-2	N-ethyl perfluorooctanesulfonamide	F	1.9	U		1.9	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid	D	0.35	U		0.35	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid	F	3.5	U		3.5	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	1691-99-2	N-ethyl perfluorooctanesulfonamidoethanol	D	1.1	U		1.1	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	1691-99-2	N-ethyl perfluorooctanesulfonamidoethanol	F	11	U		11	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	31506-32-8	N-methyl perfluorooctanesulfonamide	D	0.3	U		0.3	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	31506-32-8	N-methyl perfluorooctanesulfonamide	F	3	U		3	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	2355-31-9	N-methyl perfluorooctanesulfonamidoacetic acid	D	0.4	U		0.4	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	2355-31-9	N-methyl perfluorooctanesulfonamidoacetic acid	F	4.1	U		4.1	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	24448-09-7	N-methyl perfluorooctanesulfonamidoethanol	D	1	U		1	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	24448-09-7	N-methyl perfluorooctanesulfonamidoethanol	F	10	U		10	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	151772-58-6	Nonfluoro-3,6-dioxaheptanoic acid	D	0.37	U		0.37	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	151772-58-6	Nonfluoro-3,6-dioxaheptanoic acid	F	3.8	U		3.8	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid	D	0.32	U		0.32	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid	F	3.3	U		3.3	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	13252-13-6	Perfluoro-2-propoxypropionic acid	D	0.45	U		0.45	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	13252-13-6	Perfluoro-2-propoxypropionic acid	F	4.7	U		4.7	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	377-73-1	Perfluoro-3-methoxypropanoic acid	D	0.48	U	J	0.48	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	377-73-1	Perfluoro-3-methoxypropanoic acid	F	4.9	U		4.9	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	863090-89-5	Perfluoro-4-methoxybutanoic acid	D	0.46	U	J	0.46	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	863090-89-5	Perfluoro-4-methoxybutanoic acid	F	4.7	U		4.7	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	375-73-5	Perfluorobutanesulfonic acid (PFBS)	D	12			0.16	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	375-73-5	Perfluorobutanesulfonic acid (PFBS)	F	9.9	J		1.6	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	375-22-4	Perfluorobutanoic acid (PFBA)	D	220		R	0.57	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	375-22-4	Perfluorobutanoic acid (PFBA)	F	77			5.8	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	335-77-3	Perfluorodecanesulfonic acid (PFDS)	D	0.23	U		0.23	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	335-77-3	Perfluorodecanesulfonic acid (PFDS)	F	2.4	U		2.4	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	335-76-2	Perfluorodecanoic acid (PFDA)	D	8.2		J	0.084	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	335-76-2	Perfluorodecanoic acid (PFDA)	F	6.8	J		0.86	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	79780-39-5	Perfluorododecanesulfonic acid	D	0.21	U		0.21	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	79780-39-5	Perfluorododecanesulfonic acid	F	2.2	U		2.2	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	307-55-1	Perfluorododecanoic acid (PFDoA)	D	0.35	U		0.35	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	307-55-1	Perfluorododecanoic acid (PFDoA)	F	3.6	U		3.6	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	375-92-8	Perfluoroheptanesulfonic Acid (PFHps)	D	3			0.38	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	375-92-8	Perfluoroheptanesulfonic Acid (PFHps)	F	12	J	J	3.9	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	375-85-9	Perfluoroheptanoic acid (PFHpA)	D	87			0.19	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	375-85-9	Perfluoroheptanoic acid (PFHpA)	F	97			2	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	D	130			0.23	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	F	170			2.4	EPA 1633

Table 6. Analytical Results for Water Samples Obtained Using Method 1633 (continued)

Location Code	Location Type	Date Sampled	Sample Code	CAS No.	Analyte	Sample Type	Result (ng/L)	Lab Qualifier	Data Validation Qualifier	Detection Limit (ng/L)	Analytical Method
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	307-24-4	Perfluorohexanoic acid (PFHxA)	D	98			0.11	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	307-24-4	Perfluorohexanoic acid (PFHxA)	F	100			1.1	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	68259-12-1	Perfluorononane Sulfonic acid (PFNS)	D	0.15	U		0.15	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	68259-12-1	Perfluorononane Sulfonic acid (PFNS)	F	1.5	U		1.5	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	375-95-1	Perfluorononanoic acid (PFNA)	D	9.5			0.17	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	375-95-1	Perfluorononanoic acid (PFNA)	F	16		J	1.8	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	754-91-6	Perfluoroocatane Sulfonamide (FOSA)	D	0.52	J		0.1	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	754-91-6	Perfluoroocatane Sulfonamide (FOSA)	F	1.6	J	J	1	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	D	290			0.31	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	F	530		J	3.2	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	335-67-1	Perfluorooctanoic acid (PFOA)	D	170		J	0.63	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	335-67-1	Perfluorooctanoic acid (PFOA)	F	190			6.4	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	D	14			0.15	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	F	14	J		1.5	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	2706-90-3	Perfluoropentanoic acid (PFPeA)	D	170		J	0.37	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	2706-90-3	Perfluoropentanoic acid (PFPeA)	F	170			3.7	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	376-06-7	Perfluorotetradecanoic acid (PFTeA)	D	0.2	U		0.2	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	376-06-7	Perfluorotetradecanoic acid (PFTeA)	F	2.1	U		2.1	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	D	0.16	U		0.16	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	F	1.6	U		1.6	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-002	2058-94-8	Perfluoroundecanoic acid (PFUnA)	D	0.27	U		0.27	EPA 1633
33502	WL	10/11/2023 9:28	RFS01-18.2310002-006	2058-94-8	Perfluoroundecanoic acid (PFUnA)	F	2.8	U		2.8	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	763051-92-9	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	F	1.1	U		1.1	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	914637-49-3	2H,2H,3H-Perfluoroctanoic acid	F	4.7	U		4.7	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	812-70-4	3-Perfluoroheptyl propanoic acid	F	5	U		5	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	356-02-5	3-Perfluoropropyl propanoic acid	F	1.6	U		1.6	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (DONA)	F	0.39	U		0.39	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	F	0.62	U		0.62	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	27619-97-2	6:2 fluorotelomersulfonic acid	F	0.84	J		0.53	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	39108-34-4	8:2 fluorotelomersulfonic acid	F	0.7	U		0.7	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	756426-58-1	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	F	0.99	U	J	0.99	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	4151-50-2	N-ethyl perfluoroctanesulfonamide	F	0.18	U		0.18	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	2991-50-6	N-ethyl perfluoroctanesulfonamidoacetic acid	F	0.32	U		0.32	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	1691-99-2	N-ethyl perfluoroctanesulfonamidoethanol	F	1	U		1	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	31506-32-8	N-methyl perfluoroctanesulfonamide	F	0.28	U		0.28	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	2355-31-9	N-methyl perfluoroctanesulfonamidoacetic acid	F	0.38	U		0.38	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	24448-09-7	N-methyl perfluoroctanesulfonamidoethanol	F	0.96	U		0.96	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	151772-58-6	Nonafluoro-3,6-dioxaheptanoic acid	F	0.34	U		0.34	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid	F	0.3	U		0.3	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	13252-13-6	Perfluoro-2-propoxypropionic acid	F	0.43	U		0.43	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	377-73-1	Perfluoro-3-methoxypropanoic acid	F	0.45	U		0.45	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	863090-89-5	Perfluoro-4-methoxybutanoic acid	F	0.43	U		0.43	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	375-73-5	Perfluorobutanesulfonic acid (PFBS)	F	21			0.15	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	375-22-4	Perfluorobutanoic acid (PFBA)	F	44			0.53	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	335-77-3	Perfluorodecanesulfonic acid (PFDS)	F	0.22	U		0.22	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	335-76-2	Perfluorodecanoic acid (PFDA)	F	0.37	J		0.079	EPA 1633

Table 6. Analytical Results for Water Samples Obtained Using Method 1633 (continued)

Location Code	Location Type	Date Sampled	Sample Code	CAS No.	Analyte	Sample Type	Result (ng/L)	Lab Qualifier	Data Validation Qualifier	Detection Limit (ng/L)	Analytical Method
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	79780-39-5	Perfluorododecanesulfonic acid	F	0.2	U		0.2	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	307-55-1	Perfluorododecanoic acid (PFDoA)	F	0.33	U		0.33	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	375-92-8	Perfluoroheptanesulfonic Acid (PFHps)	F	3.5			0.36	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	375-85-9	Perfluoroheptanoic acid (PFHpA)	F	38			0.18	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	F	190			0.22	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	307-24-4	Perfluorohexanoic acid (PFHxA)	F	67			0.1	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	68259-12-1	Perfluorononane Sulfonic acid (PFNS)	F	0.14	U		0.14	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	375-95-1	Perfluorononanoic acid (PFNA)	F	3.6			0.16	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	754-91-6	Perfluoroocatane Sulfonamide (FOSA)	F	0.14	J	J	0.095	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	F	120			0.29	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	335-67-1	Perfluorooctanoic acid (PFOA)	F	40			0.59	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	F	24			0.14	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	2706-90-3	Perfluoropentanoic acid (PFPeA)	F	96			0.34	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	376-06-7	Perfluorotetradecanoic acid (PFTeA)	F	0.19	U		0.19	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	F	0.15	U		0.15	EPA 1633
33905	WL	10/11/2023 10:40	RFS01-18.2310002-007	2058-94-8	Perfluoroundecanoic acid (PFUnA)	F	0.25	U		0.25	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	763051-92-9	11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid	F	1.1	U		1.1	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	914637-49-3	2H,2H,3H,3H-Perfluorooctanoic acid	F	4.7	U		4.7	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	812-70-4	3-Perfluoroheptyl propanoic acid	F	5	U		5	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	356-02-5	3-Perfluoropropyl propanoic acid	F	1.6	U		1.6	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (DONA)	F	0.39	U		0.39	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	F	0.62	U		0.62	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	27619-97-2	6:2 fluorotelomersulfonic acid	F	0.53	U		0.53	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	39108-34-4	8:2 fluorotelomersulfonic acid	F	0.7	U		0.7	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	756426-58-1	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	F	0.99	U	J	0.99	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	4151-50-2	N-ethyl perfluorooctanesulfonamide	F	0.18	U		0.18	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid	F	0.32	U		0.32	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	1691-99-2	N-ethyl perfluorooctanesulfonamidoethanol	F	1	U		1	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	31506-32-8	N-methyl perfluorooctanesulfonamide	F	0.28	U		0.28	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	2355-31-9	N-methyl perfluorooctanesulfonamidoacetic acid	F	0.38	U		0.38	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	24448-09-7	N-methyl perfluorooctanesulfonamidoethanol	F	0.96	U		0.96	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	151772-58-6	Nonafluoro-3,6-dioxaheptanoic acid	F	0.35	U		0.35	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid	F	0.3	U		0.3	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	13252-13-6	Perfluoro-2-propoxypropionic acid	F	0.43	U		0.43	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	377-73-1	Perfluoro-3-methoxypropanoic acid	F	0.45	U		0.45	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	863090-89-5	Perfluoro-4-methoxybutanoic acid	F	0.43	U		0.43	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	375-73-5	Perfluorobutanesulfonic acid (PFBS)	F	8.3			0.15	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	375-22-4	Perfluorobutanoic acid (PFBA)	F	29			0.53	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	335-77-3	Perfluorodecanesulfonic acid (PFDS)	F	0.22	U		0.22	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	335-76-2	Perfluorodecanoic acid (PFDA)	F	0.079	U		0.079	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	79780-39-5	Perfluorododecanesulfonic acid	F	0.2	U		0.2	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	307-55-1	Perfluorododecanoic acid (PFDoA)	F	0.33	U		0.33	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	375-92-8	Perfluoroheptanesulfonic Acid (PFHps)	F	0.36	U		0.36	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	375-85-9	Perfluoroheptanoic acid (PFHpA)	F	4.3			0.18	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	F	12			0.22	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	307-24-4	Perfluorohexanoic acid (PFHxA)	F	9.3			0.1	EPA 1633

Table 6. Analytical Results for Water Samples Obtained Using Method 1633 (continued)

Location Code	Location Type	Date Sampled	Sample Code	CAS No.	Analyte	Sample Type	Result (ng/L)	Lab Qualifier	Data Validation Qualifier	Detection Limit (ng/L)	Analytical Method
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	68259-12-1	Perfluorononane Sulfonic acid (PFNS)	F	0.14	U		0.14	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	375-95-1	Perfluorononanoic acid (PFNA)	F	0.33	J		0.16	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	754-91-6	Perfluorooctane Sulfonamide (FOSA)	F	0.31	J		0.095	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	F	1.8		J	0.29	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	335-67-1	Perfluorooctanoic acid (PFOA)	F	7.2			0.59	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	F	5.3			0.14	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	2706-90-3	Perfluoropentanoic acid (PFPeA)	F	19			0.34	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	376-06-7	Perfluorotetradecanoic acid (PFTeA)	F	0.19	U		0.19	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	F	0.15	U		0.15	EPA 1633
OLFSEEP8	SL	10/11/2023 11:18	RFS01-18.2310002-008	2058-94-8	Perfluoroundecanoic acid (PFUnA)	F	0.25	U		0.25	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	763051-92-9	11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid	F	1.1	U		1.1	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	914637-49-3	2H,2H,3H,3H-Perfluorooctanoic acid	F	23	J		4.6	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	812-70-4	3-Perfluoroheptyl propanoic acid	F	4.9	U		4.9	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	356-02-5	3-Perfluoropropyl propanoic acid	F	4.1	J	J	1.6	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (DONA)	F	0.39	U		0.39	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	F	0.61	U		0.61	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	27619-97-2	6:2 fluorotelomersulfonic acid	F	1.4	J	J	0.52	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	39108-34-4	8:2 fluorotelomersulfonic acid	F	1.3	J	J	0.68	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	756426-58-1	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	F	0.97	U	J	0.97	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	4151-50-2	N-ethyl perfluorooctanesulfonamide	F	0.17	U		0.17	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid	F	23			0.32	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	1691-99-2	N-ethyl perfluorooctanesulfonamidoethanol	F	1	U		1	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	31506-32-8	N-methyl perfluorooctanesulfonamide	F	0.27	U		0.27	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	2355-31-9	N-methyl perfluorooctanesulfonamidoacetic acid	F	1.1	J		0.37	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	24448-09-7	N-methyl perfluorooctanesulfonamidoethanol	F	0.94	U		0.94	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	151772-58-6	Nonfluoro-3,6-dioxaheptanoic acid	F	0.34	U		0.34	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid	F	0.3	U		0.3	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	13252-13-6	Perfluoro-2-propoxypropionic acid	F	0.42	U		0.42	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	377-73-1	Perfluoro-3-methoxypropanoic acid	F	0.44	U		0.44	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	863090-89-5	Perfluoro-4-methoxybutanoic acid	F	0.43	U		0.43	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	375-73-5	Perfluorobutanesulfonic acid (PFBS)	F	1.6			0.15	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	375-22-4	Perfluorobutanoic acid (PFBA)	F	70			0.52	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	335-77-3	Perfluorodecanesulfonic acid (PFDS)	F	1	J		0.22	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	335-76-2	Perfluorodecanoic acid (PFDA)	F	0.71	J	J	0.078	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	79780-39-5	Perfluorododecanesulfonic acid	F	0.2	U		0.2	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	307-55-1	Perfluorododecanoic acid (PFDoA)	F	0.32	U		0.32	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	375-92-8	Perfluoroheptanesulfonic Acid (PFHps)	F	0.35	U		0.35	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	375-85-9	Perfluoroheptanoic acid (PFHpA)	F	9.4			0.18	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	355-46-4	Perfluorohexamersulfonic acid (PFHxS)	F	8.4			0.21	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	307-24-4	Perfluorohexanoic acid (PFHxA)	F	23			0.1	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	68259-12-1	Perfluorononane Sulfonic acid (PFNS)	F	0.14	U		0.14	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	375-95-1	Perfluorononanoic acid (PFNA)	F	0.84	J		0.16	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	754-91-6	Perfluorooctane Sulfonamide (FOSA)	F	0.65	J	J	0.094	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	F	20			0.29	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	335-67-1	Perfluorooctanoic acid (PFOA)	F	81		J	0.58	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	F	0.14	U		0.14	EPA 1633

Table 6. Analytical Results for Water Samples Obtained Using Method 1633 (continued)

Location Code	Location Type	Date Sampled	Sample Code	CAS No.	Analyte	Sample Type	Result (ng/L)	Lab Qualifier	Data Validation Qualifier	Detection Limit (ng/L)	Analytical Method
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	2706-90-3	Perfluoropentanoic acid (PFPeA)	F	19		J	0.34	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	376-06-7	Perfluorotetradecanoic acid (PFTeA)	F	0.19	U		0.19	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	F	0.15	U		0.15	EPA 1633
PLFSYSEFF	TS	10/11/2023 12:31	RFS01-18.2310002-010	2058-94-8	Perfluoroundecanoic acid (PFUnA)	F	0.25	U		0.25	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	763051-92-9	11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid	F	1.1	U		1.1	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	763051-92-9	11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid	D	1.1	U		1.1	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	914637-49-3	2H,2H,3H,3H-Perfluorooctanoic acid	F	4.5	U		4.5	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	914637-49-3	2H,2H,3H,3H-Perfluorooctanoic acid	D	4.7	U		4.7	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	812-70-4	3-Perfluoroheptyl propanoic acid	F	4.9	U		4.9	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	812-70-4	3-Perfluoroheptyl propanoic acid	D	5.1	U		5.1	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	356-02-5	3-Perfluoropropyl propanoic acid	F	1.6	U		1.6	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	356-02-5	3-Perfluoropropyl propanoic acid	D	1.6	U		1.6	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (DONA)	F	0.38	U		0.38	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (DONA)	D	0.4	U		0.4	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	F	0.6	U		0.6	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	757124-72-4	4:2 Fluorotelomer sulfonate (4:2 FTS)	D	0.62	U		0.62	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	27619-97-2	6:2 fluorotelomersulfonic acid	F	0.51	U		0.51	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	27619-97-2	6:2 fluorotelomersulfonic acid	D	0.53	U		0.53	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	39108-34-4	8:2 fluorotelomersulfonic acid	F	0.67	U		0.67	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	39108-34-4	8:2 fluorotelomersulfonic acid	D	0.7	U		0.7	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	756426-58-1	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	F	0.96	U		0.96	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	756426-58-1	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	D	1	U		1	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	4151-50-2	N-ethyl perfluorooctanesulfonamide	F	0.17	U		0.17	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	4151-50-2	N-ethyl perfluorooctanesulfonamide	D	0.18	U		0.18	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid	F	0.31	U		0.31	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	2991-50-6	N-ethyl perfluorooctanesulfonamidoacetic acid	D	0.33	U		0.33	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	1691-99-2	N-ethyl perfluorooctanesulfonamidoethanol	F	1	U		1	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	1691-99-2	N-ethyl perfluorooctanesulfonamidoethanol	D	1.1	U		1.1	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	31506-32-8	N-methyl perfluorooctanesulfonamide	F	0.27	U		0.27	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	31506-32-8	N-methyl perfluorooctanesulfonamide	D	0.28	U		0.28	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	2355-31-9	N-methyl perfluorooctanesulfonamidoacetic acid	F	0.37	U		0.37	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	2355-31-9	N-methyl perfluorooctanesulfonamidoacetic acid	D	0.38	U		0.38	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	24448-09-7	N-methyl perfluorooctanesulfonamidoethanol	F	0.93	U		0.93	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	24448-09-7	N-methyl perfluorooctanesulfonamidoethanol	D	0.97	U		0.97	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	151772-58-6	Nonafluoro-3,6-dioxaheptanoic acid	F	0.33	U		0.33	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	151772-58-6	Nonafluoro-3,6-dioxaheptanoic acid	D	0.35	U		0.35	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid	F	0.29	U		0.29	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid	D	0.31	U		0.31	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	13252-13-6	Perfluoro-2-propoxypropionic acid	F	0.41	U		0.41	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	13252-13-6	Perfluoro-2-propoxypropionic acid	D	0.43	U		0.43	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	377-73-1	Perfluoro-3-methoxypropanoic acid	F	0.44	U		0.44	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	377-73-1	Perfluoro-3-methoxypropanoic acid	D	0.45	U		0.45	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	863090-89-5	Perfluoro-4-methoxybutanoic acid	F	0.42	U		0.42	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	863090-89-5	Perfluoro-4-methoxybutanoic acid	D	0.44	U		0.44	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	375-73-5	Perfluorobutanesulfonic acid (PFBS)	F	0.59	J		0.15	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	375-73-5	Perfluorobutanesulfonic acid (PFBS)	D	0.69	J		0.15	EPA 1633

Table 6. Analytical Results for Water Samples Obtained Using Method 1633 (continued)

Location Code	Location Type	Date Sampled	Sample Code	CAS No.	Analyte	Sample Type	Result (ng/L)	Lab Qualifier	Data Validation Qualifier	Detection Limit (ng/L)	Analytical Method
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	375-22-4	Perfluorobutanoic acid (PFBA)	F	0.91	J		0.52	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	375-22-4	Perfluorobutanoic acid (PFBA)	D	0.95	J		0.54	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	335-77-3	Perfluorodecanesulfonic acid (PFDS)	F	0.21	U		0.21	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	335-77-3	Perfluorodecanesulfonic acid (PFDS)	D	0.22	U		0.22	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	335-76-2	Perfluorodecanoic acid (PFDA)	F	0.076	U		0.076	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	335-76-2	Perfluorodecanoic acid (PFDA)	D	0.079	U		0.079	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	79780-39-5	Perfluorododecanesulfonic acid	F	0.19	U		0.19	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	79780-39-5	Perfluorododecanesulfonic acid	D	0.2	U		0.2	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	307-55-1	Perfluorododecanoic acid (PFDoA)	F	0.32	U		0.32	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	307-55-1	Perfluorododecanoic acid (PFDoA)	D	0.33	U		0.33	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	375-92-8	Perfluoroheptanesulfonic Acid (PFHsP)	F	0.35	U		0.35	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	375-92-8	Perfluoroheptanesulfonic Acid (PFHsP)	D	0.36	U		0.36	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	375-85-9	Perfluoroheptanoic acid (PFHpA)	F	0.17	U		0.17	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	375-85-9	Perfluoroheptanoic acid (PFHpA)	D	0.18	U		0.18	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	F	0.37	J		0.21	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	355-46-4	Perfluorohexanesulfonic acid (PFHxS)	D	0.34	J		0.22	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	307-24-4	Perfluorohexanoic acid (PFHxA)	F	0.24	J	J	0.1	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	307-24-4	Perfluorohexanoic acid (PFHxA)	D	0.26	J		0.11	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	68259-12-1	Perfluorononane Sulfonic acid (PFNS)	F	0.13	U		0.13	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	68259-12-1	Perfluorononane Sulfonic acid (PFNS)	D	0.14	U		0.14	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	375-95-1	Perfluorononanoic acid (PFNA)	F	0.16	U		0.16	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	375-95-1	Perfluorononanoic acid (PFNA)	D	0.17	U		0.17	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	754-91-6	Perfluoroocatane Sulfonamide (FOSA)	F	0.092	U		0.092	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	754-91-6	Perfluoroocatane Sulfonamide (FOSA)	D	0.096	U		0.096	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	F	0.44	J	J	0.28	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	1763-23-1	Perfluorooctanesulfonic acid (PFOS)	D	0.29	U		0.29	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	335-67-1	Perfluorooctanoic acid (PFOA)	F	0.57	U		0.57	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	335-67-1	Perfluorooctanoic acid (PFOA)	D	0.59	U		0.59	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	F	0.14	U		0.14	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	2706-91-4	Perfluoropentane Sulfonic acid (PFPS)	D	0.14	U		0.14	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	2706-90-3	Perfluoropentanoic acid (PFPeA)	F	0.33	U		0.33	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	2706-90-3	Perfluoropentanoic acid (PFPeA)	D	0.35	U		0.35	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	376-06-7	Perfluorotetradecanoic acid (PFTeA)	F	0.18	U		0.18	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	376-06-7	Perfluorotetradecanoic acid (PFTeA)	D	0.19	U		0.19	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	F	0.14	U		0.14	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	72629-94-8	Perfluorotridecanoic Acid (PFTriA)	D	0.15	U		0.15	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-012	2058-94-8	Perfluoroundecanoic acid (PFUnA)	F	0.24	U		0.24	EPA 1633
WOMPOC	SL	10/25/2023 9:57	RFS01-18.2310003-001	2058-94-8	Perfluoroundecanoic acid (PFUnA)	D	0.25	U		0.25	EPA 1633

Abbreviations:

CAS No. = Chemical Abstracts Service registry number

D = duplicate

E = equipment rinse

F = field

FB = field blank

J = estimated

QC = quality control sample (dummy location code)

R = rejected

SL = surface location

TS = treatment system

U = analytical result below detection limit

WL = well

Table 7. Field Parameter Results for Water Samples

Location Code	Date Sampled	Parameter	Result	Unit
33502	10/11/2023 9:28	Alkalinity, total (As CaCO ₃)	952	mg/L
33502	10/11/2023 9:28	pH	7.15	s.u.
33502	10/11/2023 9:28	Specific conductance	2631	µmhos/cm
33502	10/11/2023 9:28	Temperature	15.6	°C
33502	10/11/2023 9:28	Turbidity	5.1	NTU
33905	10/11/2023 10:40	Alkalinity, total (As CaCO ₃)	246	mg/L
33905	10/11/2023 10:40	pH	6.85	s.u.
33905	10/11/2023 10:40	Specific conductance	1121	µmhos/cm
33905	10/11/2023 10:40	Temperature	16.4	°C
33905	10/11/2023 10:40	Turbidity	5.2	NTU
OLFSEEP8	10/11/2023 11:18	Alkalinity, total (As CaCO ₃)	366	mg/L
OLFSEEP8	10/11/2023 11:18	pH	7.38	s.u.
OLFSEEP8	10/11/2023 11:18	Specific conductance	1360	µmhos/cm
OLFSEEP8	10/11/2023 11:18	Temperature	15.8	°C
OLFSEEP8	10/11/2023 11:18	Turbidity	33.0	NTU
PLFSYSEFF	10/11/2023 12:31	Alkalinity, total (As CaCO ₃)	1454*	mg/L
PLFSYSEFF	10/11/2023 12:31	pH	6.99	s.u.
PLFSYSEFF	10/11/2023 12:31	Specific conductance	1264	µmhos/cm
PLFSYSEFF	10/11/2023 12:31	Temperature	17.2	°C
PLFSYSEFF	10/11/2023 12:31	Turbidity	9.7	NTU
WOMPOC	10/25/2023 9:57	Alkalinity, total (As CaCO ₃)	174	mg/L
WOMPOC	10/25/2023 9:57	pH	6.85	s.u.
WOMPOC	10/25/2023 9:57	Specific conductance	575	µmhos/cm
WOMPOC	10/25/2023 9:57	Temperature	14.3	°C
WOMPOC	10/25/2023 9:57	Turbidity	1.6	NTU

Note:

* This result was rejected during data validation as it is well outside the normal range for this location (historical range 590–678 mg/L, average 630 mg/L).

Abbreviations:

CaCO₃ = calcium carbonate
 mg/L = milligrams per liter
 µmhos/cm = micromhos per centimeter
 NTU = nephelometric turbidity units
 s.u. = standard pH units