Groundwater Remediation Systems
Quarterly Operations Report

January 1, 2023 through March 31, 2023

Brookhaven National Laboratory
Upton, Long Island, New York

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Prepared for:

U.S. Department of Energy
Brookhaven Site Office

July 2023

1st Quarter Groundwater Remediation Systems Operations Report

January 1, 2023 – March 1, 2023

Environmental Protection Division
Groundwater Protection Group

Brookhaven National Laboratory
Operated by
Brookhaven Science Associates
Upton, NY 11973

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Brookhaven National Laboratory

1st Quarter Groundwater Remediation System Operations Report
January 1, 2023 through March 31, 2023

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Table 1 – Summary of Operations

Operable Unit System	*Type*	*Target Contaminant*	*Number of Wells*	*Years of Operation*	*Run Time for Quarter (%)*	*Pounds VOCS Removed (Quarter/Cumulative)*
Operable Unit I						
South Boundary	Pump & Treat (AS)	VOC	2	Operate – 16 Standby – 6	Closure Approved 9/19	0 369
Operable Unit III						
South Boundary	Pump and Treat (AS)	VOC	8	26	85%	3.1 3,079
HFBR Pump and Recharge	Pump & Recirculate	Tritium	4	Operate – 9 Standby – 16	Closure Approved 3/19	NA 180
Industrial Park	Recirc./In-Well (AS/Carbon)	VOC	7	Operate – 16 Standby – 7	Standby	0 1066
	Pump & Treat (Carbon)	VOC	2	Operate – 4 Standby – 3	Standby	0 10
Building 96	Recirculation Well (AS/Carbon)	VOC	4	Operate – 21 Standby – 1	100% PP	0.1 146
Middle Road	Pump &Treat (AS)	VOC	7	22	99%	6.78 1359
Western South Boundary	Pump & Treat (AS)	VOC	6	21	99%	3.4 203
North Street	Pump & Treat (Carbon)	VOC	2	Operate – 9 Standby – 7	Closure Approved 3/20	NA 342
North Street East	Pump & Treat (Carbon)	VOC/EDB	4	Operate – 13 Standby – 6	99%	0.51 49
LIPA/Airport	Pump & Treat (Carbon)	VOC	10	19	100%	1.3 502
Industrial Park East	Pump & Treat (Carbon)	VOC	2	Operate – 5 Standby – 4	Dismantled 2013	NA 38
Chemical Holes	Pump & Treat (IE)	Sr-90	3	Operate – 15 Standby – 4	Standby	NA
BGRR/WCF	Pump & Treat (IE)	Sr-90	9	17	100% PP	NA
Freon	Pump & Treat (AS)	Freon-11	1	Operate – 4 Standby – 6	Closure Approved 9/19	0 106
Carbon Tetrachloride	Pump & Treat (Carbon)	VOC/Carbon Tetrachloride	3	Operate – 5 Standby – 5	Closure Approved 10/09	0 349
Operable Unit IV						
AOC 5 1997 Spill	AS/SVE	VOC	71	Operate – 4 Standby – 2	Closure Approved 7/03	0 35
Operable Unit VI						
EDB	Pump & Treat (Carbon)	EDB	2	18	100%	NA*
Operable Unit X						
Current Firehouse	Pump & Treat (Carbon)	PFAS	9	<1	100%	NA
Former Firehouse	Pump & Treat (Carbon)	PFAS	3	<1	100%	NA

AS = air stripping
SVE = soil vapor extraction
IE = ion exchange
NA = not applicable
PP = system is pulse pumping
EDB = ethylene dibromide
PFAS = per- and polyfluoroalkyl substances
Shaded = system closed
* EDB detected at trace levels.

OU I/RA V South Boundary Pump & Treat System (System Closed)

Process: Groundwater extraction and air stripping treatment, with discharge to the RA V recharge basin.

Goal: Reach Maximum Contaminant Levels (MCLs) in core monitoring wells within 30 years for the Upper Glacial aquifer (by 2030). The system was placed in standby in September 2013 and the Petition for Closure of the OU I South Boundary Groundwater Treatment System was approved by the regulators in September 2019.

Start Date: January 1997

Table 2-1
Pumping Rates (gpm)

Extraction Well	EW-1*	EW-2*
Site ID #	115-27	115-43
Screen Interval (ft bls)	150-190	104-124/134-154
Desired Rate (GPM)	0	0
January	Off	Off
February	Off	Off
March	Off	Off
Actual (Avg. over Qtr.)	Off	Off

* The system was shut down and approved for closure in September 2019.

OU I/RA V South Boundary Pump & Treat System (System Closed)

Figure 2-1
Cumulative Mass Removal of VOCs vs. Time

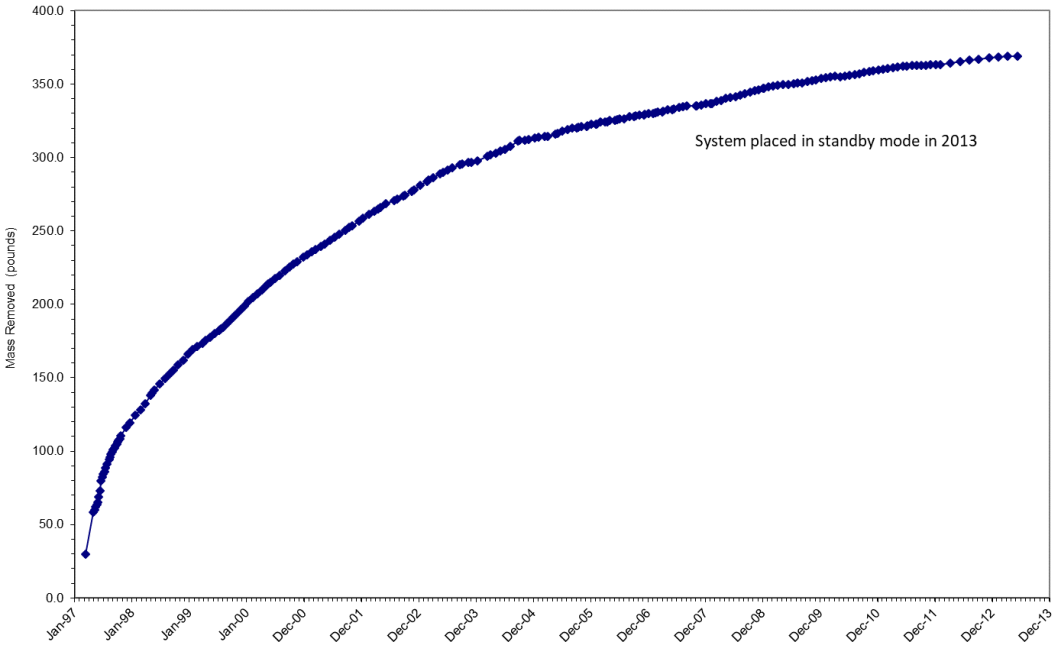
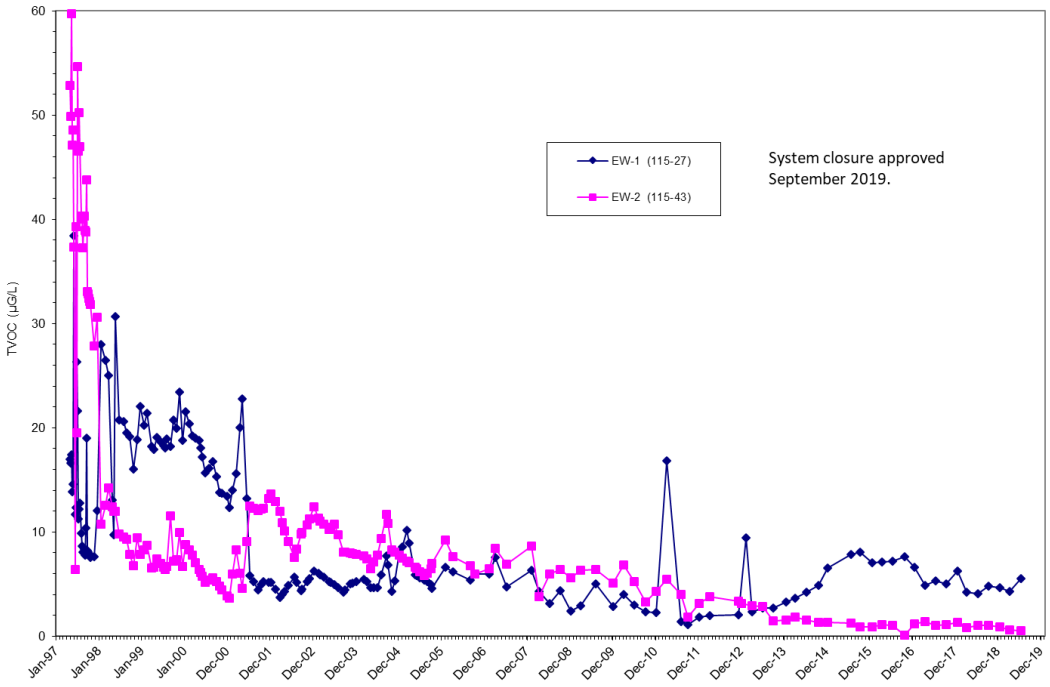


Figure 2-2
Extraction Well TVOC Concentrations vs. Time



OU I/RA V South Boundary Pump & Treat System
(System Closed)

Table 2-2
Effluent Water Quality
SPDES Equivalency Permit Concentrations - January 1 through March 31, 2023

Parameter	Permit Limit	Max. Measured Value	Units	Frequency
Flow	Monitor	NA [1]	GPD	Continuous
pH (range)	6.0- 9.0	NA [1]	SU	Weekly
Benzene	0.8	NA [1]	µg/L	Monthly
Chloroform	7.0	NA [1]	µg/L	Monthly
Chloroethane	5.0	NA [1]	µg/L	Monthly
1,2-Dichloroethane	5.0	NA [1]	µg/L	Monthly
1,1-Dichloroethene	5.0	NA [1]	µg/L	Monthly
1,1,1-Trichloroethane	5.0	NA [1]	µg/L	Monthly
Carbon Tetrachloride	5.0	NA [1]	µg/L	Quarterly
1,2-Dichloropropane	5.0	NA [1]	µg/L	Quarterly
Methylene Chloride	5.0	NA [1]	µg/L	Quarterly
Trichloroethylene	5.0	NA [1]	µg/L	Quarterly
Vinyl Chloride	2.0	NA [1]	µg/L	Quarterly
1,2-Xylene	5.0	NA [1]	µg/L	Quarterly
Sum of 1,3 and 1,4-Xylenes	10.0	NA [1]	µg/L	Quarterly

[1] The system is closed.

Monitoring Activities:

In addition to the OU I/RA V South Boundary monitoring wells, Current Landfill monitoring well data are included since this is one of the sources of the OU I/RA V plume. The OU I / RA V South Boundary monitoring well network is shown on **Figure 2-3** and the 'Hits Only' first quarter 2023 data are summarized in **Table 2-3.**

As a follow-up to temporary wells installed in 2022, three additional temporary wells (GP-97, GP-98, and GP-101) were installed in the first quarter of 2023 to track the migration of Sr-90 from the former HWMF. The maximum concentration of Sr-90 recorded was 14 pCi/L in GP-98. The temporary well locations are shown on **Figure 2-4** and the data are presented and discussed in greater detail in the 2022 Groundwater Status Report.

OU I/RA V South Boundary Pump & Treat System (System Closed)

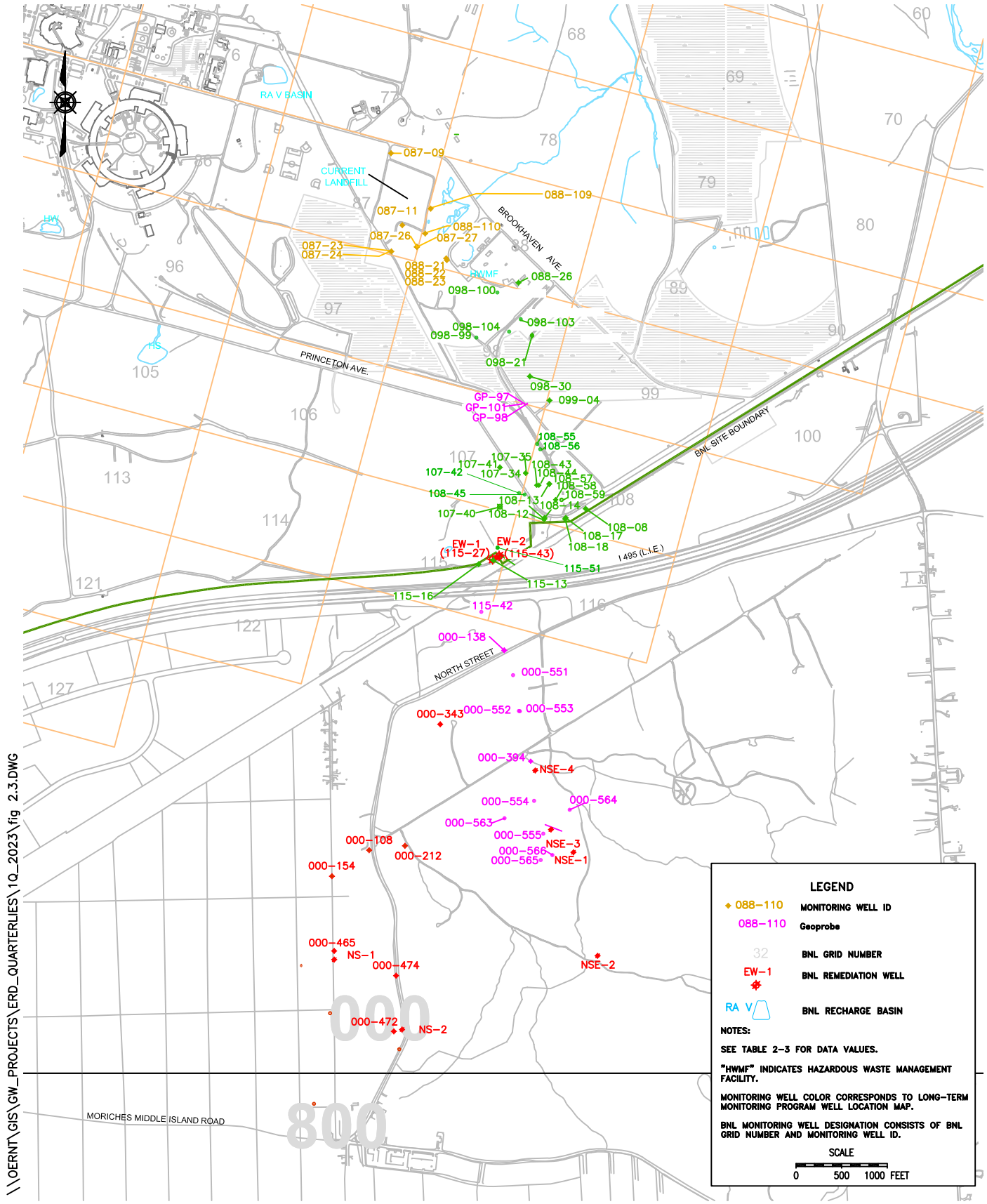
System Operations

January through March 2023:

The system remained closed.

Planned Operational Changes

- No planned operational changes.



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ENVIRONMENTAL PROTECTION DIVISION

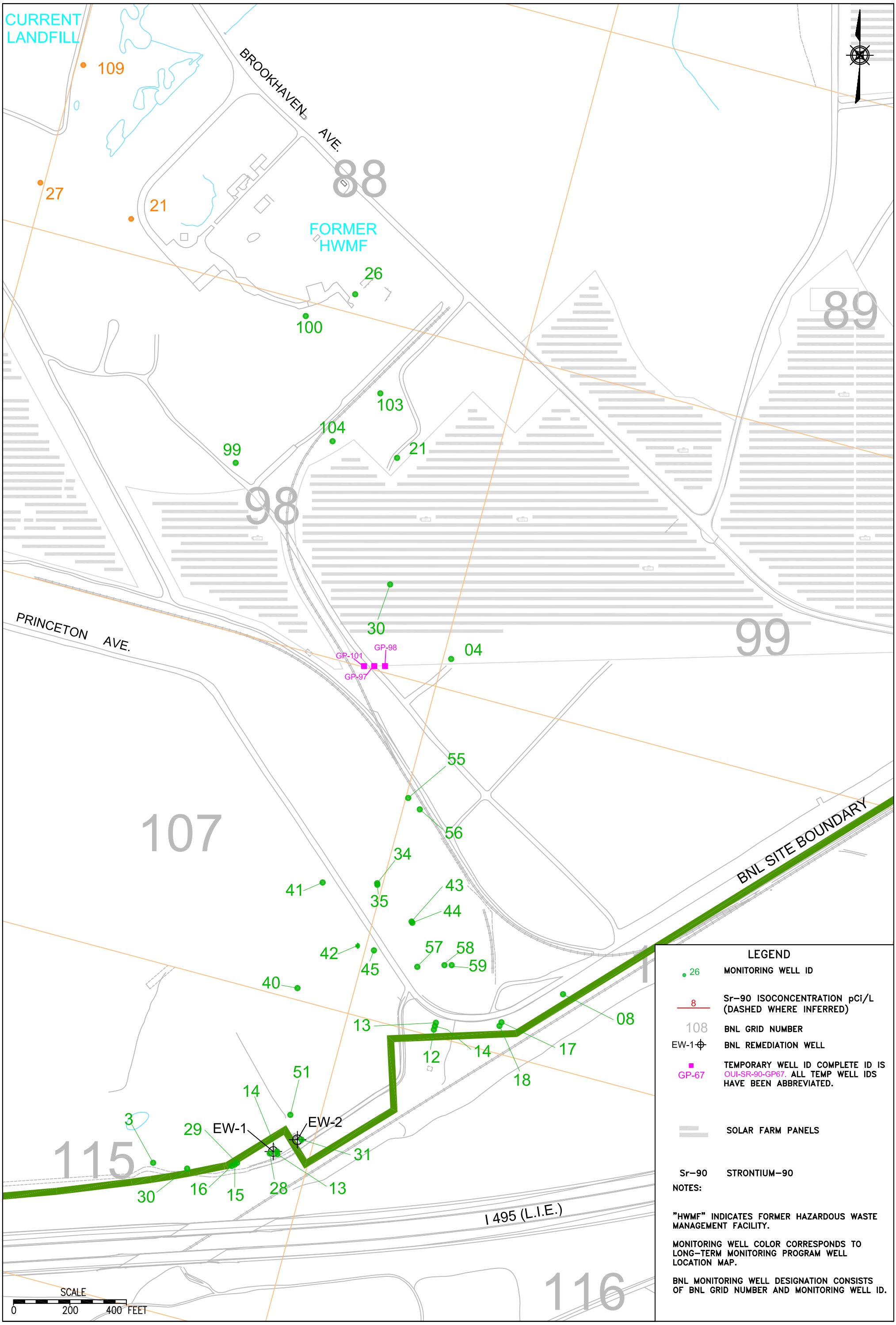
TITLE:

OU I/RA V SOUTH BOUNDARY
OUIII NORTH STREET/NORTH STREET EAST MONITORING WELL NETWORK

SITEWIDE REMEDIATION SYSTEMS
FIRST QUARTER 2023 OPERATIONS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
JEB	–	08/08/11	NA
CHKD:	APPD:	REV.:	NOTES:
LDS	––	07/07/23	–

FIGURE NO.: 2-3



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ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU I SOUTH BOUNDARY
Sr-90 TEMPORARY WELLS
First Quarter 2023 Operations Report

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
JEB	–	10/8/17	–
CHKD:	APPD:	REV.:	NOTES:
LDS	–	05/26/23	–

FIGURE NO.: 2-4

Table 2-3
OU I RA V South Boundary Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 088-109

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/03/2023	10.94	--	--	UG/L	13.50		
1,1-Dichloroethane	03/03/2023	2.45	0.5	--	UG/L	13.50		
Chloroethane	03/03/2023	8.49	0.5	--	UG/L	13.50		

Site ID : 098-100

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	03/23/2023	70.5	0.829	2.2	PCI/L	175.00		

Site ID : 098-103

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	03/24/2023	25.8	0.775	1.8	PCI/L	20.00		

Site ID : 098-104

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	03/24/2023	247	0.797	5.64	PCI/L	20.00		

Site ID : 098-30

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	03/23/2023	51.6	0.776	1.89	PCI/L	37.80		

Site ID : 098-99

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/03/2023	4.16	--	--	UG/L	44.50		
1,1-Dichloroethane	03/03/2023	4.16	0.5	--	UG/L	44.50		

Site ID : 108-55

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	03/24/2023	8.29	0.785	1.04	PCI/L	59.00		

Site ID : 108-57

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	03/22/2023	8.02	0.789	0.965	PCI/L	70.00		

Site ID : 108-58

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	03/22/2023	6.18	0.78	0.84	PCI/L	70.00		

Qualifiers :

J = Estimated value.

D = Compound was identified in an analysis at a secondary dilution factor.

N2 = Not usable based on the results that are not distinguishable from background. The value is less than or equal to the sum of the MDA and the uncertainty or RDL.

U = Compound not detected.

Organic Compounds :

B = Compound was found in both the sample And associated laboratory blank.

Inorganic Compounds :

B = Result Is between instrument detection limit And contract required reporting limit.

OU III South Boundary Pump and Treat System

Process: Groundwater extraction and air stripping treatment, with discharge to both the OU III and RAV recharge basins.

Goal: Reach Maximum Contaminant Levels (MCLs) in core monitoring wells in OU III within 30 years for the Upper Glacial aquifer (by 2030).

Start Date: June 1997

Table 3-1
Pumping Rates (gpm)

Extraction Well	EW-3	EW-4	EW-5	EW-6	EW-7	EW-8	EW-12	EW-17
Site ID	121-17	121-16	121-15	122-14	122-13	122-12	122-30	121-46
Screen Interval (ft bls)	150-190	160-180 &190-200	160-200	160-200	170-210	190-210 & 230-250	180-220	207-237
Desired Flow Rate (gpm)	0*	0*	0*	0*	0*	0*	0*	150
January (Avg monthly gpm)	0	0	0	0	0	0	0	120
February " "	0	0	0	0	0	0	0	92
March " "	0	0	0	0	0	0	0	48**
Actual (Avg. over Qtr)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**87**

*Extraction wells placed in standby mode: EW-12 (2003), EW-8 (2006), EW-6 (2007), EW-7 (2007), EW-3, EW-5 (2015) and EW-4 (2021).
** EW-17 was off for repairs during the second half of March.

OU III South Boundary Pump and Treat System

Figure 3-1
Cumulative Mass Removal of VOCs vs. Time

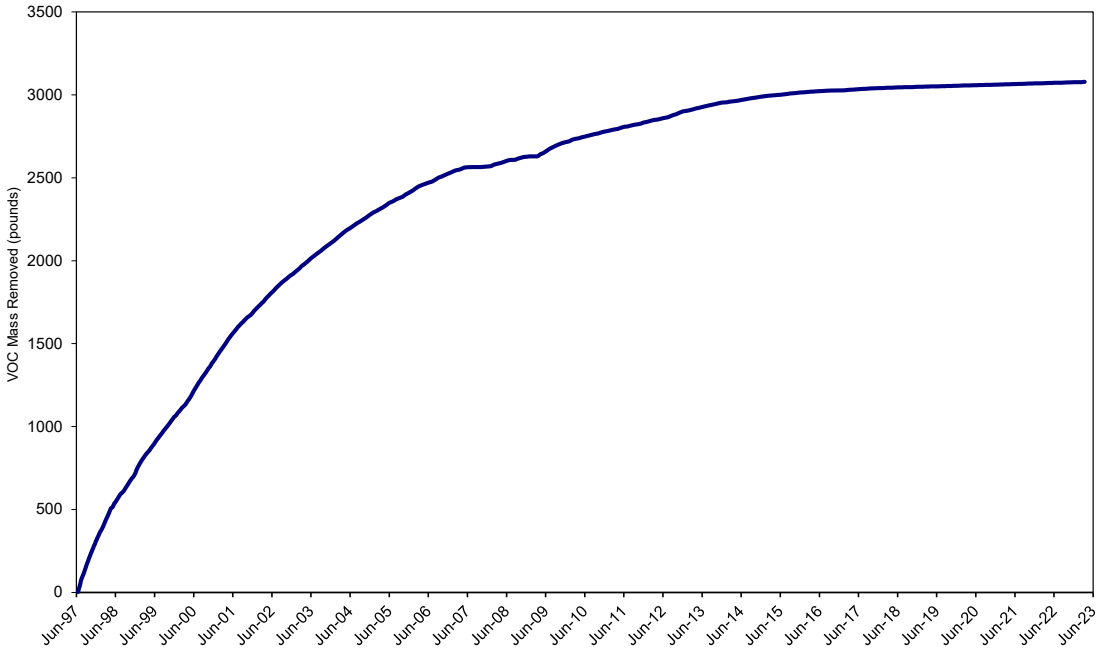
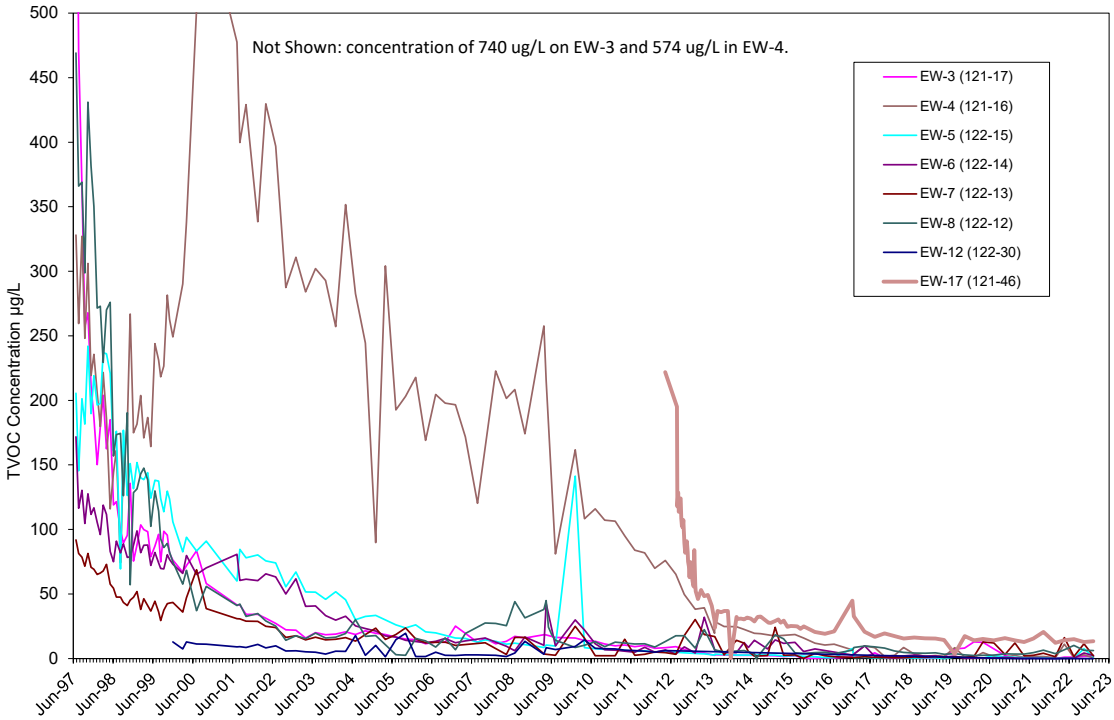


Figure 3-2
Extraction Well TVOC Concentration vs. Time



OU III South Boundary Pump and Treat System

Table 3-2
Effluent Water Quality
SPDES Equivalency Permit Concentrations - January 1 through March 31, 2023

Parameter	Permit Limit	Max. Measured Value	Units	Frequency
Flow	**Monitor**	**1,299,701[1]**	**GPD**	**Continuous**
pH (range)	**6.5 - 8.5**	**6.7– 7.3[2]**	**SU**	**Monthly[3]**
Carbon Tetrachloride	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
Chloroform	**7.0**	**<0.50**	**µg/L**	**Monthly[3]**
Dichlorodifluoromethane	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
1,1-Dichloroethane	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
1,1-Dichloroethylene	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
Methyl Chloride	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
Tetrachloroethylene	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
Toluene	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
1,1,1-Trichloroethane	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
1,1,2 Trichloroethane	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
Trichloroethylene	**10.0**	**<0.50**	**µg/L**	**Monthly[3]**

[1] The maximum monthly average flow rate for both the OU III South Boundary, Middle Road, and Western South Boundary Systems, during the operational period.
[2] The minimum and maximum pH values during the operational period.
[3] Beginning in April 2003, a SPDES modification was approved revising the pH and volatile organic sampling to once a month.

Monitoring Activities:

The OU III South Boundary monitoring well data show the highest concentration of TVOCs in plume core monitoring well 121-53 at 142 µg/L. The highest individual VOC concentration recorded in this well was tetrachloroethylene (PCE) at 110 µg/L. The TVOC concentration in monitoring well 121-49, downgradient of 121-53, was 129. PCE was recorded at 120 µg/L in this well. The OU III South Boundary monitoring well network is shown on **Figure 3-3.** The 'Hits Only' first quarter 2023 data are summarized in **Table 3-3.**

OU III South Boundary Pump and Treat System

System Operations

January 2023:

Extraction well EW-17 was in full-time operation. Wells EW-3, EW-4, EW-5, EW-6, EW-7, EW-8, and EW-12 remained in standby mode. An effluent sample was taken from the OU III South Boundary air stripping tower and the system treated approximately 5 million gallons of water.

February 2023:

The system operated normally for the month with extraction well EW-17 in full-time operation. Wells EW-3, EW-4, EW-5, EW-6, EW-7, EW-8, and EW-12 remained in standby mode. An effluent sample was taken from the OU III South Boundary air stripping tower and the system treated approximately 4 million gallons of water.

March 2023:

Extraction well EW-17 was in full time operation through the middle of March; however, it required mechanical repairs and was down through the remainder of the month. Wells EW-3, EW-4, EW-5, EW-6, EW-7, EW-8, and EW-12 remained in standby mode. An effluent sample was taken from the OU III South Boundary air stripping tower and the system treated approximately 2 million gallons of water.

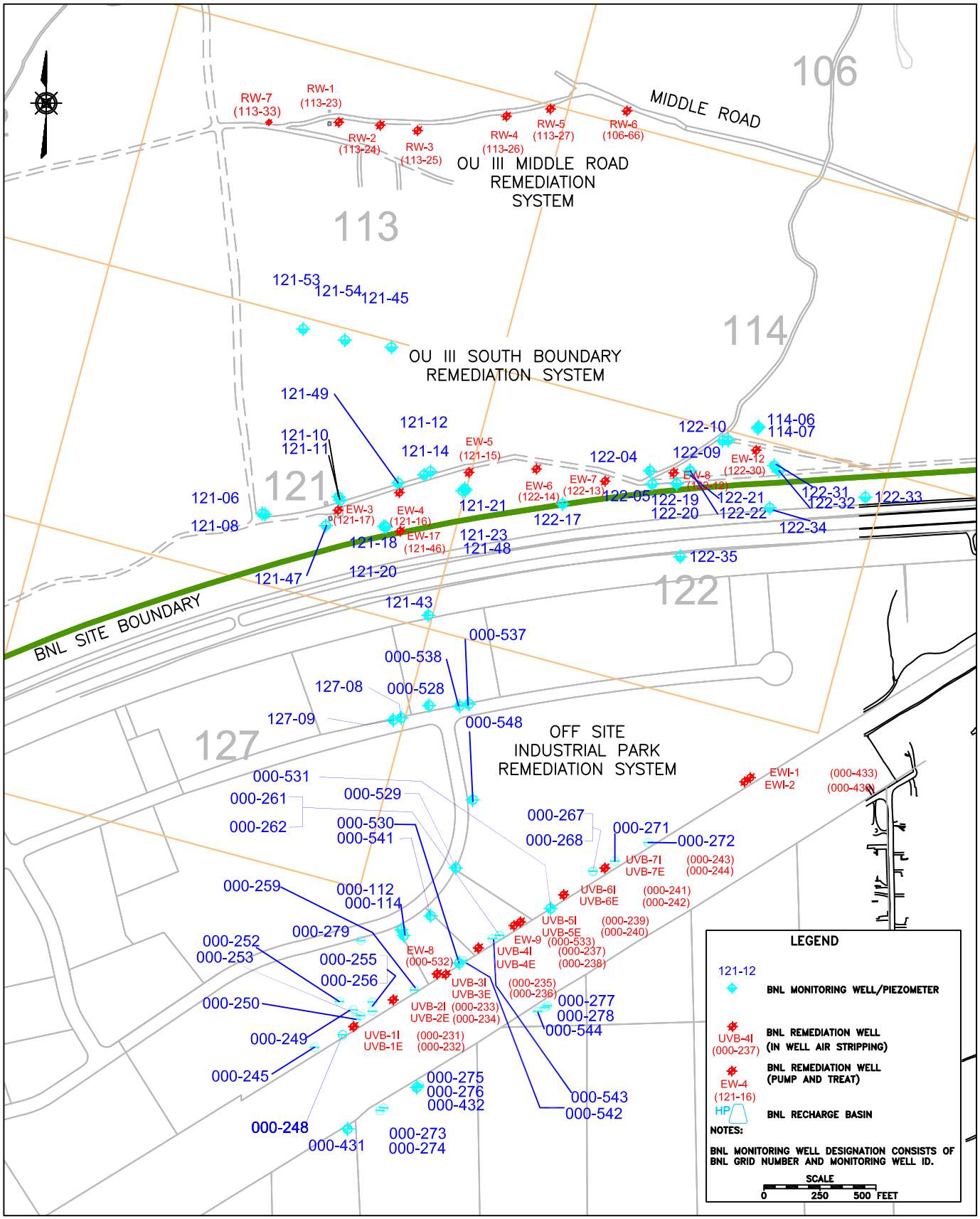
The system treated approximately 11 million gallons of water during the first quarter of 2023. The treatment system 'Hits Only' data, including individual extraction wells, influent, and effluent is summarized in **Table 3-4** through **Table 3-6.**

Planned Operational Changes

- Maintain extraction wells EW-3, EW-4, EW-5, EW-6, EW-7, EW-8, and EW-12 in standby mode. The system's extraction wells will continue to be sampled on a quarterly basis, with the exception of EW-12. The wells will be restarted if extraction or monitoring well data indicate TVOC concentrations exceed the 50 µg/L capture goal. During the first quarter, TVOC concentrations in extraction wells EW-3, EW-4 EW-5, EW-6, EW-7, EW-8, and adjacent monitoring wells were less than 50 µg/L.
- Continue to operate extraction well EW-17 on a full-time basis. During the first quarter, TVOC concentrations in extraction well EW-17 were less than 50 µg/L. TVOC concentrations in monitoring well 121-49, located upgradient, and at the same depth as EW-17, have remained below 50 µg/L for the last four quarters apart from one sample. This sample was collected while EW-17 was off for repairs and recorded a concentration of 130 µg/L during the first quarter of 2023.

OU III South Boundary Pump and Treat System

- Discontinue sampling for tritium on the influent of the South Boundary Treatment System as tritium has not been detected at this location for over 20 years.
- Install a permanent monitoring well at the location of the vertical profile SB-VP-01-2021 installed during 2021.
- The concentrations of VOCs in the Deep Upper Glacial aquifer in this area of the site are not declining at a rate that will meet the ROD cleanup goal by 2030. To address this, per the 2021 CERCLA Five-Year Review Report (BNL 2021) recommendations, groundwater modeling simulations will be performed to evaluate the best locations, extraction rates, and number of extraction wells to design an appropriate system modification. The regional groundwater model will be reviewed prior to this modeling effort and updated as necessary to accurately represent the Upton Unit and its lower hydraulic conductivity.



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ENVIRONMENTAL PROTECTION DIVISION

TITLE: OU III SOUTH BOUNDARY/INDUSTRIAL PARK/INDUSTRIAL PARK AREA MONITORING WELL NETWORKS

SITEWIDE REMEDIATION SYSTEMS
FIRST QUARTER 2023 OPERATIONS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
JEB	–	09/12/14	–
CHKD:	APPD:	REV.:	NOTES:
LDS	–	07/07/23	–

FIGURE NO.: 3–3

Table 3-3
OU III South Boundary Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 121-45

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/10/2023	5.2	--	--	UG/L	199.50		
1,1,1-Trichloroethane	03/10/2023	0.2	0.5	--	UG/L	199.50	J	
Carbon tetrachloride	03/10/2023	0.16	0.5	--	UG/L	199.50	J	
Tetrachloroethylene	03/10/2023	4.4	0.5	--	UG/L	199.50		
Trichloroethylene	03/10/2023	0.44	0.5	--	UG/L	199.50	J	

Site ID : 121-49

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/31/2023	129.36	--	--	UG/L	215.00		
1,1,1-Trichloroethane	03/31/2023	0.89	0.5	--	UG/L	215.00		
1,1-Dichloroethylene	03/31/2023	0.87	0.5	--	UG/L	215.00		
Carbon tetrachloride	03/31/2023	5.4	0.5	--	UG/L	215.00		
Tetrachloroethylene	03/31/2023	120	5	--	UG/L	215.00	D	
Trichloroethylene	03/31/2023	2.2	0.5	--	UG/L	215.00		

Site ID : 121-53

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/31/2023	141.64	--	--	UG/L	229.00		
1,1,1-Trichloroethane	03/31/2023	2.2	0.5	--	UG/L	229.00		
1,1-Dichloroethane	03/31/2023	0.37	0.5	--	UG/L	229.00	J	
1,1-Dichloroethylene	03/31/2023	2.1	0.5	--	UG/L	229.00		
Carbon tetrachloride	03/31/2023	22	0.5	--	UG/L	229.00		
Chloroform	03/31/2023	1.3	0.5	--	UG/L	229.00		
Dichlorodifluoromethane	03/31/2023	0.27	0.5	--	UG/L	229.00	J	
Tetrachloroethylene	03/31/2023	110	5	--	UG/L	229.00	D	
Trichloroethylene	03/31/2023	3.4	0.5	--	UG/L	229.00		

Site ID : 121-54

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/31/2023	61.69	--	--	UG/L	220.00		
1,1,1-Trichloroethane	03/31/2023	0.45	0.5	--	UG/L	220.00	J	
1,1-Dichloroethylene	03/31/2023	0.38	0.5	--	UG/L	220.00	J	
Carbon tetrachloride	03/31/2023	9.1	0.5	--	UG/L	220.00		
Tetrachloroethylene	03/31/2023	51	2	--	UG/L	220.00	D	
Trichloroethylene	03/31/2023	0.76	0.5	--	UG/L	220.00		

Table 3-4
OU III South Boundary Extraction Well Data
'Hits Only' January through March 2023

Site ID : 121-15 (EW-5)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	1.3	--	--	UG/L	0.00		
Chloroform	01/09/2023	0.37	0.5	--	UG/L	0.00	J	
Tetrachloroethylene	01/09/2023	0.93	0.5	--	UG/L	0.00		

Site ID : 121-16 (EW-4)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	0.64	--	--	UG/L	0.00		
Chloroform	01/09/2023	0.27	0.5	--	UG/L	0.00	J	
Tetrachloroethylene	01/09/2023	0.37	0.5	--	UG/L	0.00	J	

Site ID : 121-17 (EW-3)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	1.82	--	--	UG/L	0.00		
Chloroform	01/09/2023	0.44	0.5	--	UG/L	0.00	J	
Methyl tert-butyl ether	01/09/2023	0.71	0.5	--	UG/L	0.00		
Tetrachloroethylene	01/09/2023	0.67	0.5	--	UG/L	0.00		

Site ID : 121-46 (EW-17)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	13.44	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/09/2023	0.39	0.5	--	UG/L	0.00	J	
Carbon tetrachloride	01/09/2023	2.2	0.5	--	UG/L	0.00		
Chloroform	01/09/2023	0.58	0.5	--	UG/L	0.00		
Tetrachloroethylene	01/09/2023	9.8	0.5	--	UG/L	0.00		
Trichloroethylene	01/09/2023	0.47	0.5	--	UG/L	0.00	J	

Site ID : 122-12 (EW-8)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	6.12	--	--	UG/L	0.00		
Methylene chloride	01/09/2023	1.1	0.5	--	UG/L	0.00	B	
Tetrachloroethylene	01/09/2023	4.2	0.5	--	UG/L	0.00		
Toluene	01/09/2023	0.36	0.5	--	UG/L	0.00	J	
Trichloroethylene	01/09/2023	0.46	0.5	--	UG/L	0.00	J	

Site ID : 122-13 (EW-7)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	2.05	--	--	UG/L	0.00		
Chloroform	01/09/2023	0.25	0.5	--	UG/L	0.00	J	

Table 3-4
OU III South Boundary Extraction Well Data
'Hits Only' January through March 2023

Site ID : 122-13 (EW-7)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Tetrachloroethylene	01/09/2023	1.8	0.5	--	UG/L	0.00		

Site ID : 122-14 (EW-6)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	2.39	--	--	UG/L	0.00		
Carbon tetrachloride	01/09/2023	0.18	0.5	--	UG/L	0.00	J	
Chloroform	01/09/2023	0.21	0.5	--	UG/L	0.00	J	
Tetrachloroethylene	01/09/2023	2	0.5	--	UG/L	0.00		

Table 3-5
OU III South Boundary Influent Data
'Hits Only' January through March 2023

Site ID : 121-41 (System Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	9.45	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/09/2023	0.17	0.5	--	UG/L	0.00	J	
Carbon tetrachloride	01/09/2023	1.2	0.5	--	UG/L	0.00		
Chloroform	01/09/2023	0.42	0.5	--	UG/L	0.00	J	
Tetrachloroethylene	01/09/2023	7.2	0.5	--	UG/L	0.00		
Trichloroethylene	01/09/2023	0.46	0.5	--	UG/L	0.00	J	
8260 TVOC	02/11/2023	12.07	--	--	UG/L	0.00		
1,1-Dichloroethylene	02/11/2023	0.26	0.5	--	UG/L	0.00	J	
Carbon tetrachloride	02/11/2023	1.8	0.5	--	UG/L	0.00		
Chloroform	02/11/2023	0.46	0.5	--	UG/L	0.00	J	
Tetrachloroethylene	02/11/2023	9.2	0.5	--	UG/L	0.00		
Trichloroethylene	02/11/2023	0.35	0.5	--	UG/L	0.00	J	
8260 TVOC	03/13/2023	12.7	--	--	UG/L	0.00		
1,1,1-Trichloroethane	03/13/2023	0.26	0.5	--	UG/L	0.00	J	
1,1-Dichloroethylene	03/13/2023	0.32	0.5	--	UG/L	0.00	J	
Carbon tetrachloride	03/13/2023	1.9	0.5	--	UG/L	0.00		
Chloroform	03/13/2023	0.52	0.5	--	UG/L	0.00		
Tetrachloroethylene	03/13/2023	9.7	0.5	--	UG/L	0.00		

Table 3-6
OU III South Boundary Effluent Data
'Hits Only' January through March 2023

Site ID : 095-126 (System Effluent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	0	--	--	UG/L	0.00		
8260 TVOC	02/11/2023	0	--	--	UG/L	0.00		
8260 TVOC	03/13/2023	0	--	--	UG/L	0.00		

Qualifiers :

J = Estimated value.

D = Compound was identified in an analysis at a secondary dilution factor.

N2 = Not usable based on the results that are not distinguishable from background. The value is less than or equal to the sum of the MDA and the uncertainty or RDL.

U = Compound not detected.

Organic Compounds :

B = Compound was found in both the sample And associated laboratory blank.

Inorganic Compounds :

B = Result Is between instrument detection limit And contract required reporting limit.

OU III Middle Road Pump & Treat System

Process: Groundwater extraction and air stripping treatment, with discharge to both the OU III and RAV recharge basins.

Goal: Reach Maximum Contaminant Levels (MCLs) in core monitoring wells in OU III within 30 years for the Upper Glacial aquifer (by 2030).

Start Date: October 23, 2001

Table 4-1
Pumping Rates (gpm)

Extraction Well	RW-1	RW-2	RW-3	RW-4	RW-5	RW-6	RW-7
Site ID #	113-23	113-24	113-25	113-26	113-27	106-66	113-33
Screen Interval (ft bls)	90-130	170-200	228-268	150-180	150-180	188-218	202-222
Desired Flow Rate (gpm)	0*	150	125	0*	0*	0*	125
January (Avg monthly gpm)	0	115	118	0	0	0	76
February " " "	0	96	90	0	0	0	102
March " " "	0	133	150	0	0	0	127
Actual (Avg. over Qtr.)	**0**	**115**	**119**	**0**	**0**	**0**	**102**

* Extraction wells placed in standby mode: RW-4 and RW-5 (2003), RW-6 (2006), and RW-1 (2015).

OU III Middle Road Pump & Treat System

Figure 4-1
Cumulative Mass Removal of VOCs vs. Time

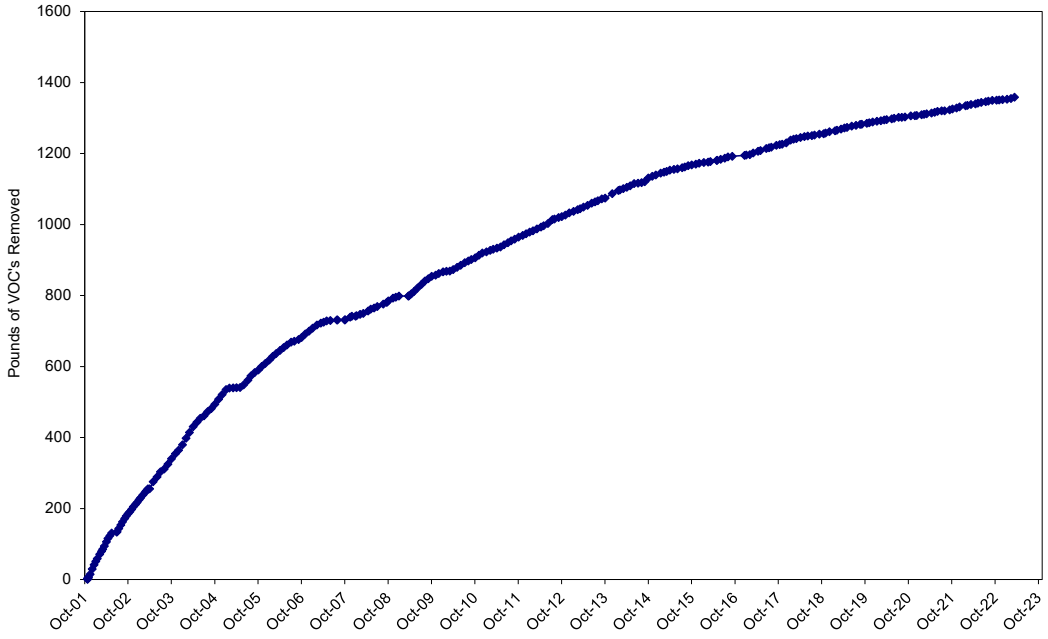
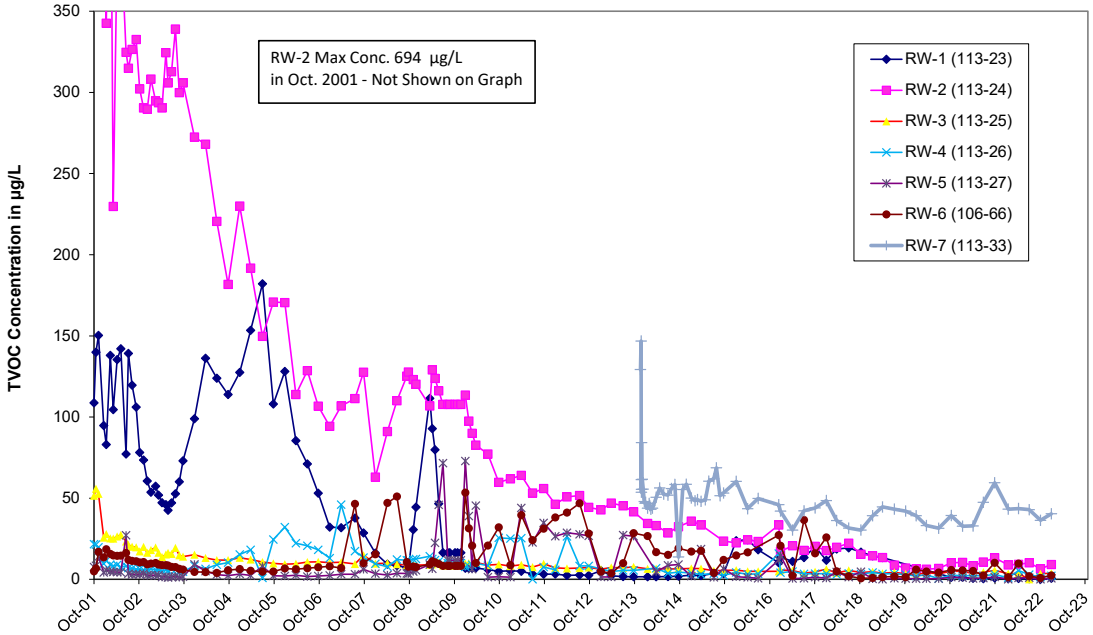


Figure 4-2
Extraction Well TVOC Concentrations vs. Time



OU III Middle Road Pump & Treat System

Table 4-2
Effluent Water Quality
SPDES Equivalency Permit Concentrations - January 1 through March 31, 2023

Parameter	Permit Limit	Max. Measured Value	Units	Frequency
Flow	**Monitor**	**1,299,701[1]**	**GPD**	**Continuous**
pH (range)	**6.5 - 8.5**	**6.7– 7.3[2]**	**SU**	**Monthly[3]**
Carbon Tetrachloride	**5**	**<0.50**	**µg/L**	**Monthly[3]**
Chloroform	**7**	**<0.50**	**µg/L**	**Monthly[3]**
Dichlorodifluoromethane	**5**	**<0.50**	**µg/L**	**Monthly[3]**
1,1-Dichloroethane	**5**	**<0.50**	**µg/L**	**Monthly[3]**
1,1-Dichloroethylene	**5**	**<0.50**	**µg/L**	**Monthly[3]**
Methyl Chloride	**5**	**<0.50**	**µg/L**	**Monthly[3]**
Tetrachloroethylene	**5**	**<0.50**	**µg/L**	**Monthly[3]**
Toluene	**5**	**<0.50**	**µg/L**	**Monthly[3]**
1,1,1-Trichloroethane	**5**	**<0.50**	**µg/L**	**Monthly[3]**
1,1,2 Trichloroethane	**5**	**<0.50**	**µg/L**	**Monthly[3]**
Trichloroethylene	**10**	**<0.50**	**µg/L**	**Monthly[3]**

[1] The maximum monthly average flow for the OU III Middle Road, South Boundary, and Western South Boundary Systems during the operational period.
[2] The minimum and maximum pH values during the operational period.
[3] Beginning in April 2003, a SPDES modification was approved revising the pH and volatile organic sampling to once a month.

Monitoring Activities:

The OU III Middle Road well data show the highest concentration of TVOCs recorded in plume core monitoring well 105-68 at 154.82 µg/L. The highest individual VOC concentration recorded in this well was tetrachloroethylene (PCE) at 130 µg/L. In monitoring well 105-66, a plume core monitoring well east of 105-68, TVOCs were recorded at a concentration of 150.1 µg/L and PCE was recorded at 140 µg/L in this well. These wells are located upgradient of the OU III South Boundary monitoring wells discussed in Section 3. The OU III Middle Road monitoring well network is shown on **Figure 4-3.** The 'Hits Only' first quarter 2023 data are summarized in **Table 4-3.**

OU III Middle Road Pump & Treat System

System Operations

January 2023:

The system operated normally for the month. Extraction wells RW-2, RW-3, and RW-7 were in full-time operation. Wells RW-1, RW-4, RW-5, and RW-6 remained in standby mode. An effluent sample was collected from OU III South Boundary air stripping tower and the system treated approximately 14 million gallons of water.

February 2023:

The system operated normally for the month. Extraction wells RW-2, RW-3, and RW-7 were in full-time operation. Wells RW-1, RW-4, RW-5, and RW-6 remained in standby mode. An effluent sample was taken from OU III South Boundary air stripping tower and the system treated approximately 12 million gallons of water.

March 2023:

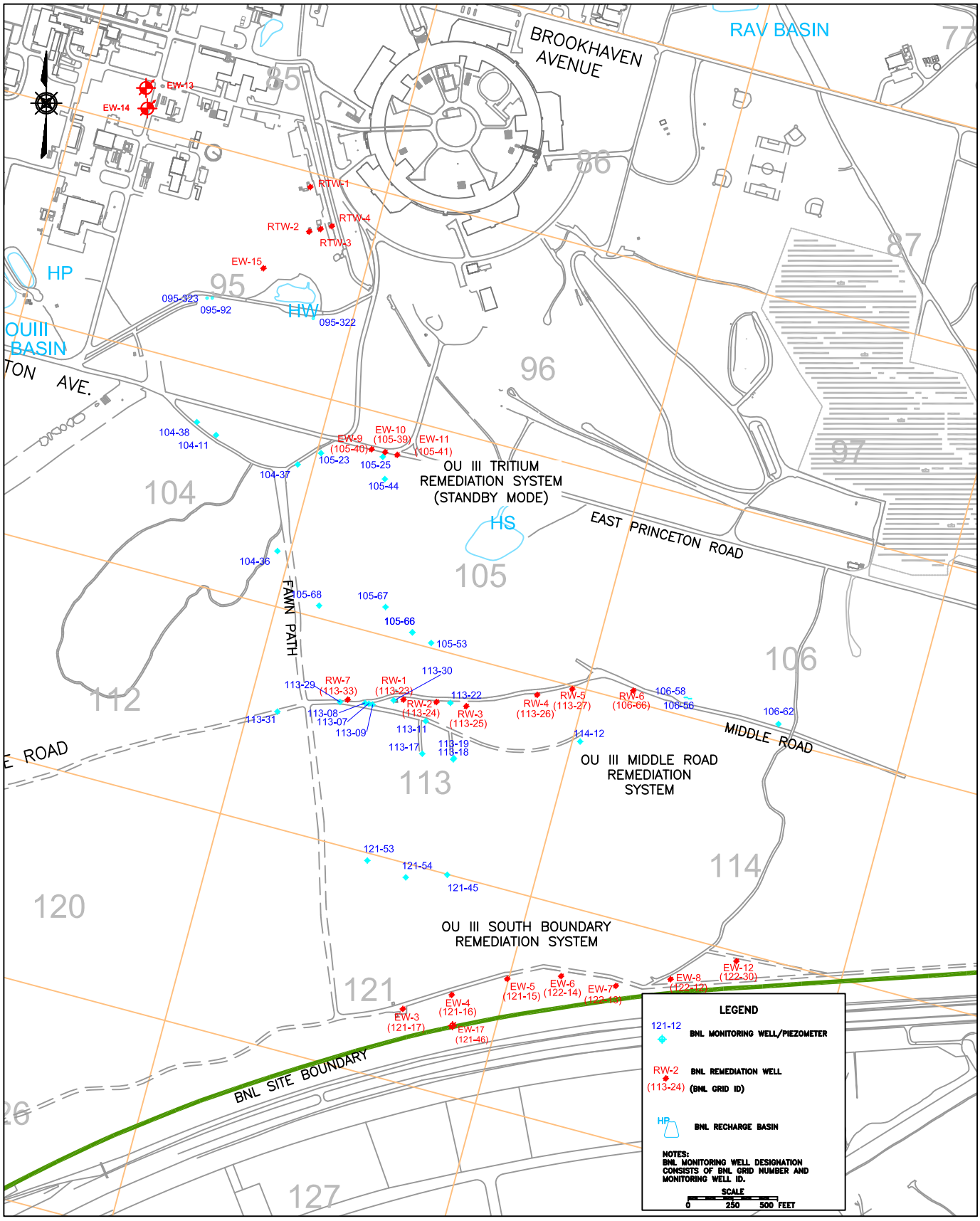
The system operated normally for the month. Extraction wells RW-2, RW-3, and RW-7 were in full-time operation. Wells RW-1, RW- 4, RW-5, and RW-6 remained in standby mode. An effluent sample was collected from the OU III South Boundary air stripping tower and the system treated approximately 18 million gallons of water.

The system treated approximately 44 million gallons of water during the first quarter of 2023. The treatment system 'Hits 'Only data, including individual extraction wells, influent, and effluent is summarized in **Table 4-4** through **Table 4-6.**

Planned Operational Changes

- Continue operation of extraction wells RW-2, RW-3, and RW-7. Maintain RW-1, RW-4, RW-5, and RW-6 in standby mode. Restart the well(s) if extraction or monitoring well data indicate that TVOC concentrations exceed the 50 µg/L capture goal. TVOC concentrations in extraction wells RW-1, RW-4, RW-5 and RW-6 and adjacent monitoring wells were below 50 µg/L in the first quarter.
- Discontinue sampling for tritium on the influent of the Middle Road Treatment System as tritium has not been detected at this location for over 20 years.
- Install a permanent monitoring well at the location of vertical profile locations MR-VP-01-2021 and MR-VP-02-2021 installed during 2021.
- The concentrations of VOCs in the Deep Upper Glacial aquifer in this area of the site are not declining at a rate that will meet the ROD cleanup goal by 2030. To address this, per the 2021 CERCLA Five-Year Review Report (BNL 2021) recommendations, groundwater modeling simulations will be performed to evaluate the best locations, extraction rates, and number of extraction wells to design an appropriate system

modification. The regional groundwater model will be reviewed prior to this modeling effort and updated as necessary to accurately represent the Upton Unit and its lower hydraulic conductivity.



\\OERNT\GIS\GW_PROJECTS\ERD_QUARTERLIES\1Q_2023\FIG 4-3.DWG

ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III MIDDLE ROAD MONITORING WELL NETWORK

SITEWIDE REMEDIATION SYSTEMS
FIRST QUARTER 2023 OPERATIONS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
JEB	–	02/08/07	–
CHKD:	APPD:	REV.:	NOTES:
LDS	--	07/07/23	–

FIGURE NO.: 4–3

Table 4-3
OU III Middle Road Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 095-322

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/08/2023	33.21	--	--	UG/L	180.00		
1,1,1-Trichloroethane	03/08/2023	2.6	0.5	--	UG/L	180.00		
1,1-Dichloroethane	03/08/2023	0.41	0.5	--	UG/L	180.00	J	
1,1-Dichloroethylene	03/08/2023	5.1	0.5	--	UG/L	180.00		
Tetrachloroethylene	03/08/2023	17	0.5	--	UG/L	180.00		
Trichloroethylene	03/08/2023	8.1	0.5	--	UG/L	180.00		

Site ID : 095-323

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/08/2023	16.61	--	--	UG/L	205.00		
1,1,1-Trichloroethane	03/08/2023	1.5	0.5	--	UG/L	205.00		
1,1,2,2-Tetrachloroethane	03/08/2023	1.1	0.5	--	UG/L	205.00		
1,1-Dichloroethylene	03/08/2023	0.71	0.5	--	UG/L	205.00		
Tetrachloroethylene	03/08/2023	9.3	0.5	--	UG/L	205.00		
Trichloroethylene	03/08/2023	4	0.5	--	UG/L	205.00		

Site ID : 104-37

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/01/2023	88.97	--	--	UG/L	209.00		
1,1,1-Trichloroethane	03/01/2023	1.7	0.5	--	UG/L	209.00		
1,1,2,2-Tetrachloroethane	03/01/2023	0.9	0.5	--	UG/L	209.00		
1,1,2-Trichloroethane	03/01/2023	0.48	0.5	--	UG/L	209.00	J	
1,1-Dichloroethylene	03/01/2023	2.5	0.5	--	UG/L	209.00		
Carbon tetrachloride	03/01/2023	2.5	0.5	--	UG/L	209.00		
Chloroform	03/01/2023	0.69	0.5	--	UG/L	209.00		
Tetrachloroethylene	03/01/2023	77	2	--	UG/L	209.00	D	
Trichloroethylene	03/01/2023	3.2	0.5	--	UG/L	209.00		

Site ID : 105-23

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/01/2023	16.09	--	--	UG/L	180.00		
1,1,1-Trichloroethane	03/01/2023	0.17	0.5	--	UG/L	180.00	J	
Carbon tetrachloride	03/01/2023	0.59	0.5	--	UG/L	180.00		
Chloroform	03/01/2023	0.33	0.5	--	UG/L	180.00	J	
Tetrachloroethylene	03/01/2023	15	0.5	--	UG/L	180.00		

Site ID : 105-44

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/14/2023	106.8	--	--	NG/L	152.50		

Table 4-3
OU III Middle Road Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 105-44

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorobutanesulfonate (PFBS)	02/14/2023	2.9	1.4	--	NG/L	152.50		
Perfluorobutyric acid (PFBA)	02/14/2023	14	5.7	--	NG/L	152.50		
Perfluoroheptanoic acid (PFHpA)	02/14/2023	6.6	1.4	--	NG/L	152.50		
Perfluorohexanesulfonate (PFHxS)	02/14/2023	20	1.4	--	NG/L	152.50		
Perfluorohexanoic acid (PFHxA)	02/14/2023	18	1.6	--	NG/L	152.50		
Perfluorooctanesulfonate (PFOS)	02/14/2023	10	1.4	--	NG/L	152.50		
Perfluorooctanoic acid (PFOA)	02/14/2023	9.2	1.4	--	NG/L	152.50		
Perfluoropentanesulfonate (PFPeS)	02/14/2023	2.1	1.4	--	NG/L	152.50		
Perfluoropentanoic acid (PFPeA)	02/14/2023	24	2.9	--	NG/L	152.50		
solids-tot	02/14/2023	50	4	--	MG/L	152.50		

Site ID : 105-66

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/08/2023	150.1	--	--	UG/L	184.00		
Carbon tetrachloride	03/08/2023	5.9	5	--	UG/L	184.00	D	
Tetrachloroethylene	03/08/2023	140	5	--	UG/L	184.00	D	
Trichloroethylene	03/08/2023	4.2	5	--	UG/L	184.00	J D	

Site ID : 105-67

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/08/2023	72.94	--	--	UG/L	185.00		
1,1,1-Trichloroethane	03/08/2023	3.2	0.5	--	UG/L	185.00		
1,1,2,2-Tetrachloroethane	03/08/2023	0.52	0.5	--	UG/L	185.00		
1,1-Dichloroethylene	03/08/2023	2.6	0.5	--	UG/L	185.00		
Carbon tetrachloride	03/08/2023	0.2	0.5	--	UG/L	185.00	J	
Methyl tert-butyl ether	03/08/2023	0.22	0.5	--	UG/L	185.00	J	
Tetrachloroethylene	03/08/2023	65	2	--	UG/L	185.00	D	
Trichloroethylene	03/08/2023	1.2	0.5	--	UG/L	185.00		

Site ID : 105-68

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/28/2023	154.82	--	--	UG/L	205.00		
1,1,1-Trichloroethane	02/28/2023	0.76	0.5	--	UG/L	205.00		
1,1,2,2-Tetrachloroethane	02/28/2023	2.7	0.5	--	UG/L	205.00		
1,1,2-Trichloroethane	02/28/2023	1	0.5	--	UG/L	205.00		
1,1-Dichloroethylene	02/28/2023	0.94	0.5	--	UG/L	205.00		

Table 4-3
OU III Middle Road Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 105-68

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Carbon tetrachloride	02/28/2023	6.6	0.5	--	UG/L	205.00		
Chloroform	02/28/2023	0.82	0.5	--	UG/L	205.00		
Tetrachloroethylene	02/28/2023	130	10	--	UG/L	205.00	D	
Trichloroethylene	02/28/2023	12	0.5	--	UG/L	205.00		

Site ID : 113-17

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/10/2023	15.75	--	--	UG/L	177.00		
Carbon tetrachloride	03/10/2023	0.4	0.5	--	UG/L	177.00	J	
Chloroform	03/10/2023	0.97	0.5	--	UG/L	177.00		
Tetrachloroethylene	03/10/2023	14	0.5	--	UG/L	177.00		
Trichloroethylene	03/10/2023	0.38	0.5	--	UG/L	177.00	J	

Site ID : 113-19

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/17/2023	24.58	--	--	UG/L	230.00		
1,1,1-Trichloroethane	03/17/2023	8.3	0.5	--	UG/L	230.00		
1,1-Dichloroethane	03/17/2023	1.2	0.5	--	UG/L	230.00		
1,1-Dichloroethylene	03/17/2023	4.5	0.5	--	UG/L	230.00		
Carbon tetrachloride	03/17/2023	5.7	0.5	--	UG/L	230.00		
Chloroform	03/17/2023	0.78	0.5	--	UG/L	230.00		
Trichloroethylene	03/17/2023	4.1	0.5	--	UG/L	230.00		

Site ID : 113-29

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/01/2023	1.3	--	--	UG/L	190.00		
Chloroform	03/01/2023	0.34	0.5	--	UG/L	190.00	J	
Tetrachloroethylene	03/01/2023	0.96	0.5	--	UG/L	190.00		

Site ID : 113-30

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/10/2023	5.18	--	--	UG/L	190.00		
Carbon tetrachloride	03/10/2023	0.9	0.5	--	UG/L	190.00		
Tetrachloroethylene	03/10/2023	4.1	0.5	--	UG/L	190.00		
Trichloroethylene	03/10/2023	0.18	0.5	--	UG/L	190.00	J	

Site ID : 113-31

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/01/2023	1.96	--	--	UG/L	190.00		

Table 4-3
OU III Middle Road Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 113-31

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1,1,1-Trichloroethane	03/01/2023	1.1	0.5	--	UG/L	190.00		
1,1-Dichloroethylene	03/01/2023	0.41	0.5	--	UG/L	190.00	J	
Chloroform	03/01/2023	0.19	0.5	--	UG/L	190.00	J	
Trichloroethylene	03/01/2023	0.26	0.5	--	UG/L	190.00	J	

Site ID : 114-12

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/13/2023	0.75	--	--	UG/L	0.00		
Chloroform	03/13/2023	0.75	0.5	--	UG/L	0.00		

Site ID : 121-45

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/10/2023	5.2	--	--	UG/L	199.50		
1,1,1-Trichloroethane	03/10/2023	0.2	0.5	--	UG/L	199.50	J	
Carbon tetrachloride	03/10/2023	0.16	0.5	--	UG/L	199.50	J	
Tetrachloroethylene	03/10/2023	4.4	0.5	--	UG/L	199.50		
Trichloroethylene	03/10/2023	0.44	0.5	--	UG/L	199.50	J	

Site ID : 121-53

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/31/2023	141.64	--	--	UG/L	229.00		
1,1,1-Trichloroethane	03/31/2023	2.2	0.5	--	UG/L	229.00		
1,1-Dichloroethane	03/31/2023	0.37	0.5	--	UG/L	229.00	J	
1,1-Dichloroethylene	03/31/2023	2.1	0.5	--	UG/L	229.00		
Carbon tetrachloride	03/31/2023	22	0.5	--	UG/L	229.00		
Chloroform	03/31/2023	1.3	0.5	--	UG/L	229.00		
Dichlorodifluoromethane	03/31/2023	0.27	0.5	--	UG/L	229.00	J	
Tetrachloroethylene	03/31/2023	110	5	--	UG/L	229.00	D	
Trichloroethylene	03/31/2023	3.4	0.5	--	UG/L	229.00		

Site ID : 121-54

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/31/2023	61.69	--	--	UG/L	220.00		
1,1,1-Trichloroethane	03/31/2023	0.45	0.5	--	UG/L	220.00	J	
1,1-Dichloroethylene	03/31/2023	0.38	0.5	--	UG/L	220.00	J	
Carbon tetrachloride	03/31/2023	9.1	0.5	--	UG/L	220.00		
Tetrachloroethylene	03/31/2023	51	2	--	UG/L	220.00	D	

Table 4-3
OU III Middle Road Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 121-54

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Trichloroethylene	03/31/2023	0.76	0.5	--	UG/L	220.00		

Table 4-4
OU III Middle Road Extraction Well Data
'Hits Only' January through March 2023

Site ID : 106-66 (RW-6)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	2.46	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/09/2023	0.89	0.5	--	UG/L	0.00		
1,1-Dichloroethylene	01/09/2023	0.27	0.5	--	UG/L	0.00	J	
Chloroform	01/09/2023	0.3	0.5	--	UG/L	0.00	J	
Tetrachloroethylene	01/09/2023	0.67	0.5	--	UG/L	0.00		
Trichloroethylene	01/09/2023	0.33	0.5	--	UG/L	0.00	J	

Site ID : 113-23 (RW-1)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	0.63	--	--	UG/L	0.00		
Chloroform	01/09/2023	0.44	0.5	--	UG/L	0.00	J	
Tetrachloroethylene	01/09/2023	0.19	0.5	--	UG/L	0.00	J	

Site ID : 113-24 (RW-2)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	9.15	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/09/2023	0.18	0.5	--	UG/L	0.00	J	
Carbon tetrachloride	01/09/2023	0.59	0.5	--	UG/L	0.00		
Chloroform	01/09/2023	0.44	0.5	--	UG/L	0.00	J	
Tetrachloroethylene	01/09/2023	7.5	0.5	--	UG/L	0.00		
Trichloroethylene	01/09/2023	0.44	0.5	--	UG/L	0.00	J	

Site ID : 113-25 (RW-3)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	3.68	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/09/2023	1.7	0.5	--	UG/L	0.00		
1,1-Dichloroethane	01/09/2023	0.38	0.5	--	UG/L	0.00	J	
1,1-Dichloroethylene	01/09/2023	0.65	0.5	--	UG/L	0.00		
Chloroform	01/09/2023	0.18	0.5	--	UG/L	0.00	J	
Trichloroethylene	01/09/2023	0.77	0.5	--	UG/L	0.00		

Site ID : 113-26 (RW-4)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	2.19	--	--	UG/L	0.00		
Carbon tetrachloride	01/09/2023	0.42	0.5	--	UG/L	0.00	J	
Chloroform	01/09/2023	0.69	0.5	--	UG/L	0.00		
Tetrachloroethylene	01/09/2023	0.44	0.5	--	UG/L	0.00	J	

Table 4-4
OU III Middle Road Extraction Well Data
'Hits Only' January through March 2023

Site ID : 113-26 (RW-4)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Trichloroethylene	01/09/2023	0.64	0.5	--	UG/L	0.00		

Site ID : 113-27 (RW-5)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	0.67	--	--	UG/L	0.00		
Chloroform	01/09/2023	0.67	0.5	--	UG/L	0.00		

Site ID : 113-33 (RW-7)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	40.37	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/09/2023	0.76	0.5	--	UG/L	0.00		
1,1-Dichloroethylene	01/09/2023	0.24	0.5	--	UG/L	0.00	J	
Carbon tetrachloride	01/09/2023	6.1	0.5	--	UG/L	0.00		
Chloroform	01/09/2023	0.62	0.5	--	UG/L	0.00		
Tetrachloroethylene	01/09/2023	32	0.5	--	UG/L	0.00		
Trichloroethylene	01/09/2023	0.65	0.5	--	UG/L	0.00		

Table 4-5
OU III Middle Road Influent Data
'Hits Only' January through March 2023

Site ID : 113-34 (Combo Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	6.98	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/09/2023	0.72	0.5	--	UG/L	0.00		
1,1-Dichloroethylene	01/09/2023	0.34	0.5	--	UG/L	0.00	J	
Carbon tetrachloride	01/09/2023	0.36	0.5	--	UG/L	0.00	J	
Chloroform	01/09/2023	0.36	0.5	--	UG/L	0.00	J	
Tetrachloroethylene	01/09/2023	5.2	0.5	--	UG/L	0.00		
8260 TVOC	02/11/2023	22.07	--	--	UG/L	0.00		
1,1,1-Trichloroethane	02/11/2023	0.68	0.5	--	UG/L	0.00		
1,1-Dichloroethylene	02/11/2023	0.32	0.5	--	UG/L	0.00	J	
Carbon tetrachloride	02/11/2023	2	0.5	--	UG/L	0.00		
Chloroform	02/11/2023	0.41	0.5	--	UG/L	0.00	J	
Tetrachloroethylene	02/11/2023	18	0.5	--	UG/L	0.00		
Trichloroethylene	02/11/2023	0.66	0.5	--	UG/L	0.00		
8260 TVOC	03/13/2023	21.86	--	--	UG/L	0.00		
1,1,1-Trichloroethane	03/13/2023	0.67	0.5	--	UG/L	0.00		
1,1-Dichloroethylene	03/13/2023	0.33	0.5	--	UG/L	0.00	J	
Carbon tetrachloride	03/13/2023	1.7	0.5	--	UG/L	0.00		
Chloroform	03/13/2023	0.42	0.5	--	UG/L	0.00	J	
Tetrachloroethylene	03/13/2023	18	0.5	--	UG/L	0.00		
Trichloroethylene	03/13/2023	0.74	0.5	--	UG/L	0.00		

Table 4-6
OU III Middle Road Effluent Data
'Hits Only' January through March 2023

Site ID : 095-126 (System Effluent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	0	--	--	UG/L	0.00		
8260 TVOC	02/11/2023	0	--	--	UG/L	0.00		
8260 TVOC	03/13/2023	0	--	--	UG/L	0.00		

Qualifiers :

J = Estimated value.

D = Compound was identified in an analysis at a secondary dilution factor.

N2 = Not usable based on the results that are not distinguishable from background. The value is less than or equal to the sum of the MDA and the uncertainty or RDL.

U = Compound not detected.

Organic Compounds :

B = Compound was found in both the sample And associated laboratory blank.

Inorganic Compounds :

B = Result Is between instrument detection limit And contract required reporting limit.

OU III Industrial Park In-Well Air Stripping System

Process: Groundwater extraction and in-well air stripping treatment, with discharge in same well (recirculating well technology) for wells UVB-1 through UVB-7, and groundwater extraction and liquid phase granular activated carbon treatment, with discharge to injection wells for wells EW-8 and EW-9.

Goal: Reach Maximum Contaminant Levels (MCLs) in core monitoring wells within 30 years for the Upper Glacial aquifer (by 2030), and 65 years for the Magothy aquifer (by 2065).

Start Date: September 1999

Table 5-1
Pumping Rates (gpm)

Recirculation Treatment Well	UVB-1	UVB-2	UVB-3	UVB-4	UVB-5	UVB-6	UVB-7	EW-8	EW-9
Site Id #	000-231	000-233	000-235	000-237	000-239	000-241	000-243	000-532	000-533
Screened Interval (feet below grade)	220-240	195-215	194-214	170-190	180-200	190-210	205-225	230-250	220-240
Desired Flow Rate (GPM)	*0	*0	*0	*0	*0	*0	*0	**0	**0
January	*0	*0	*0	*0	*0	*0	*0	**0	**0
February	*0	*0	*0	*0	*0	*0	*0	**0	**0
March	*0	*0	*0	*0	*0	*0	*0	**0	**0
Actual (Avg.over Qtr.)	*0	*0	*0	*0	*0	*0	*0	**0	**0

* Wells UVB-1 through UVB-7 were placed in stand-by mode January 2017. Wells EW-8 and EW-9 started full-time operation January 2015.
** Wells EW-8 and EW-9 started one month on and one month off pulsed pumping February 2018 and were placed in stand-by mode July 2019.

OU III Industrial Park In-Well Air Stripping System

Figure 5-1
Cumulative Mass Removal of VOCs vs. Time

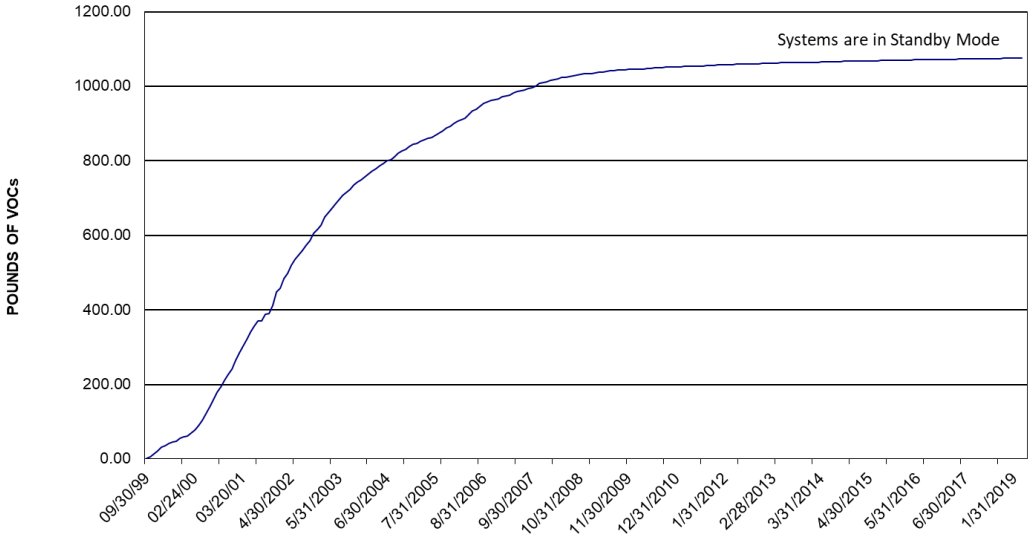
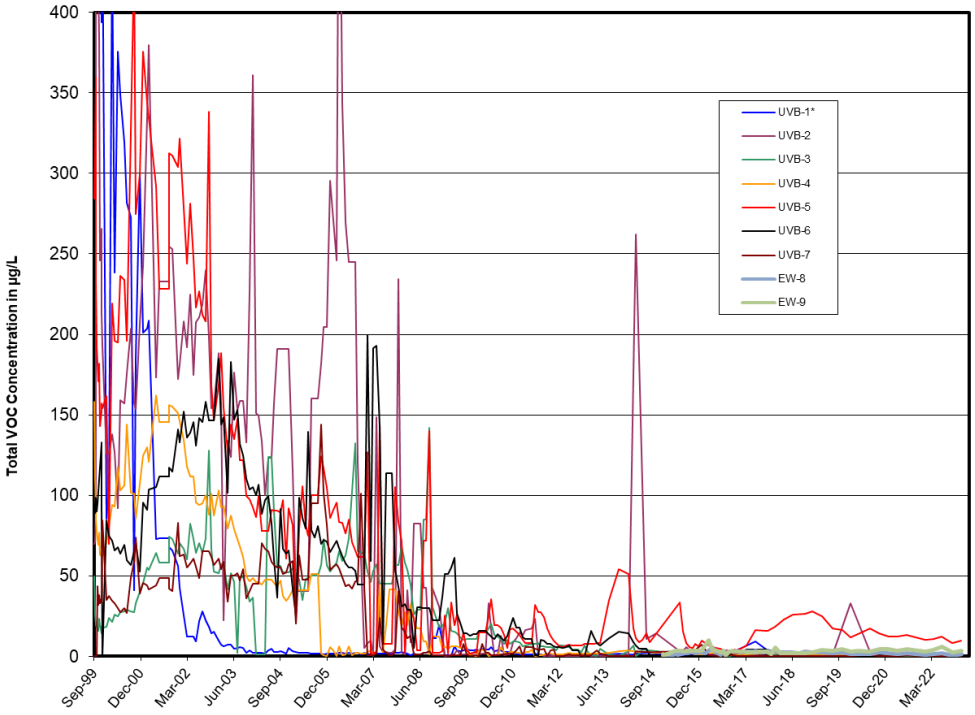


Figure 5-2
Influent TVOC Concentrations vs. Time



Startup concentrations for UVB-1 are not illustrated on this graph. TVOC concentration of 1,900 µg/L in September 1999, and 1,485 µg/L in October 1999.

OU III Industrial Park In-Well Air Stripping System

Table 5-2
Effluent Water Quality
SPDES Equivalency Permit Concentrations - January 1 through March 31, 2023

Parameter	Permit Limit	Max. Measured Value	Units	Frequency
Flow	Monitor	N/A	GPM	Continuous
pH (range)	5.0 - 8.5	N/A	SU	Weekly
Carbon Tetrachloride	5.0	N/A	µg/L	Monthly[1]
Chloroform	7.0	N/A	µg/L	Monthly[1]
1,2-Dichloroethane	0.6	N/A	µg/L	Monthly[1]
1,1-Dichloroethylene	5.0	N/A	µg/L	Monthly[1]
Tetrachloroethylene	5.0	N/A	µg/L	Monthly[1]
Trichloroethene	5.0	N/A	µg/L	Monthly[1]
1,1,1-Trichloroethane	5.0	N/A	µg/L	Monthly[1]

[1] The minimum measurement frequency shall be monthly following a period of 24 consecutive weekly sampling events showing no exceedances of the stated discharge limitations. Monthly sampling was initiated in August 2015.
NA = Not applicable. The system was placed in standby mode in July 2019.

Monitoring Activities:

The OU III Industrial Park monitoring well data show the concentration of TVOCs ranged from 15.7 µg/L in monitoring well 000-531 to 21.5 µg/L in 000-530 during the first quarter 2023. The OU III Industrial Park monitoring wells are shown on **Figure 5-3.** The **'**Hits Only' first quarter 2023 data are summarized in **Table 5-3**.

System Operation

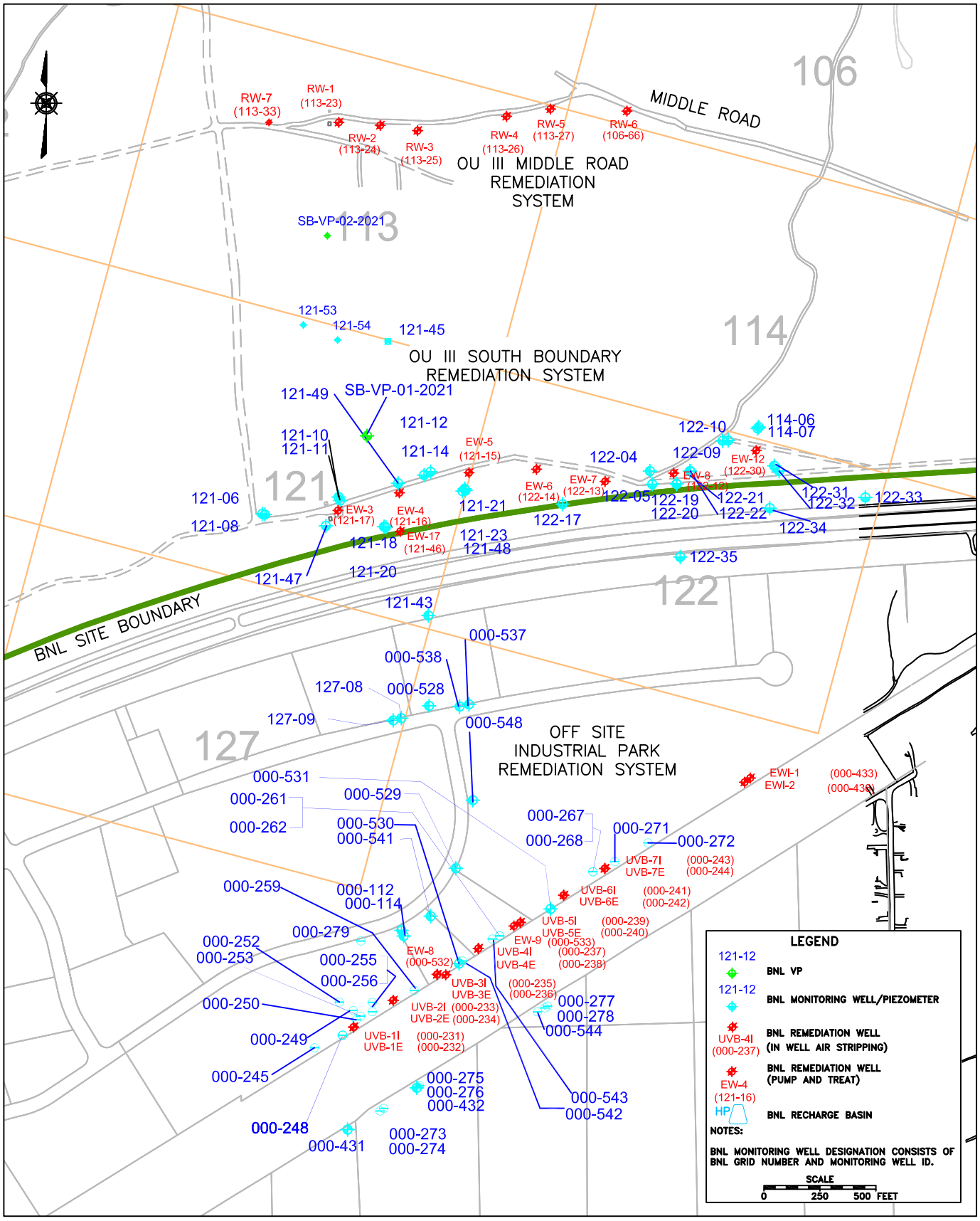
January through March 2023:

Extraction wells UVB-1 through UVB-7, EW-8, and EW-9 remained in stand-by mode. However, the extraction wells were each turned on temporarily to facilitate sampling. The treatment system 'Hits Only' extraction well/influent data is summarized in **Table 5-4**.

OU III Industrial Park In-Well Air Stripping System

Planned Operational Changes

- Maintain the seven UVB wells, EW-8, and EW-9 in standby. If TVOC concentrations exceed the 50 µg/L capture goal the wells may be restarted. During the first quarter, TVOC concentrations in treatment wells UVB-1 through UVB-7, extraction wells EW-8 and EW-9, and all monitoring wells were below 50 µg/L.



\\OERNT\GIS\GW_PROJECTS\ERD_QUARTERLIES\1Q_2023\FIG 5-3.DWG

ENVIRONMENTAL PROTECTION DIVISION

TITLE: OU III SOUTH BOUNDARY/INDUSTRIAL PARK/INDUSTRIAL PARK AREA MONITORING WELL NETWORKS
SITEWIDE REMEDIATION SYSTEMS
FIRST QUARTER 2023 OPERATIONS REPORT

DWN:	VT:HZ.:	DATE:	PROJECT NO.:
JEB	–	09/12/14	–
CHKD:	APPD:	REV.:	NOTES:
LDS	–	05/12/23	–

FIGURE NO.: 5–3

Table 5-3
OU III Industrial Park Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 000-529

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/17/2023	17.15	--	--	UG/L	219.00		
1,1,1-Trichloroethane	02/17/2023	4.1	0.5	--	UG/L	219.00		
1,1-Dichloroethylene	02/17/2023	2.2	0.5	--	UG/L	219.00		
Carbon tetrachloride	02/17/2023	1.2	0.5	--	UG/L	219.00		
Chloroform	02/17/2023	0.52	0.5	--	UG/L	219.00		
Dichlorodifluoromethane	02/17/2023	0.23	0.5	--	UG/L	219.00	J	
Tetrachloroethylene	02/17/2023	6.8	0.5	--	UG/L	219.00		
Trichloroethylene	02/17/2023	2.1	0.5	--	UG/L	219.00		

Site ID : 000-530

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/23/2023	21.53	--	--	UG/L	210.00		
1,1,1-Trichloroethane	02/23/2023	12	0.5	--	UG/L	210.00		
1,1-Dichloroethane	02/23/2023	1.3	0.5	--	UG/L	210.00		
1,1-Dichloroethylene	02/23/2023	7.4	0.5	--	UG/L	210.00		
Trichloroethylene	02/23/2023	0.83	0.5	--	UG/L	210.00		

Site ID : 000-531

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/17/2023	15.71	--	--	UG/L	205.00		
1,1,1-Trichloroethane	02/17/2023	1.1	0.5	--	UG/L	205.00		
1,1-Dichloroethylene	02/17/2023	1.2	0.5	--	UG/L	205.00		
Carbon tetrachloride	02/17/2023	5.9	0.5	--	UG/L	205.00		
Chloroform	02/17/2023	0.81	0.5	--	UG/L	205.00		
Tetrachloroethylene	02/17/2023	0.7	0.5	--	UG/L	205.00		
Trichloroethylene	02/17/2023	6	0.5	--	UG/L	205.00		

Site ID : 000-538

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/23/2023	17.36	--	--	UG/L	215.00		
1,1,1-Trichloroethane	02/23/2023	3.3	0.5	--	UG/L	215.00		
1,1-Dichloroethylene	02/23/2023	1.6	0.5	--	UG/L	215.00		
Carbon tetrachloride	02/23/2023	0.71	0.5	--	UG/L	215.00		
cis-1,2-Dichloroethylene	02/23/2023	0.45	0.5	--	UG/L	215.00	J	
Dichlorodifluoromethane	02/23/2023	0.2	0.5	--	UG/L	215.00	J	
Tetrachloroethylene	02/23/2023	7.2	0.5	--	UG/L	215.00		

Table 5-3
OU III Industrial Park Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 000-538

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Trichloroethylene	02/23/2023	3.9	0.5	--	UG/L	215.00		

Table 5-4
OU III Industrial Park Influent Data
'Hits Only' January through March 2023

Site ID : 000-231 (UVB-1 Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/13/2023	0	--	--	UG/L	230.00		

Site ID : 000-235 (UVB-3 Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/13/2023	0	--	--	UG/L	204.00		

Site ID : 000-237 (UVB-4 Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/13/2023	0	--	--	UG/L	180.00		

Site ID : 000-239 (UVB-5 Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/13/2023	9.95	--	--	UG/L	190.00		
1,1,1-Trichloroethane	01/13/2023	0.78	0.5	--	UG/L	190.00		
1,1-Dichloroethylene	01/13/2023	0.47	0.5	--	UG/L	190.00	J	
Carbon tetrachloride	01/13/2023	2.2	0.5	--	UG/L	190.00		
Chloroform	01/13/2023	0.51	0.5	--	UG/L	190.00		
cis-1,2-Dichloroethylene	01/13/2023	0.54	0.5	--	UG/L	190.00		
m/p xylene	01/13/2023	0.26	1	--	UG/L	190.00	J	
Tetrachloroethylene	01/13/2023	1.7	0.5	--	UG/L	190.00		
Toluene	01/13/2023	0.33	0.5	--	UG/L	190.00	J	
Trichloroethylene	01/13/2023	2.9	0.5	--	UG/L	190.00		
Xylene (total)	01/13/2023	0.26	1.5	--	UG/L	190.00	J	

Site ID : 000-241 (UVB-6 Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/13/2023	0.16	--	--	UG/L	200.00		
cis-1,2-Dichloroethylene	01/13/2023	0.16	0.5	--	UG/L	200.00	J	

Site ID : 000-243 (UVB-7 Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/13/2023	0	--	--	UG/L	215.00		

Qualifiers :

J = Estimated value.

D = Compound was identified in an analysis at a secondary dilution factor.

N2 = Not usable based on the results that are not distinguishable from background. The value is less than or equal to the sum of the MDA and the uncertainty or RDL.

U = Compound not detected.

Organic Compounds :

B = Compound was found in both the sample And associated laboratory blank.

Inorganic Compounds :

B = Result Is between instrument detection limit And contract required reporting limit.

OU III Former Carbon Tetrachloride Pump & Treat System (System Closed)

The Draft Petition for Closure for the OU III Carbon Tetrachloride Groundwater Removal Action was submitted to the regulators for review in August 2009. Following the incorporation of EPA comments, in October 2009, the Final Petition for Closure of the OU III Carbon Tetrachloride Groundwater Removal Action was issued to the regulators. EPA and NYSDEC provided approval in October 2009. Since that time, activities have been concluded with decommissioning and dismantling of the Carbon Tetrachloride treatment system. A decommissioning report was submitted to the regulators in March 2011.

OU III Building 96 Pump & Treat System

Process: Three re-circulation extraction wells are each connected to individual shallow tray air-stripping units. One extraction well is connected to a shallow tray air-stripping unit with discharge to a drainage channel directed to Recharge Basin HS.

Goal: Remediation of volatile organic compounds (VOCs) in the source area and reaching Maximum Contaminant Levels (MCLs) in core monitoring wells within 30 years for the Upper Glacial aquifer (by 2030).

Start Date: February 2001

Table 7-1
Pumping Rates (gpm)

Recirculation Treatment Well	RTW-1	RTW-2	RTW-3	RTW-4
Site Id #	095-151	095-153	095-155	095-157
Screen Interval (feet bls)	48-58	48-58	48-58	48-58
Desired Flow Rate (gpm)	60	0	0	0
January	0	0	0	0
February	58	0	0	0
March	0	0	0	0
Actual (Avg. over Qtr.)	**58**	**0**	**0**	**0**

RTW-1 was restarted in 2008 with discharge to Recharge Basin HS. RTW-2 and RTW-3 were placed in standby mode in January 2016. RTW-4 was placed in standby mode in 2012. RTW-2 was restarted November 2018 and placed back in standby June 2020. In June 2019, the RTW-1 pumping rate was increased from 30 gpm to 60 gpm. In May 2022, RTW-1 began pulsed pumping.

OU III Building 96 Pump & Treat System

Figure 7-1
Cumulative Mass Removal of VOCs vs. Time

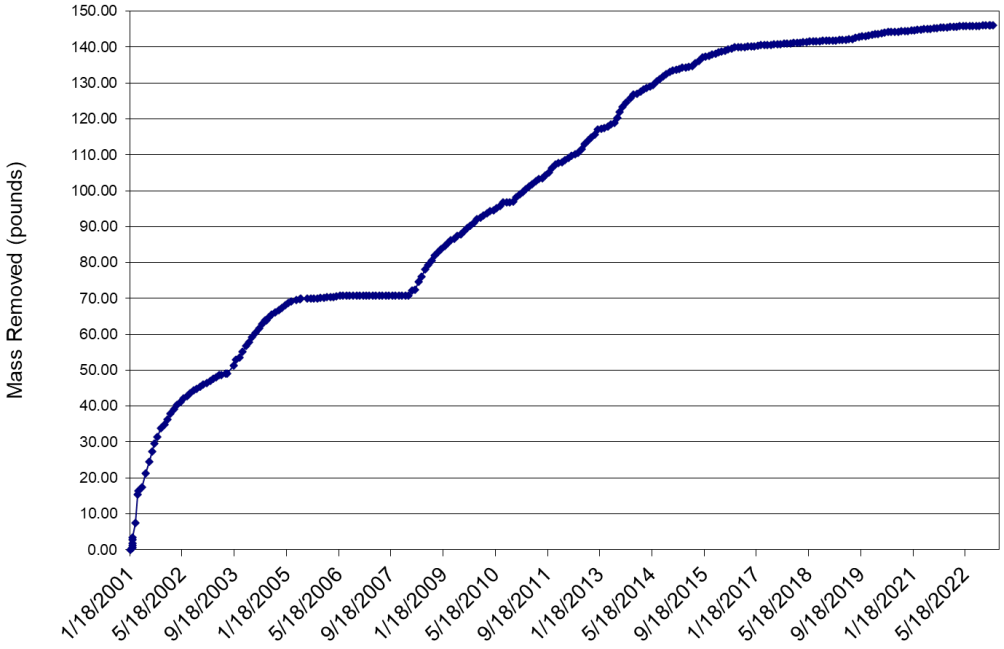
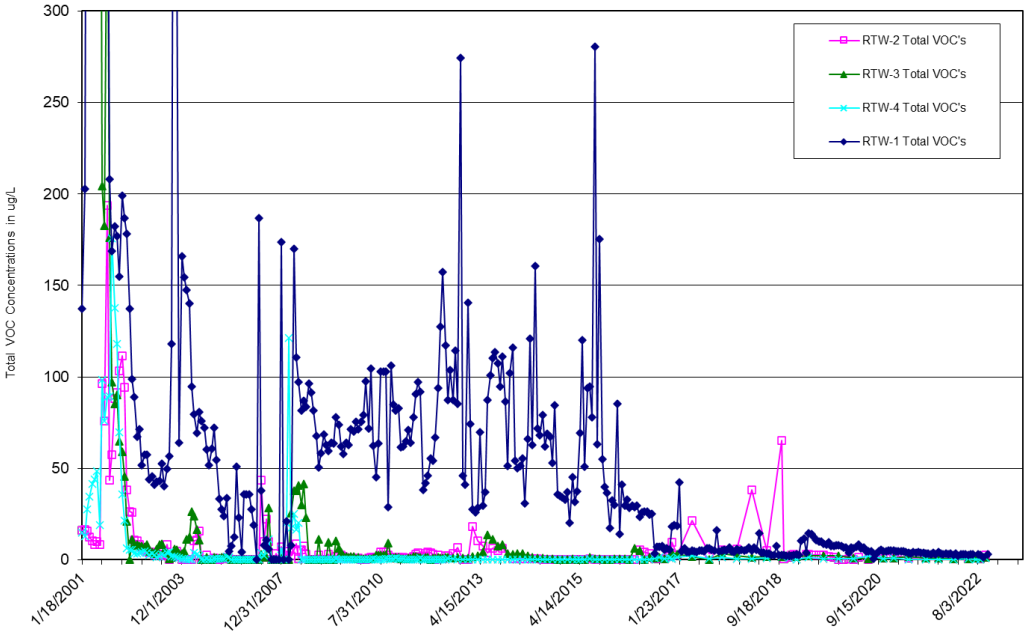


Figure 7-2
Influent TVOC Concentrations vs. Time



OU III Building 96 Pump & Treat System

Table 7-2
Effluent Water Quality
SPDES Equivalency Permit Concentrations - January 1 through March 31, 2023

Parameter	Permit Limit	Max. Measured Value	Units	Frequency
Flow	65	58	GPM	Continuous
pH (range)	5.0 - 8.5	7.2 – 7.7*	SU	Monthly
Tetrachloroethylene	5.0	<0.5	µg/L	Monthly
1,1,1-Trichloroethane	5.0	<0.5	µg/L	Monthly
Thallium, Total	Monitor	<2.0	µg/L	Monthly
Trichlorofluoromethane	5.0	<0.5	µg/L	Monthly
Methyl Bromide	5.0	<0.5	µg/L	Monthly
Methyl Chloride	5.0	<0.5	µg/L	Monthly
Methylene Chloride	5.0	<0.5	µg/L	Monthly
1,2-Dichloroethane	0.6	<0.5	µg/L	Monthly
Perfluorooctanesulfonic acid (PFOS)	Monitor	7.9	ng/L	Quarterly
Perfluorooctanoic acid (PFOA)	Monitor	3.9	ng/L	Quarterly

* Minimum to maximum value for pH during this operational period.

In September 2022, a SPDES equivalency permit renewal was issued by NYSDEC. Sampling for PFOS and PFOA is required on a quarterly basis using EPA Method 1633 for the analysis. RTW-1 was off for pulsed pumping during January and March during this quarter; therefore, system samples were collected during February only.

Monitoring Activities:

The OU III Building 96 monitoring well data show the highest concentration of TVOCs recorded in plume core monitoring well 085-379 at 52 µg/L and was comprised entirely of tetrachloroethylene (PCE). PCE is the primary VOC of concern in this area. This was the only Building 96 monitoring well exhibiting TVOC concentrations above 50 µg/L. The maximum PCE detection in extraction well RTW-1 in the first quarter was 2.3 µg/L. Trichlorofluoromethane (Freon-11) was not detected in RTW-1 or the monitoring wells during the first quarter. The OU III Building 96 monitoring well network is shown on **Figure 7-3.** The 'Hits Only' first quarter 2023 data are summarized in **Table 7-3.**

OU III Building 96 Pump & Treat System

System Operations

January 2023:

The system was off this month for pulsed pumping. Wells RTW-2, RTW-3 and RTW-4 remained in standby mode.

February 2023:

Extraction well RTW-1 ran normally for the month. Wells RTW-2, RTW-3 and RTW-4 remained in standby mode. The system treated approximately 2.2 million gallons of water.

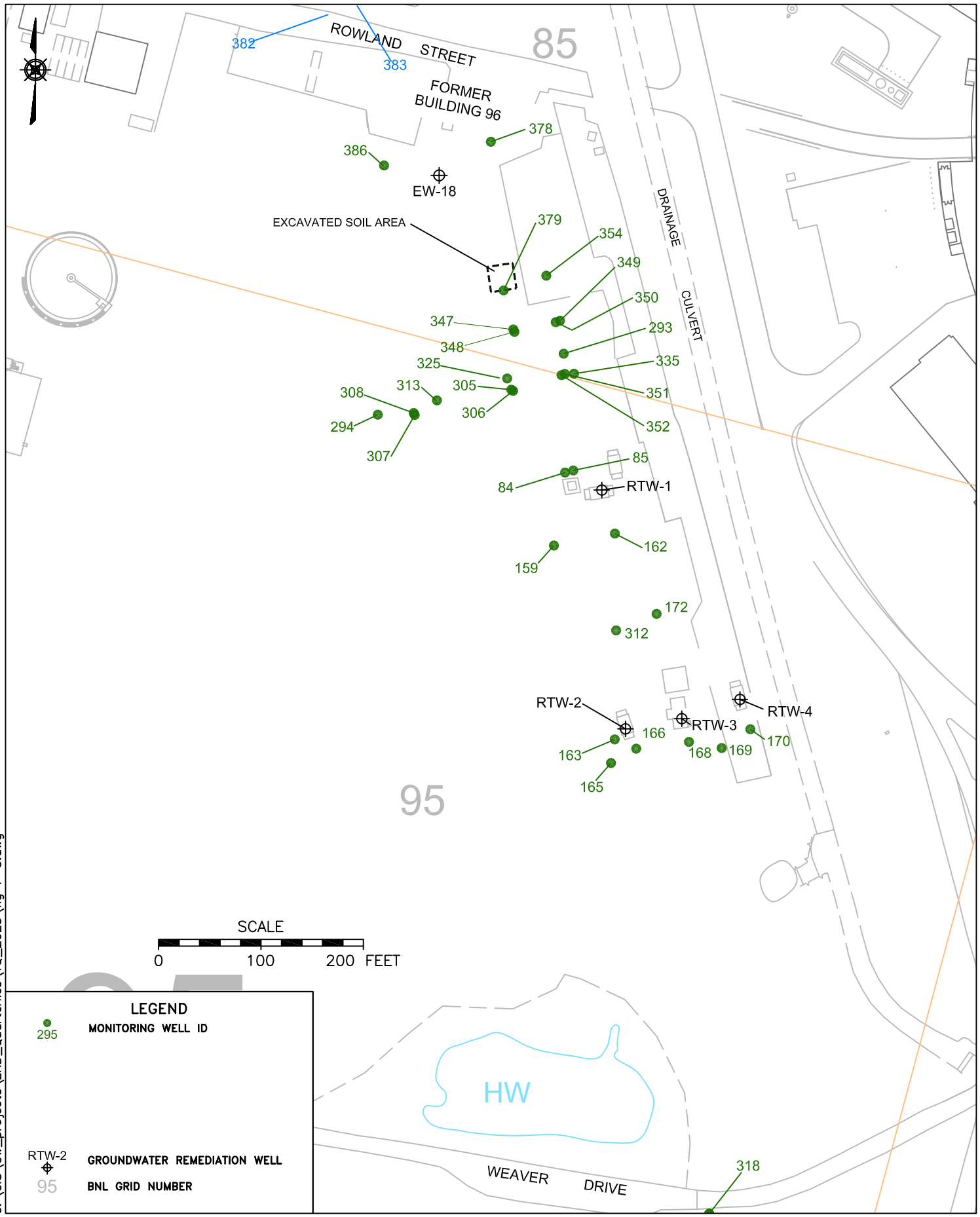
March 2023:

The system was off for pulsed pumping this month. Wells RTW-2, RTW-3 and RTW-4 remained in standby mode.

The system treated approximately 2.2 million gallons of water during the first quarter of 2023. The extraction wells maintained in standby mode were temporarily turned on to facilitate sampling. The treatment system 'Hits Only' data, including individual extraction well influent, and effluent (RTW-1), is shown in **Table 7-4** through **Table 7-5**.

Planned Operational Changes

- Maintain extraction well RTW-1 in a pulsed pumping mode and operate every other month. Continue to monitor for any rebound of VOC concentrations over the system capture goal. During the first quarter, 085-379 was the only monitoring well exceeding the 50 µg/L TVOC capture goal with a concentration of 52 µg/L. Well 085-379 is approximately 200 feet upgradient of RTW-1.
- Per a recommendation in the 2021 CERCLA Five-Year Review Report, continue to monitor VOC concentrations in the plume source area and evaluate/implement a liquid carbon with zero-valent iron in-situ treatment for the immediate source area.
- Maintain treatment wells RTW-2, RTW-3, and RTW-4 in standby mode, and restart the wells if extraction or monitoring well data indicate that TVOC concentrations exceed 50 µg/L. During the first quarter of 2023, the maximum TVOC concentration was 2.79 µg/L in extraction well RTW-2.



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ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III BUILDING 96 MONITORING WELL NETWORK

SITEWIDE REMEDIATION SYSTEMS
FIRST QUARTER 2023 OPERATIONS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	06/15/18	–
CHKD:	APPD:	REV.:	NOTES:
LDS	--	05/12/23	–

FIGURE NO.: 7-3

Table 7-3
OU III Building 96 Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 085-335

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/17/2023	21	--	--	UG/L	35.00		
Tetrachloroethylene	02/17/2023	21	0.5	--	UG/L	35.00		

Site ID : 085-348

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/28/2023	16	--	--	UG/L	34.50		
Tetrachloroethylene	02/28/2023	16	0.5	--	UG/L	34.50		

Site ID : 085-349

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/16/2023	3.7	--	--	UG/L	25.50		
Tetrachloroethylene	02/16/2023	3.7	0.5	--	UG/L	25.50		

Site ID : 085-350

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/16/2023	34.3	--	--	NG/L	34.50		
8260 TVOC	02/16/2023	3	--	--	UG/L	34.50		
Perfluorobutanesulfonate (PFBS)	02/16/2023	3.4	1.4	--	NG/L	34.50		
Perfluorobutyric acid (PFBA)	02/16/2023	10	5.6	--	NG/L	34.50		
Perfluoroheptanoic acid (PFHpA)	02/16/2023	1.5	1.4	--	NG/L	34.50		
Perfluorohexanesulfonate (PFHxS)	02/16/2023	1.9	1.4	--	NG/L	34.50		
Perfluorohexanoic acid (PFHxA)	02/16/2023	2.3	1.5	--	NG/L	34.50		H
Perfluorooctanesulfonate (PFOS)	02/16/2023	11	1.4	--	NG/L	34.50		
Perfluorooctanoic acid (PFOA)	02/16/2023	4.4	1.4	--	NG/L	34.50		
Perfluoropentanoic acid (PFPeA)	02/16/2023	2.1	2.8	--	NG/L	34.50	J	
solids-tot	02/16/2023	30	4	--	MG/L	34.50		
Tetrachloroethylene	02/16/2023	3	0.5	--	UG/L	34.50		

Site ID : 085-352

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/17/2023	20.16	--	--	UG/L	34.50		
1,1,1-Trichloroethane	02/17/2023	0.16	0.5	--	UG/L	34.50	J	
Tetrachloroethylene	02/17/2023	20	0.5	--	UG/L	34.50		

Site ID : 085-379

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/27/2023	52	--	--	UG/L	17.00		
Tetrachloroethylene	02/27/2023	52	2	--	UG/L	17.00	D	

Table 7-3
OU III Building 96 Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 095-159

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/17/2023	6.93	--	--	UG/L	50.00		
Chloroform	02/17/2023	0.43	0.5	--	UG/L	50.00	J	
Tetrachloroethylene	02/17/2023	6.5	0.5	--	UG/L	50.00		

Site ID : 095-162

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/17/2023	0.73	--	--	UG/L	50.00		
Chloroform	02/17/2023	0.73	0.5	--	UG/L	50.00		

Site ID : 095-163

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/27/2023	5.5	--	--	UG/L	23.00		
Tetrachloroethylene	02/27/2023	5.5	0.5	--	UG/L	23.00		

Site ID : 095-165

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/27/2023	3.8	--	--	UG/L	50.00		
Tetrachloroethylene	02/27/2023	3.8	0.5	--	UG/L	50.00		

Site ID : 095-166

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/27/2023	0.2	--	--	UG/L	50.00		
Tetrachloroethylene	02/27/2023	0.2	0.5	--	UG/L	50.00	J	

Site ID : 095-168

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/16/2023	0.81	--	--	UG/L	50.00		
Chloroform	02/16/2023	0.81	0.5	--	UG/L	50.00		

Site ID : 095-169

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/16/2023	0.65	--	--	UG/L	50.00		
Chloroform	02/16/2023	0.65	0.5	--	UG/L	50.00		

Site ID : 095-170

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/16/2023	28.89	--	--	NG/L	50.00		
8260 TVOC	02/16/2023	0.83	--	--	UG/L	50.00		
Chloroform	02/16/2023	0.83	0.5	--	UG/L	50.00		
Perfluorobutanesulfonate (PFBS)	02/16/2023	0.9	1.4	--	NG/L	50.00	J	

Table 7-3
OU III Building 96 Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 095-170

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorobutyric acid (PFBA)	02/16/2023	9.3	5.7	--	NG/L	50.00		
Perfluoroheptanoic acid (PFHpA)	02/16/2023	2.5	1.4	--	NG/L	50.00		
Perfluorohexanesulfonate (PFHxS)	02/16/2023	2.5	1.4	--	NG/L	50.00		
Perfluorohexanoic acid (PFHxA)	02/16/2023	3.3	1.4	--	NG/L	50.00		H
Perfluorononanoic acid (PFNA)	02/16/2023	0.79	1.4	--	NG/L	50.00	J	
Perfluorooctanesulfonate (PFOS)	02/16/2023	6.7	1.4	--	NG/L	50.00		
Perfluorooctanoic acid (PFOA)	02/16/2023	3.5	1.4	--	NG/L	50.00		
Perfluoropentanoic acid (PFPeA)	02/16/2023	2.7	2.8	--	NG/L	50.00	J	
solids-tot	02/16/2023	40	4	--	MG/L	50.00		

Site ID : 095-172

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/28/2023	1.3	--	--	UG/L	50.00		
Chloroform	02/28/2023	1.3	0.5	--	UG/L	50.00		

Site ID : 095-305

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/28/2023	3.5	--	--	UG/L	22.50		
Tetrachloroethylene	02/28/2023	3.5	0.5	--	UG/L	22.50		

Site ID : 095-306

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/28/2023	19.58	--	--	UG/L	34.50		
cis-1,2-Dichloroethylene	02/28/2023	0.58	0.5	--	UG/L	34.50		
Tetrachloroethylene	02/28/2023	19	0.5	--	UG/L	34.50		

Site ID : 095-325

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/28/2023	16	--	--	UG/L	45.00		
Tetrachloroethylene	02/28/2023	16	0.5	--	UG/L	45.00		

Site ID : 095-84

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/28/2023	16	--	--	UG/L	35.00		
Tetrachloroethylene	02/28/2023	16	0.5	--	UG/L	35.00		

Table 7-4
OU III Building 96 Influent Data
'Hits Only' January through March 2023

Site ID : 095-151 (RTW-1 Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/03/2023	34.71	--	--	NG/L	0.00		
8260 TVOC	02/03/2023	2.89	--	--	UG/L	0.00		
Chloroform	02/03/2023	0.59	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	02/03/2023	1.3	1.6	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/03/2023	9.2	6.2	--	NG/L	0.00		
Perfluorodecanoic acid (PFDA)	02/03/2023	0.48	1.6	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	02/03/2023	1.6	1.6	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/03/2023	3.7	1.6	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/03/2023	3.1	1.6	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/03/2023	0.81	1.6	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/03/2023	0.22	1.6	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	02/03/2023	8.3	1.6	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/03/2023	3.6	1.6	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/03/2023	2.4	3.1	--	NG/L	0.00	J	
Tetrachloroethylene	02/03/2023	2.3	0.5	--	UG/L	0.00		

Site ID : 095-153 (RTW-2 Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/10/2023	2.79	--	--	UG/L	0.00		
1,2,3-Trichlorobenzene	01/10/2023	0.38	0.5	--	UG/L	0.00	J	
Chloroform	01/10/2023	0.94	0.5	--	UG/L	0.00		
Hexachlorobutadiene	01/10/2023	0.16	0.5	--	UG/L	0.00	J	
m/p xylene	01/10/2023	0.22	1	--	UG/L	0.00	J	
Tetrachloroethylene	01/10/2023	0.48	0.5	--	UG/L	0.00	J	
Toluene	01/10/2023	0.39	0.5	--	UG/L	0.00	J	
Xylene (total)	01/10/2023	0.22	1.5	--	UG/L	0.00	J	

Site ID : 095-155 (RTW-3 Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/10/2023	1.24	--	--	UG/L	0.00		
Chloroform	01/10/2023	0.96	0.5	--	UG/L	0.00		
Tetrachloroethylene	01/10/2023	0.28	0.5	--	UG/L	0.00	J	

Site ID : 095-157 (RTW-4 Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/10/2023	1.15	--	--	UG/L	0.00		

Table 7-4
OU III Building 96 Influent Data
'Hits Only' January through March 2023

Site ID : 095-157 (RTW-4 Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Chloroform	01/10/2023	0.66	0.5	--	UG/L	0.00		
Ethylbenzene	01/10/2023	0.27	0.5	--	UG/L	0.00	J	
Tetrachloroethylene	01/10/2023	0.22	0.5	--	UG/L	0.00	J	

Table 7-5
OU III Building 96 Effluent Data
'Hits Only' January through March 2023

Site ID : 095-152 (RTW-1 Effluent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/03/2023	36.59	--	--	NG/L	0.00		
8260 TVOC	02/03/2023	0	--	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	02/03/2023	1.6	1.5	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	02/03/2023	9.7	5.9	--	NG/L	0.00		
Perfluorodecanoic acid (PFDA)	02/03/2023	0.37	1.5	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	02/03/2023	1.7	1.5	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/03/2023	3.6	1.5	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/03/2023	3.4	1.5	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/03/2023	1.1	1.5	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/03/2023	0.45	1.5	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	02/03/2023	7.9	1.5	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/03/2023	3.9	1.5	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/03/2023	0.37	1.5	--	NG/L	0.00	J	
Perfluoropentanoic acid (PFPeA)	02/03/2023	2.5	2.9	--	NG/L	0.00	J	
solids-tot	02/03/2023	20	4	--	MG/L	0.00		

Qualifiers :

J = Estimated value.

D = Compound was identified in an analysis at a secondary dilution factor.

N2 = Not usable based on the results that are not distinguishable from background. The value is less than or equal to the sum of the MDA and the uncertainty or RDL.

U = Compound not detected.

Organic Compounds :

B = Compound was found in both the sample And associated laboratory blank.

Inorganic Compounds :

B = Result Is between instrument detection limit And contract required reporting limit.

OU IV Former Air Sparge/Soil Vapor Extraction System (System Closed)

A petition was submitted in June 2002 for closure of this project. The EPA and DEC provided their approval for system closure in July 2003. The system was decommissioned in the fall of 2003. Per the *2010 Groundwater Status Report*, groundwater monitoring related to the OU IV Air Sparge/Soil Vapor Extraction System is concluded.

OU VI Ethylene Dibromide Pump & Treat System

Process: Groundwater extraction and liquid phase granular activated carbon (GAC) treatment, with discharge to injection wells.

Goal: Reach the ethylene dibromide (EDB) Maximum Contaminant Level (MCL) in core monitoring wells within 30 years for the Upper Glacial aquifer (by 2030).

Start Date: October 2004

Table 9-1
Pumping Rates (gpm)

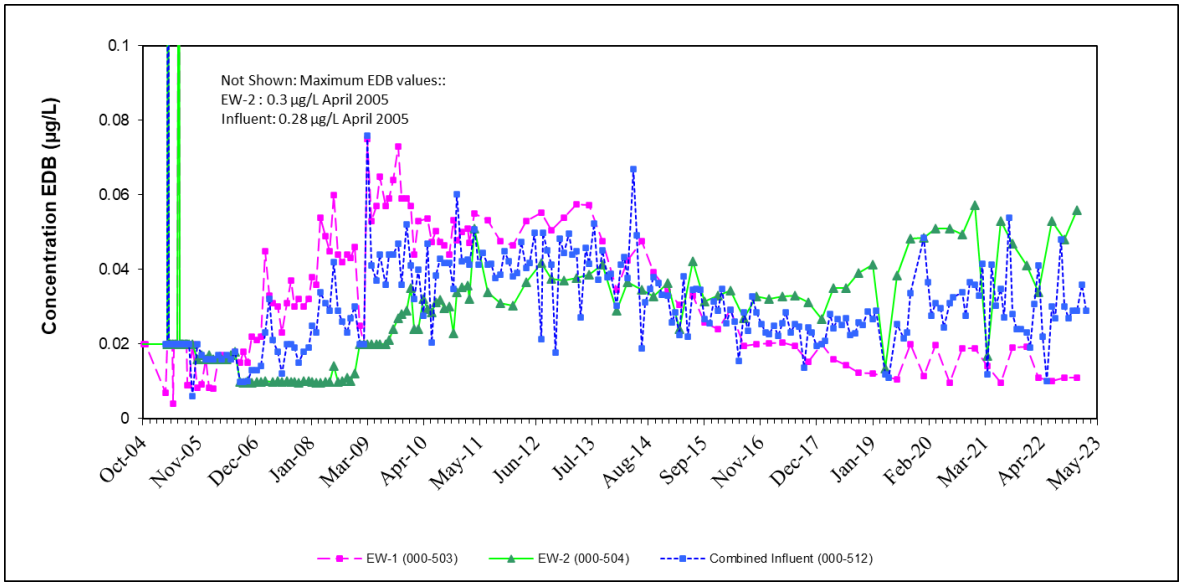
Extraction Well	EW-1E	EW-2E
Site Id #	000-503	000-504
Screened Interval (feet below grade)	115-135	115-135
Desired Flow Rate (GPM)	160	190
January	162	185
February	158	176
March	155	187
Actual (Avg. over Qtr.)	**158**	**183**

OU VI Ethylene Dibromide Pump & Treat System

Figure 9-1
OU VI Cumulative Mass Removal of EDB vs. Time

Due to the low concentrations of EDB in the extraction wells, a presentation of a mass removal graph is not included.

Figure 9-2
Extraction Well and Influent EDB Concentration vs. Time



OU VI Ethylene Dibromide Pump & Treat System

Table 9-2
Effluent Water Quality
SPDES Equivalency Permit Concentrations - January 1 through March 31, 2023

Parameter	Permit Limit	Max. Measured Value	Units	Frequency
Flow	**450**	**347**	**GPM**	**Continuous**
pH	**5.0 - 8.5**	**5.5-5.8***	**SU**	**Weekly**
Ethylene Dibromide	**.03**	**<0.02**	**µg/L**	**Monthly****
Chloroform	**7.0**	**1.1**	**µg/L**	**Monthly****
1,1-Dichloroethene	**5.0**	**<0.5**	**µg/L**	**Monthly****
1,1,1-Trichloroethane	**5.0**	**<0.5**	**µg/L**	**Monthly****
Methyl Chloride	**5.0**	**<0.5**	**µg/L**	**Monthly****
Methylene Chloride	**5.0**	**<0.5**	**µg/L**	**Monthly****

*Minimum to maximum value for pH during this operational period.
** The minimum measurement frequency shall be monthly following a period of 24 consecutive weekly sampling events showing no exceedances of the stated discharge limitations.

Monitoring Activities:

The OU VI EDB monitoring well data show the concentration of EDB ranged from 0.15 µg/L in 000-567 to 1.8 µg/L in 000-571. The OU VI EDB monitoring well network is shown on **Figure 9-3.** The 'Hits Only' first quarter 2023 monitoring well data are summarized in **Table 9-3.**

System Operations

January 2023:

The system ran normally for the month and treated approximately 15 million gallons of water.

February 2023:

The system ran normally for the month with the exception of being off from February 14 to February 16 for a carbon change-out. The system treated approximately 12.5 million gallons of water.

March 2023:

The system ran normally for the month and treated approximately 15 million gallons of water.

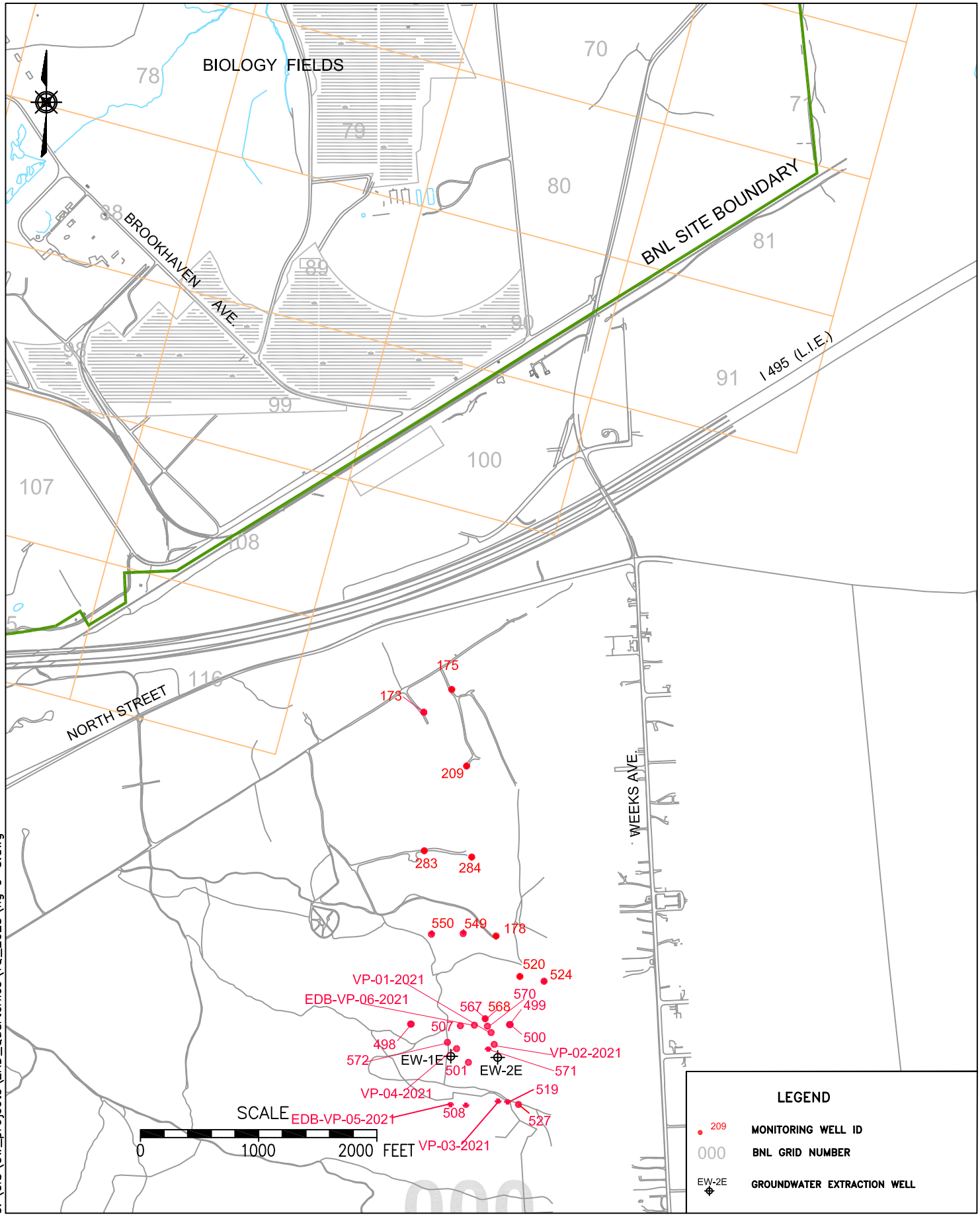
OU VI Ethylene Dibromide Pump & Treat System

The system treated approximately 42.5 million gallons of water during the first quarter of 2023. The treatment system 'Hits Only' data including individual extraction wells, combined influent, and effluent is summarized in **Table 9-4** through **Table 9-6**.

The EDB Transport Evaluation was performed in March 2023 to evaluate the locations and extraction rates of proposed additional deeper extraction wells. This is documented in the 2022 Groundwater Status Report.

Planned Operational Changes

- Maintain full time operation of the treatment system and continue quarterly sampling of the extraction wells.
- Based on updated groundwater flow and transport modeling, the following is recommended:
  - Submit a system design modification to the regulators in mid-2023 for the addition of two deeper extraction wells immediately adjacent to the existing wells EW-1E and EW-2E. These wells are planned to be installed in 2023 and will replace the existing extraction wells, which will no longer be operated.
  - This modification will establish capture of both the deep and slightly shallower portions of the EDB plume in this area and enhance remediation of the high concentration segment of the plume.
  - Additional deep bypass monitoring wells will be installed to monitor the effectiveness of the new extraction wells.



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ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU VI EDB

SITEWIDE REMEDIATION SYSTEMS
FIRST QUARTER 2023 OPERATIONS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
JEB	–	09/26/05	–
CHKD:	APPD:	REV.:	NOTES:
LDS	--	05/12/23	–
FIGURE NO.:			
9-3			

Table 9-3
OU VI Ethylene Dibromide Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 000-500

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
EDB	03/13/2023	0.18	0.011	--	UG/L	135.00		

Site ID : 000-549

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
EDB	03/14/2023	0.38	0.01	--	UG/L	145.00		

Site ID : 000-550

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
EDB	03/14/2023	0.31	0.01	--	UG/L	130.00		

Site ID : 000-567

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
EDB	03/14/2023	0.15	0.01	--	UG/L	145.00		

Site ID : 000-568

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
EDB	03/14/2023	0.64	0.1	--	UG/L	160.00	D	

Site ID : 000-570

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
EDB	03/13/2023	1.3	0.11	--	UG/L	160.00	D	

Site ID : 000-571

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
EDB	03/13/2023	1.8	0.1	--	UG/L	175.00	D	

Site ID : 000-572

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
EDB	03/13/2023	0.71	0.11	--	UG/L	200.00	D	

Table 9-4
OU VI Ethylene Dibromide Extraction Well Data
'Hits Only' January through March 2023

Site ID : 000-503 (EW-1)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/05/2023	0.92	--	--	UG/L	0.00		
Chloroform	01/05/2023	0.92	0.5	--	UG/L	0.00		

Site ID : 000-504 (EW-2)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/05/2023	0.9	--	--	UG/L	0.00		
Chloroform	01/05/2023	0.9	0.5	--	UG/L	0.00		
EDB	01/05/2023	0.056	0.011	--	UG/L	0.00		

Table 9-5
OU VI Ethylene Dibromide Influent Data
'Hits Only' January through March 2023

Site ID : 000-512 (Combined Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/05/2023	0.92	--	--	UG/L	0.00		
Chloroform	01/05/2023	0.92	0.5	--	UG/L	0.00		
EDB	01/05/2023	0.029	0.011	--	UG/L	0.00		
8260 TVOC	02/09/2023	1.08	--	--	UG/L	0.00		
Barium	02/09/2023	13	10	--	UG/L	0.00		
Calcium	02/09/2023	5000	130	--	UG/L	0.00		
Chloroform	02/09/2023	0.86	0.5	--	UG/L	0.00		
Chromium	02/09/2023	0.53	1.5	--	UG/L	0.00	B	
Copper	02/09/2023	2.3	5	--	UG/L	0.00	B	
EDB	02/09/2023	0.036	0.011	--	UG/L	0.00		
Iron	02/09/2023	1100	100	--	UG/L	0.00		
Lead	02/09/2023	9	0.5	--	UG/L	0.00		
Magnesium	02/09/2023	2400	130	--	UG/L	0.00		
Nickel	02/09/2023	10	5	--	UG/L	0.00		
Potassium	02/09/2023	760	1000	--	UG/L	0.00	B	
Sodium	02/09/2023	13000	130	--	UG/L	0.00		
Trichloroethylene	02/09/2023	0.22	0.5	--	UG/L	0.00	J	
Zinc	02/09/2023	55	5	--	UG/L	0.00		
8260 TVOC	03/08/2023	0.85	--	--	UG/L	0.00		
Chloroform	03/08/2023	0.85	0.5	--	UG/L	0.00		
EDB	03/08/2023	0.029	0.01	--	UG/L	0.00		

Table 9-6
OU VI Ethylene Dibromide Effluent Data
'Hits Only' January through March 2023

Site ID : 000-510 (System Effluent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/05/2023	1.1	--	--	UG/L	0.00		
Chloroform	01/05/2023	1.1	0.5	--	UG/L	0.00		
EDB	01/05/2023	0.011	0.011	--	UG/L	0.00	U	
EDB	01/05/2023	0.5	0.5	--	UG/L	0.00	U	
8260 TVOC	02/09/2023	1	--	--	UG/L	0.00		
Chloroform	02/09/2023	1	0.5	--	UG/L	0.00		
EDB	02/09/2023	0.011	0.011	--	UG/L	0.00	U	
EDB	02/09/2023	0.5	0.5	--	UG/L	0.00	U	
8260 TVOC	03/08/2023	0	--	--	UG/L	0.00		
EDB	03/08/2023	0.011	0.011	--	UG/L	0.00	U	
EDB	03/08/2023	0.5	0.5	--	UG/L	0.00	U	

Qualifiers :

J = Estimated value.

D = Compound was identified in an analysis at a secondary dilution factor.

N2 = Not usable based on the results that are not distinguishable from background. The value is less than or equal to the sum of the MDA and the uncertainty or RDL.

U = Compound not detected.

Organic Compounds :

B = Compound was found in both the sample And associated laboratory blank.

Inorganic Compounds :

B = Result Is between instrument detection limit And contract required reporting limit.

OU III HFBR Tritium Pump & Recharge System (System Closed)

Process: Pump and recharge (to the RAV basin) with monitored natural attenuation for tritium. Carbon filtration was also included in the pump and recharge system to remove VOCs that were also present in the groundwater.

Goal: Reach Maximum Contaminant Levels (MCLs) in core monitoring wells within 30 years for the Upper Glacial aquifer (by 2030). NYSDEC and EPA approved the Petition for Closure in August 2018 and March 2019, respectively.

Start Date: May 1997

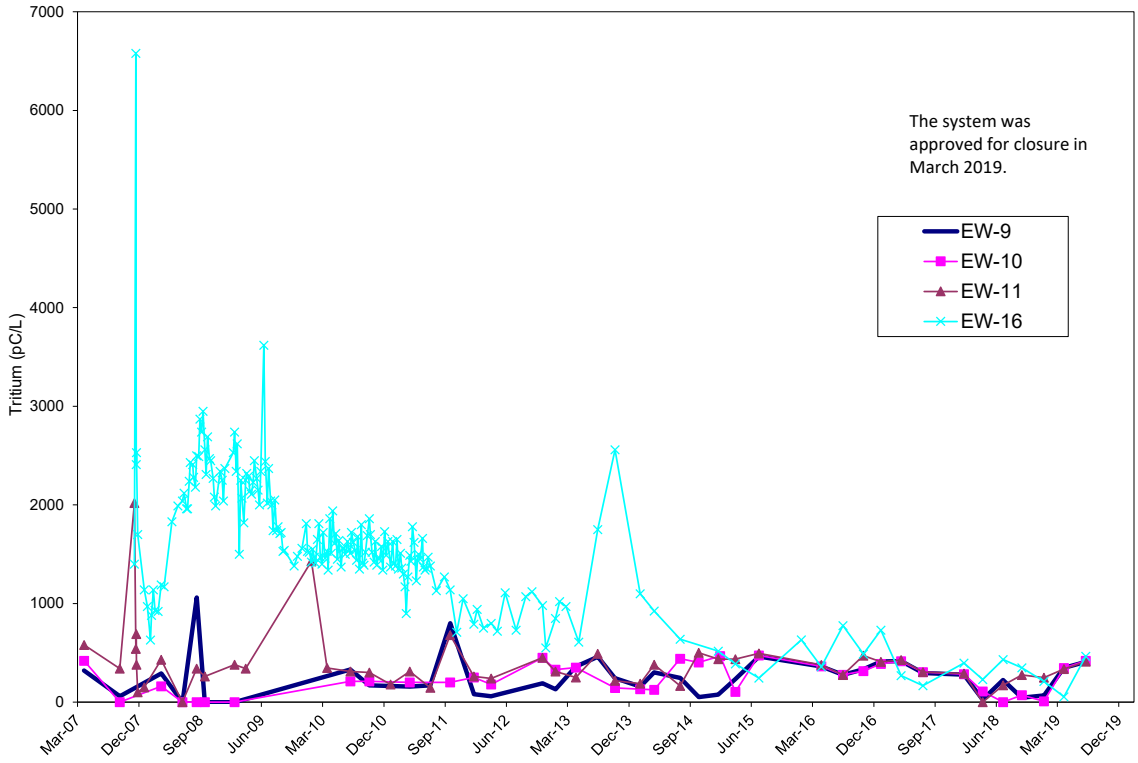
Table 10-1
Pumping Rates (gpm)

Extraction Well	EW-9	EW-10	EW-11	EW-16
Site ID #	105-40	105-39	105-41	096-119
Screen Interval (ft bls)	130-150	130-150	130-150	80-120
Desired Flow Rate (gpm)	0 *	0 *	0 *	0 *
January (Avg monthly gpm)	0	0	0	0
February " "	0	0	0	0
March " "	0	0	0	0
Actual (Avg. over Qtr.)	**0**	**0**	**0**	**0**

* The system was approved for closure in March 2019.

OU III HFBR Tritium Pump & Recharge System (System Closed)

Figure 10-1
Extraction Wells Tritium Concentrations vs. Time



OU III HFBR Tritium Pump & Recharge System
(System Closed)

Table 10-2
Effluent Water Quality
SPDES Equivalency Permit Concentrations January 1 through March 31, 2023

Parameter	Permit Limit	Max. Measured Value	Units	Frequency
Flow	**Monitor**	**NA**	**GPD**	**Continuous**
pH (range)	**5.6 - 8.5**	**NA**	**SU**	**Weekly**
Carbon Tetrachloride	**5.0**	**NA**	**µg/L**	**2/Month**
Chloroform	**7.0**	**NA**	**µg/L**	**2/Month**
1,1-Dichloroethane	**5.0**	**NA**	**µg/L**	**2/Month**
1,2-Dichloroethane	**0.6**	**NA**	**µg/L**	**2/Month**
1,1-Dichloroethene	**5.0**	**NA**	**µg/L**	**2/Month**
cis-1,2-Dichloroethylene	**5.0**	**NA**	**µg/L**	**2/Month**
trans-1,2-Dichloroethylene	**5.0**	**NA**	**µg/L**	**2/Month**
Methyl Chloride	**5.0**	**NA**	**µg/L**	**2/Month**
Methylene Chloride	**5.0**	**NA**	**µg/L**	**2/Month**
Methyl Bromide	**5.0**	**NA**	**µg/L**	**2/Month**
Tetrachloroethylene	**5.0**	**NA**	**µg/L**	**2/Month**
1,1,1-Trichloroethane	**5.0**	**NA**	**µg/L**	**2/Month**
Trichloroethylene	**5.0**	**NA**	**µg/L**	**2/Month**

NA = Not applicable. The system is closed.

OU III HFBR Tritium Pump & Recharge System (System Closed)

Monitoring Activities:

During the first quarter of 2023, the highest concentration of tritium recorded was 4,968 pCi/L, immediately downgradient of the HFBR in well 075-805.The current monitoring well network is shown on **Figure 10-1**. The first quarter 'Hits Only' monitoring well analytical results are summarized in**Table 10-3**.

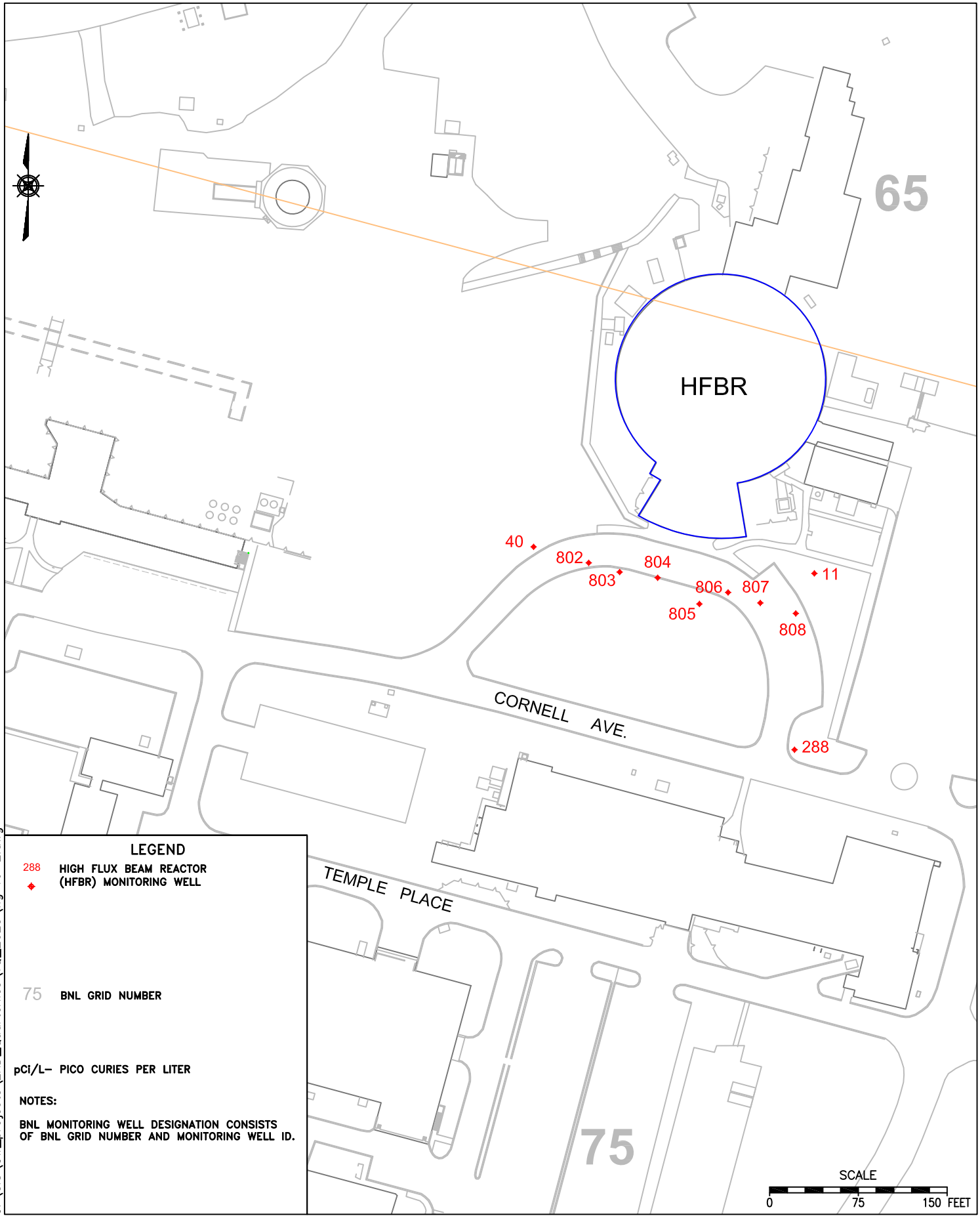
System Operations

January through March 2023:

The system remained closed.

Planned Operational Changes

- Continue to monitor the source area with the ten wells located immediately downgradient of the HFBR on a quarterly basis. Consider reducing the sampling frequency to semi-annual if tritium concentrations remain below 20,000 pCi/L in 2023.
- Maintain the downgradient monitoring and extraction wells until a determination is made on their potential utilization related to PFAS and 1,4-dioxane.



G:\GIS\Gw_projects\ERD_Quarterlies\1Q_2023\fig 10-2.dwg

ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III HFBR AOC 29

FIRST QUARTER 2023 OPERATIONS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	06/14/16	–
CHKD:	APPD:	REV.:	NOTES:
LDS	–	07/07/23	–

FIGURE NO.: 10–2

Table 10-3
OU III HFBR Tritium Plume Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 075-804

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Tritium	01/10/2023	495.632	362.247	224.178	PCI/L	53.15		N2

Site ID : 075-805

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Tritium	01/10/2023	4968.079	358.965	321.708	PCI/L	52.85		

Site ID : 075-806

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Tritium	01/10/2023	852.345	359.933	232.336	PCI/L	52.39		

Site ID : 075-807

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Tritium	01/10/2023	1620.91	362.376	253.039	PCI/L	51.56		

Qualifiers :

J = Estimated value.

D = Compound was identified in an analysis at a secondary dilution factor.

N2 = Not usable based on the results that are not distinguishable from background. The value is less than or equal to the sum of the MDA and the uncertainty or RDL.

U = Compound not detected.

Organic Compounds :

B = Compound was found in both the sample And associated laboratory blank.

Inorganic Compounds :

B = Result Is between instrument detection limit And contract required reporting limit.

OU III Western South Boundary Pump & Treat System

Process: Groundwater extraction and air stripping treatment. As of March 2019, the water is treated at the OU III South Boundary/Middle Road air stripper towers and discharged to both the OU III and RA V recharge basins.

Goal: Reach Maximum Contaminant Levels (MCLs) in core monitoring wells in OU III within 30 years for the Upper Glacial aquifer (by 2030).

Start Date: September 2002

Table 11-1
Pumping Rates (gpm)

Extraction Well	WSB-1	WSB-2	WSB-3	WSB-4	WSB-5	WSB-6
Site ID #	126-12	127-05	111-17	119-13	130-12	130-13
Screen Interval (ft bls)	140-160	150-170	168-188	170-190	160-190	196-216
Desired Flow Rate (GPM)	100	0*	75	75	75	75
January (Avg monthly gpm)	86	0	58	31	83	96
February " "	63	0	96	66	57	88
March " "	73	0	101	84	80	91
Actual (Avg. over Qtr.)	**74**	**0**	**85**	**60**	**73**	**92**

* Extraction well WSB-2 is in standby mode. Extraction wells WSB-3 through WSB-6 became operational in March 2019.

OU III Western South Boundary Pump & Treat System

Figure 11-1
Cumulative Mass Removal of VOCs vs. Time

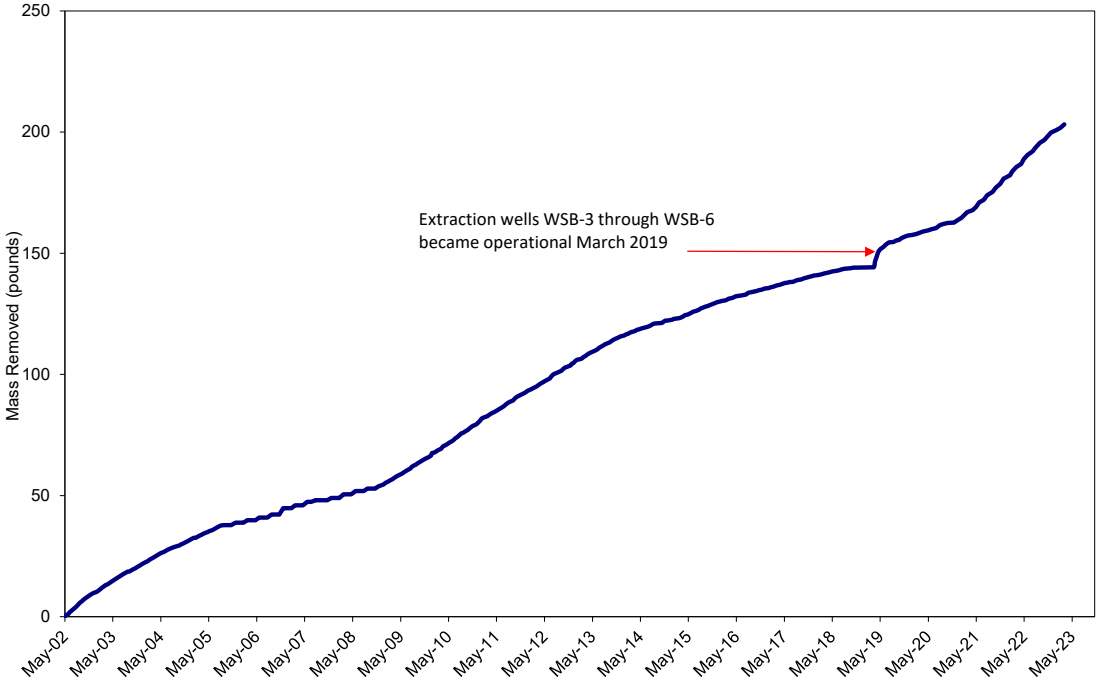
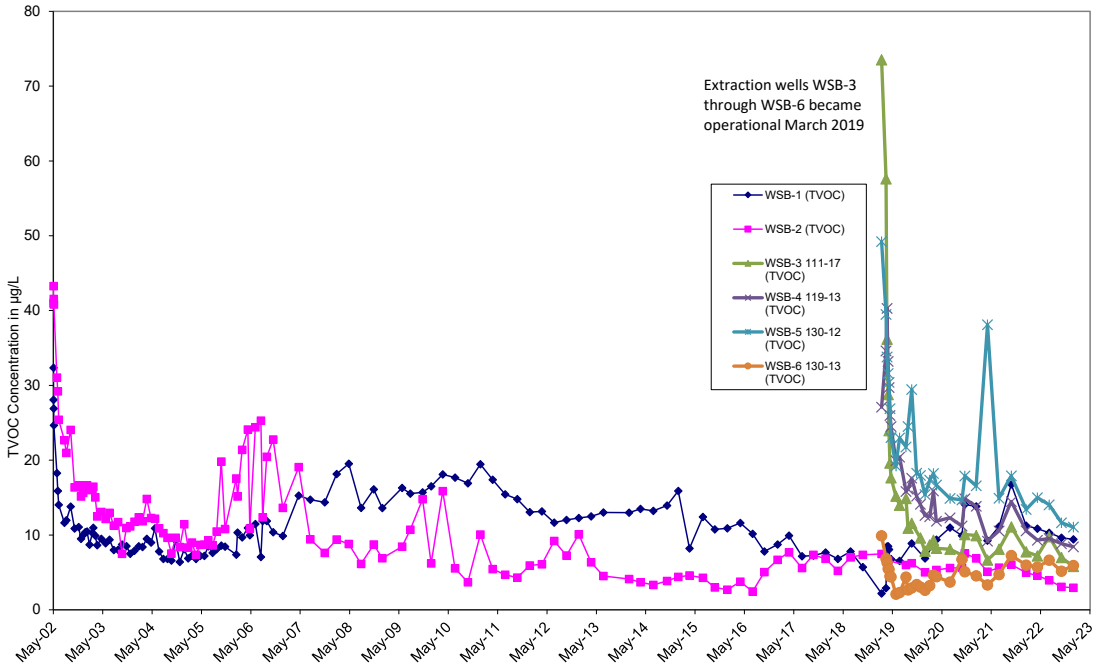


Figure 11-2
Extraction Well TVOC Concentrations vs. Time



OU III Western South Boundary Pump & Treat System

Table 11-2
Effluent Water Quality
SPDES Equivalency Permit Concentrations January 1 through March 31, 2023

Parameter	Permit Limit	Max. Measured Value	Units	Frequency
Flow	**Monitor**	**1,299,701[1]**	**GPD**	**Continuous**
pH (range)	**6.5 - 8.5**	**6.7– 7.3[2]**	**SU**	**Monthly[3]**
Carbon Tetrachloride	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
Chloroform	**7.0**	**<0.50**	**µg/L**	**Monthly[3]**
Dichlorodifluoromethane	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
1,1-Dichloroethane	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
1,1-Dichloroethylene	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
Methyl Chloride	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
Tetrachloroethylene	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
Toluene	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
1,1,1-Trichloroethane	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
1,1,2 Trichloroethane	**5.0**	**<0.50**	**µg/L**	**Monthly[3]**
Trichloroethylene	**10.0**	**<0.50**	**µg/L**	**Monthly[3]**

[1] The maximum monthly average flow for the Middle Road and South Boundary, and Western South Boundary Systems during the operational period.
[2] The minimum and maximum pH values during the operational period.
[3] Beginning in April 2003, a SPDES modification was approved revising the pH and volatile organic sampling to once a month.

As of March 2019, the water from the Western South Boundary is treated at the OU III South Boundary/Middle Road air stripper towers and discharged under that equivalency permit. This change in discharge location was reflected starting with the April 2019 Discharge Monitoring Report (DMR).

Monitoring Activities:

The OU III Western South Boundary monitoring well data reported the concentration of TVOCs slightly above (25.2 µg/L, 39.3 µg/L and 20.2 µg/L) their 20 µg/L capture goal in three monitoring wells (103-15, 119-11, and 130-14, respectively). The highest concentration of individual VOCs in these wells included dichlorodifluoromethane (Freon-12) at 11 µg/L in 103-15 and 18 µg/L in 130-14. In monitoring well 119-11, the

highest concentration of an individual VOC was 1,1-dichloroethylene (1,1-DCE) at 24 µg/L. The OU III Western South Boundary monitoring well network is shown on **Figure 11-3.** The 'Hits Only' first quarter 223 data are summarized in **Table 11-3.**

System Operations

January 2023:

The system operated normally with extraction wells WSB-1, WSB-3, WSB-5, and WSB-6. Extraction well WSB-2 was in standby mode and WSB-4 was off for repairs from the middle of January through remainder of the month. The effluent sample was collected from the OU III South Boundary air stripping tower and the system treated approximately 16 million gallons of water.

February 2023:

The system operated normally with extraction wells WSB-1, WSB-3, WSB-5, and WSB-6. Extraction well WSB-2 was in standby mode and WSB-4 was off for repairs during the first week of February. The effluent sample was collected from OU III South Boundary air stripping tower and the system treated approximately 15 million gallons of water.

March 2023:

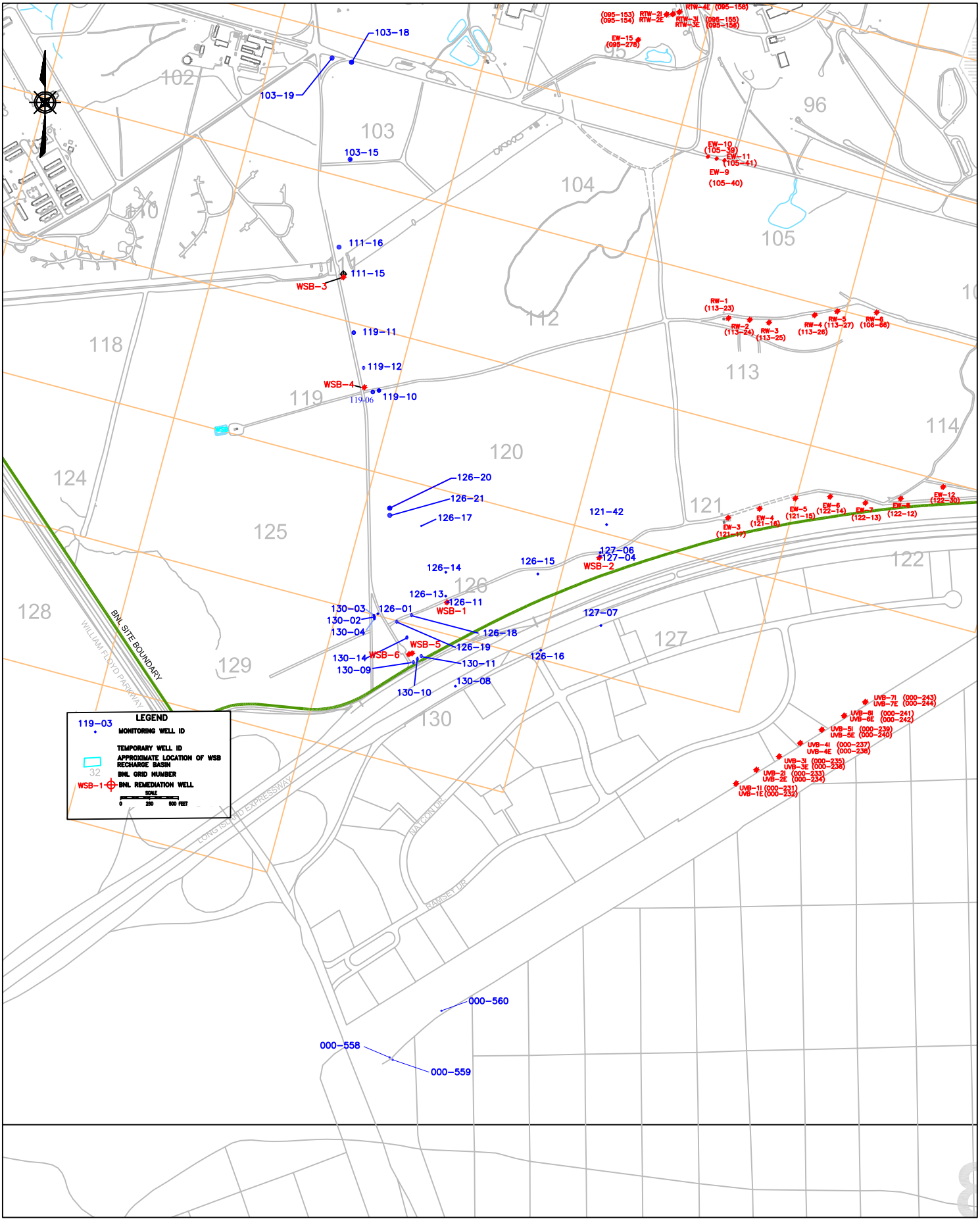
The system operated normally with extraction wells WSB-1, WSB-3, WSB-4, WSB-5, and WSB-6. Extraction well WSB-2 was in standby mode. The effluent sample was collected from OU III South Boundary air stripping tower and the system treated approximately 19 million gallons of water.

The system treated approximately 50 million gallons of water during the first quarter of 2023. The treatment system 'Hits Only' data, including individual extraction wells, influent, and effluent is summarized in **Table 11-4** through **Table 11-6**.

Planned Operational Changes

- Based on TVOC concentrations being below the capture goal of 20 µg/L, maintain extraction well WSB-2 in standby mode. If TVOC concentrations greater than 20 µg/L are observed in WSB-2 or the adjacent monitoring wells, extraction well WSB-2 may be placed into full time operation.
- Only three core monitoring wells are currently above the 20 µg/L TVOC concentration capture goal. To enhance the remaining cleanup, begin pulsed pumping the five operating extraction wells to address areas of groundwater stagnation between the extraction wells. The pulsed pumping shall be done with wells WSB-1, WSB- 3, and WSB-5 on one month, while wells WSB-4 and WSB-6 are off. The

following month, wells WSB-4 and WSB-6 shall be on while wells WSB-1, WSB-3 and WSB-5 are off.



\\OERNT\GIS\GW_PROJECTS\ERD QUARTERLIES\1Q_2023\FIG 11-3.DWG

ENVIRONMENTAL PROTECTION DIVISION

OU III WESTERN SOUTH BOUNDARY PUMP AND TREAT SYSTEM MONITORING WELL LOCATIONS

SITEWIDE REMEDIATION SYSTEMS
FIRST QUARTER 2023 OPERATIONS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
JEB	–	09/26/05	–
CHKD:	APPD:	REV.:	NOTES:
LDS	--	05/12/23	–

FIGURE NO.: 11-3

Table 11-3
OU III Western South Boundary Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 000-558

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/07/2023	18.73	--	--	UG/L	165.00		
1,1,1-Trichloroethane	03/07/2023	2.5	0.5	--	UG/L	165.00		
1,1-Dichloroethane	03/07/2023	0.93	0.5	--	UG/L	165.00		
1,1-Dichloroethylene	03/07/2023	3.8	0.5	--	UG/L	165.00		
Chloroform	03/07/2023	3.7	0.5	--	UG/L	165.00		
Dichlorodifluoromethane	03/07/2023	4	0.5	--	UG/L	165.00		
Trichloroethylene	03/07/2023	3.8	0.5	--	UG/L	165.00		

Site ID : 000-559

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/07/2023	2.3	--	--	UG/L	215.00		
Dichlorodifluoromethane	03/07/2023	2.3	0.5	--	UG/L	215.00		

Site ID : 000-560

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/07/2023	19.19	--	--	UG/L	159.50		
1,1,1-Trichloroethane	03/07/2023	2.4	0.5	--	UG/L	159.50		
1,1-Dichloroethane	03/07/2023	0.99	0.5	--	UG/L	159.50		
1,1-Dichloroethylene	03/07/2023	3.5	0.5	--	UG/L	159.50		
Chloroform	03/07/2023	3.9	0.5	--	UG/L	159.50		
Dichlorodifluoromethane	03/07/2023	4.5	0.5	--	UG/L	159.50		
Trichloroethylene	03/07/2023	3.9	0.5	--	UG/L	159.50		

Site ID : 103-15

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/21/2023	25.2	--	--	UG/L	200.00		
1,1-Dichloroethane	03/21/2023	3.2	0.5	--	UG/L	200.00		
1,1-Dichloroethylene	03/21/2023	5.5	0.5	--	UG/L	200.00		
Dichlorodifluoromethane	03/21/2023	11	0.5	--	UG/L	200.00		
Trichloroethylene	03/21/2023	5.5	0.5	--	UG/L	200.00		

Site ID : 103-18

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/22/2023	9.1	--	--	UG/L	170.00		
1,1-Dichloroethane	03/22/2023	1.2	0.5	--	UG/L	170.00		
1,1-Dichloroethylene	03/22/2023	1.8	0.5	--	UG/L	170.00		
Dichlorodifluoromethane	03/22/2023	3.1	0.5	--	UG/L	170.00		

Table 11-3
OU III Western South Boundary Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 103-18

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Trichloroethylene	03/22/2023	3	0.5	--	UG/L	170.00		

Site ID : 103-19

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/22/2023	5.76	--	--	UG/L	170.00		
1,1-Dichloroethane	03/22/2023	0.87	0.5	--	UG/L	170.00		
1,1-Dichloroethylene	03/22/2023	0.99	0.5	--	UG/L	170.00		
Dichlorodifluoromethane	03/22/2023	1.3	0.5	--	UG/L	170.00		
Trichloroethylene	03/22/2023	2.6	0.5	--	UG/L	170.00		

Site ID : 111-15

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/13/2023	1.6	--	--	UG/L	175.00		
1,1-Dichloroethylene	03/13/2023	0.4	0.5	--	UG/L	175.00	J	
Chloroform	03/13/2023	1.2	0.5	--	UG/L	175.00		

Site ID : 111-16

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/13/2023	2.7	--	--	UG/L	173.00		
1,1-Dichloroethane	03/13/2023	0.35	0.5	--	UG/L	173.00	J	
1,1-Dichloroethylene	03/13/2023	0.81	0.5	--	UG/L	173.00		
Chloroform	03/13/2023	1.1	0.5	--	UG/L	173.00		
Trichloroethylene	03/13/2023	0.44	0.5	--	UG/L	173.00	J	

Site ID : 119-10

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/17/2023	5.8	--	--	UG/L	200.00		
1,1-Dichloroethane	03/17/2023	1.4	0.5	--	UG/L	200.00		
1,1-Dichloroethylene	03/17/2023	1.2	0.5	--	UG/L	200.00		
Dichlorodifluoromethane	03/17/2023	1.8	0.5	--	UG/L	200.00		
Trichloroethylene	03/17/2023	1.4	0.5	--	UG/L	200.00		

Site ID : 119-11

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/13/2023	39.3	--	--	UG/L	180.00		
1,1,1-Trichloroethane	03/13/2023	4.3	0.5	--	UG/L	180.00		
1,1-Dichloroethane	03/13/2023	5.5	0.5	--	UG/L	180.00		
1,1-Dichloroethylene	03/13/2023	24	0.5	--	UG/L	180.00		

Table 11-3
OU III Western South Boundary Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 119-11

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Dichlorodifluoromethane	03/13/2023	1.9	0.5	--	UG/L	180.00		
Trichloroethylene	03/13/2023	3.6	0.5	--	UG/L	180.00		

Site ID : 119-12

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/17/2023	3.85	--	--	UG/L	179.00		
1,1,1-Trichloroethane	03/17/2023	1.5	0.5	--	UG/L	179.00		
1,1-Dichloroethylene	03/17/2023	0.95	0.5	--	UG/L	179.00		
Trichloroethylene	03/17/2023	1.4	0.5	--	UG/L	179.00		

Site ID : 126-14

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/21/2023	9.73	--	--	UG/L	155.00		
1,1,1-Trichloroethane	03/21/2023	4.8	0.5	--	UG/L	155.00		
1,1-Dichloroethylene	03/21/2023	3.1	0.5	--	UG/L	155.00		
1,2-Dichloroethane	03/21/2023	0.13	0.5	--	UG/L	155.00	J	
Trichloroethylene	03/21/2023	1.7	0.5	--	UG/L	155.00		

Site ID : 126-16

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/06/2023	15.5	--	--	UG/L	135.00		
1,1,1-Trichloroethane	03/06/2023	2	0.5	--	UG/L	135.00		
1,1-Dichloroethane	03/06/2023	1.2	0.5	--	UG/L	135.00		
1,1-Dichloroethylene	03/06/2023	3.7	0.5	--	UG/L	135.00		
Chloroform	03/06/2023	3.2	0.5	--	UG/L	135.00		
Dichlorodifluoromethane	03/06/2023	2.7	0.5	--	UG/L	135.00		
Trichloroethylene	03/06/2023	2.7	0.5	--	UG/L	135.00		

Site ID : 126-18

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/17/2023	1.45	--	--	UG/L	165.00		
1,1,1-Trichloroethane	03/17/2023	0.54	0.5	--	UG/L	165.00		
1,1-Dichloroethylene	03/17/2023	0.91	0.5	--	UG/L	165.00		

Site ID : 126-19

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/21/2023	16.1	--	--	UG/L	195.00		
1,1,1-Trichloroethane	03/21/2023	1.7	0.5	--	UG/L	195.00		

Table 11-3
OU III Western South Boundary Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 126-19

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1,1-Dichloroethane	03/21/2023	2.2	0.5	--	UG/L	195.00		
1,1-Dichloroethylene	03/21/2023	3.7	0.5	--	UG/L	195.00		
Chloroform	03/21/2023	1.1	0.5	--	UG/L	195.00		
Dichlorodifluoromethane	03/21/2023	7.4	0.5	--	UG/L	195.00		

Site ID : 126-20

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/21/2023	5.01	--	--	UG/L	140.00		
1,1,1-Trichloroethane	03/21/2023	2	0.5	--	UG/L	140.00		
1,1-Dichloroethylene	03/21/2023	1.8	0.5	--	UG/L	140.00		
1,2-Dichloroethane	03/21/2023	0.19	0.5	--	UG/L	140.00	J	
Chloroform	03/21/2023	0.22	0.5	--	UG/L	140.00	J	
Tetrachloroethylene	03/21/2023	0.33	0.5	--	UG/L	140.00	J	
Trichloroethylene	03/21/2023	0.47	0.5	--	UG/L	140.00	J	

Site ID : 126-21

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/21/2023	2.68	--	--	UG/L	204.00		
1,1,1-Trichloroethane	03/21/2023	0.32	0.5	--	UG/L	204.00	J	
1,1-Dichloroethylene	03/21/2023	0.56	0.5	--	UG/L	204.00		
Chloroform	03/21/2023	1	0.5	--	UG/L	204.00		
Dichlorodifluoromethane	03/21/2023	0.27	0.5	--	UG/L	204.00	J	
Trichloroethylene	03/21/2023	0.53	0.5	--	UG/L	204.00		

Site ID : 127-07

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/06/2023	4.41	--	--	UG/L	151.00		
1,1,1-Trichloroethane	03/06/2023	0.83	0.5	--	UG/L	151.00		
1,1-Dichloroethane	03/06/2023	0.48	0.5	--	UG/L	151.00	J	
1,1-Dichloroethylene	03/06/2023	1.2	0.5	--	UG/L	151.00		
Dichlorodifluoromethane	03/06/2023	0.96	0.5	--	UG/L	151.00		
Tetrachloroethylene	03/06/2023	0.17	0.5	--	UG/L	151.00	J	
Trichloroethylene	03/06/2023	0.77	0.5	--	UG/L	151.00		

Site ID : 130-08

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/06/2023	1.63	--	--	UG/L	150.00		

Table 11-3
OU III Western South Boundary Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 130-08

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Chloroform	03/06/2023	1.1	0.5	--	UG/L	150.00		
Tetrachloroethylene	03/06/2023	0.34	0.5	--	UG/L	150.00	J	
Trichloroethylene	03/06/2023	0.19	0.5	--	UG/L	150.00	J	

Site ID : 130-09

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/06/2023	1.6	--	--	UG/L	140.00		
Chloroform	03/06/2023	1.6	0.5	--	UG/L	140.00		

Site ID : 130-10

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/06/2023	1.7	--	--	UG/L	155.00		
Chloroform	03/06/2023	1.7	0.5	--	UG/L	155.00		

Site ID : 130-11

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/06/2023	1.6	--	--	UG/L	200.00		
Chloroform	03/06/2023	1.6	0.5	--	UG/L	200.00		

Site ID : 130-14

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/21/2023	20.2	--	--	UG/L	208.00		
1,1-Dichloroethane	03/21/2023	1.2	0.5	--	UG/L	208.00		
1,1-Dichloroethylene	03/21/2023	1	0.5	--	UG/L	208.00		
Dichlorodifluoromethane	03/21/2023	18	0.5	--	UG/L	208.00		

Table 11-4
OU III Western South Boundary Extraction Well Data
'Hits Only' January through March 2023

Site ID : 111-17 (WSB-3)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	5.81	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/09/2023	0.58	0.5	--	UG/L	0.00		
1,1-Dichloroethane	01/09/2023	0.64	0.5	--	UG/L	0.00		
1,1-Dichloroethylene	01/09/2023	3	0.5	--	UG/L	0.00		
Chloroform	01/09/2023	1.1	0.5	--	UG/L	0.00		
Trichloroethylene	01/09/2023	0.49	0.5	--	UG/L	0.00	J	

Site ID : 119-13 (WSB-4)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	8.42	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/09/2023	2	0.5	--	UG/L	0.00		
1,1-Dichloroethane	01/09/2023	0.53	0.5	--	UG/L	0.00		
1,1-Dichloroethylene	01/09/2023	4.7	0.5	--	UG/L	0.00		
Chloroform	01/09/2023	0.27	0.5	--	UG/L	0.00	J	
Dichlorodifluoromethane	01/09/2023	0.36	0.5	--	UG/L	0.00	J	
Trichloroethylene	01/09/2023	0.56	0.5	--	UG/L	0.00		

Site ID : 126-12 (WSB-1)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	9.42	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/09/2023	3	0.5	--	UG/L	0.00		
1,1-Dichloroethylene	01/09/2023	4.9	0.5	--	UG/L	0.00		
Chloroform	01/09/2023	0.87	0.5	--	UG/L	0.00		
Trichloroethylene	01/09/2023	0.65	0.5	--	UG/L	0.00		

Site ID : 127-05 (WSB-2)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	2.94	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/09/2023	0.55	0.5	--	UG/L	0.00		
1,1-Dichloroethylene	01/09/2023	0.51	0.5	--	UG/L	0.00		
Chloroform	01/09/2023	0.48	0.5	--	UG/L	0.00	J	
Trichloroethylene	01/09/2023	1.4	0.5	--	UG/L	0.00		

Site ID : 130-12 (WSB-5)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	11.05	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/09/2023	3.6	0.5	--	UG/L	0.00		

Table 11-4
OU III Western South Boundary Extraction Well Data
'Hits Only' January through March 2023

Site ID : 130-12 (WSB-5)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1,1-Dichloroethane	01/09/2023	0.27	0.5	--	UG/L	0.00	J	
1,1-Dichloroethylene	01/09/2023	4.5	0.5	--	UG/L	0.00		
Chloroform	01/09/2023	1.3	0.5	--	UG/L	0.00		
Dichlorodifluoromethane	01/09/2023	0.51	0.5	--	UG/L	0.00		
Trichloroethylene	01/09/2023	0.87	0.5	--	UG/L	0.00		

Site ID : 130-13 (WSB-6)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	5.93	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/09/2023	0.49	0.5	--	UG/L	0.00	J	
1,1-Dichloroethane	01/09/2023	0.63	0.5	--	UG/L	0.00		
1,1-Dichloroethylene	01/09/2023	1.1	0.5	--	UG/L	0.00		
Dichlorodifluoromethane	01/09/2023	3.5	0.5	--	UG/L	0.00		
Trichloroethylene	01/09/2023	0.21	0.5	--	UG/L	0.00	J	

Table 11-5
OU III Western South Boundary Influent Data
'Hits Only' January through March 2023

Site ID : 121-55 (System Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	7.08	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/09/2023	1.6	0.5	--	UG/L	0.00		
1,1-Dichloroethane	01/09/2023	0.36	0.5	--	UG/L	0.00	J	
1,1-Dichloroethylene	01/09/2023	3	0.5	--	UG/L	0.00		
Chloroform	01/09/2023	0.79	0.5	--	UG/L	0.00		
Dichlorodifluoromethane	01/09/2023	0.57	0.5	--	UG/L	0.00		
Trichloroethylene	01/09/2023	0.76	0.5	--	UG/L	0.00		
8260 TVOC	02/11/2023	8.29	--	--	UG/L	0.00		
1,1,1-Trichloroethane	02/11/2023	1.9	0.5	--	UG/L	0.00		
1,1-Dichloroethane	02/11/2023	0.45	0.5	--	UG/L	0.00	J	
1,1-Dichloroethylene	02/11/2023	3.9	0.5	--	UG/L	0.00		
Chloroform	02/11/2023	0.72	0.5	--	UG/L	0.00		
Dichlorodifluoromethane	02/11/2023	0.95	0.5	--	UG/L	0.00		
Trichloroethylene	02/11/2023	0.37	0.5	--	UG/L	0.00	J	
8260 TVOC	03/13/2023	8.65	--	--	UG/L	0.00		
1,1,1-Trichloroethane	03/13/2023	1.9	0.5	--	UG/L	0.00		
1,1-Dichloroethane	03/13/2023	0.44	0.5	--	UG/L	0.00	J	
1,1-Dichloroethylene	03/13/2023	4.2	0.5	--	UG/L	0.00		
Chloroform	03/13/2023	0.75	0.5	--	UG/L	0.00		
Dichlorodifluoromethane	03/13/2023	0.78	0.5	--	UG/L	0.00		
Trichloroethylene	03/13/2023	0.58	0.5	--	UG/L	0.00		

Table 11-6
OU III Western South Boundary Effluent Data
'Hits Only' January through March 2023

Site ID : 095-126 (System Effluent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	0	--	--	UG/L	0.00		
8260 TVOC	02/11/2023	0	--	--	UG/L	0.00		
8260 TVOC	03/13/2023	0	--	--	UG/L	0.00		

Qualifiers :

J = Estimated value.

D = Compound was identified in an analysis at a secondary dilution factor.

N2 = Not usable based on the results that are not distinguishable from background. The value is less than or equal to the sum of the MDA and the uncertainty or RDL.

U = Compound not detected.

Organic Compounds :

B = Compound was found in both the sample And associated laboratory blank.

Inorganic Compounds :

B = Result Is between instrument detection limit And contract required reporting limit.

OU III Strontium-90 Chemical Holes Pump & Treat System

Process: Groundwater extraction and treatment via zeolite resin (Clinoptilolite) for the removal of strontium-90 (Sr-90), with discharge to dry wells.

Goal: Reach Maximum Contaminant Levels (MCLs) in core monitoring wells within 40 years for the Upper Glacial aquifer (by 2040).

Start Date: February 2003

Table 12-1
Pumping Rates (gpm)

Extraction Well	EW-1 *	EW-2*	EW-3*
Site Id #	106-92	106-123	106-124
Screen Interval (ft bls)	23.5-38.5	35-45	35-45
Desired Flow Rate (gpm)	0.0	0.0	0.0
January (Avg monthly gpm)	0.0	0.0	0.0
February	0.0	0.0	0.0
August	0.0	0.0	0.0
Actual (Avg. over Qtr. when on)	0.0	0.0	0.0

All three extraction wells began pulse pumping (one month on and two months off) in October 2014. In October 2015, EW-1 resumed full time operation. In April 2016, EW-1 was placed into pulsed pumping mode (one month on and one month off). In October 2016, EW-2 and EW-3 were placed in stand-by mode while EW-1 continued in pulsed pumping mode. EW-1 was placed in stand-by mode in July 2018 and the entire system remains in standby mode.

OU III Strontium-90 Chemical Holes Pump & Treat System

Figure 12-1
Chemical Holes Sr-90 Cumulative Millicuries Removed

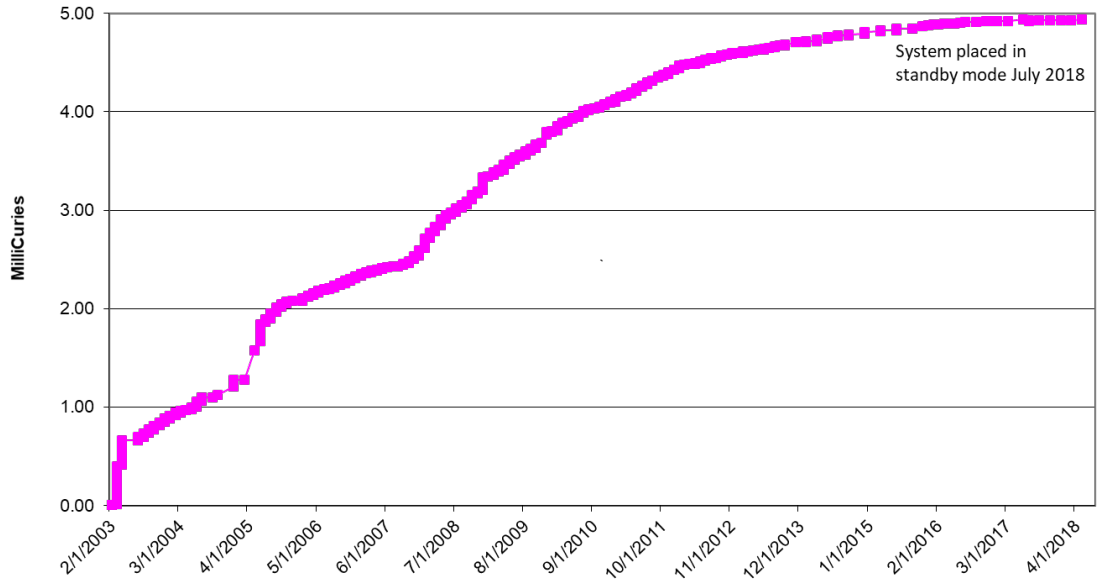
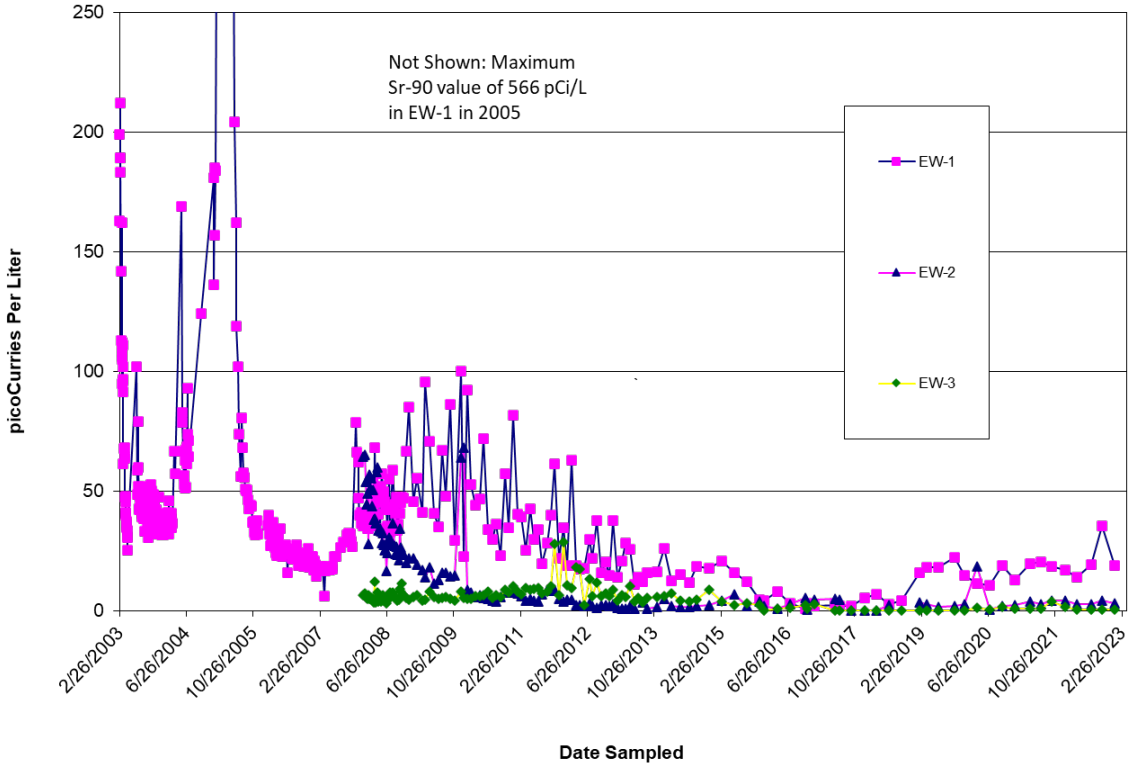


Figure 12-2
Extraction Well Sr-90 Concentrations



OU III Strontium-90 Chemical Holes Pump & Treat System

Table 12-2
Effluent Water Quality
SPDES Equivalency Permit Concentrations January 1 through March 31, 2023

Parameter	Permit Limit	Max. Measured Value	Units	Frequency
Flow	**Monitor**	**NA**	**GPM**	**Continuous**
pH (range)	**5.0 - 8.5**	**NA**	**SU**	**Monthly**
Strontium-90	**8.0**	**NA**	**pCi/L**	**Monthly**
Perfluorooctanoic acid (PFOA)	**6.7**	**NA**	**ng/L**	**Monthly**
Perfluorooctanesulfonate (PFOS)	**2.7**	**NA**	**ng/L**	**Monthly**

NA = Not Applicable. The system was shut down in July 2018.
ND = Not Detected.

In February 2023, a SPDES equivalency permit renewal was issued by the NYSDEC. If the system is restarted, sampling for PFOA and PFOS is required monthly using EPA Method 1633 for the analysis.

Monitoring Activities:

During the first quarter 2023, the highest concentration of Sr-90 recorded was 21.3 pCi/L in monitoring well 097-314. The highest concentration recorded from extraction well sampling was 19.1 pCi/L in EW-1. The Chemical Holes Sr-90 monitoring well network is shown in **Figure 12-3** and the 'Hits Only' first quarter 2023 data are summarized on **Table 12-3.**

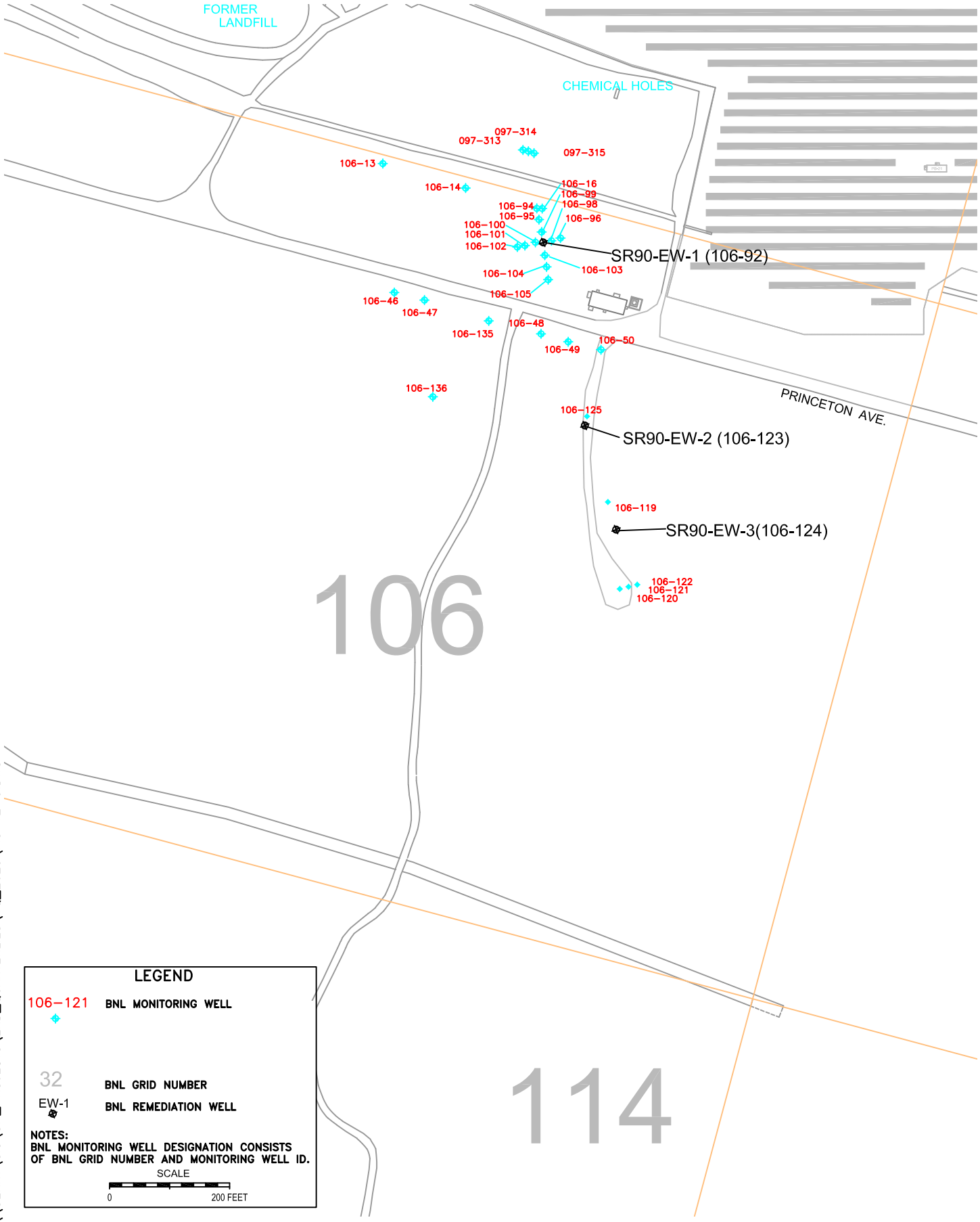
Systems Operations

January through March 2023:

The system was in stand-by mode.

Planned Operational Changes

- Maintain the system in stand-by mode. If significant rebound is identified, the extraction wells may be restarted. During the first quarter, Sr-90 concentrations in extraction well EW-1 and EW-2 were 19.1 pCi/L and 3.31 pCi/L, respectively. Extraction well EW-3 did not detect Sr-90. The maximum Sr-90 concentration in the monitoring wells during the third quarter was 21.3 pCi/L in well 097-314, which is located upgradient of EW-1.



\\OERNT\GIS\GW_PROJECTS\ERD_QUARTERLIES\1Q_2023\FIG 12-3.DWG

ENVIRONMENTAL PROTECTION DIVISION

TITLE:

CHEMICAL HOLES
Sr-90 MONITORING WELL NETWORK

SITEWIDE REMEDIATION SYSTEMS
FIRST QUARTER 2023 OPERATIONS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
JEB	–	07/15/08	–
CHKD:	APPD:	REV.:	NOTES:
LDS	--	05/12/23	–

FIGURE NO.: 12-3

Table 12-3
OU III Strontium-90 Chemical Holes Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 097-313

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	03/07/2023	7.05	0.768	0.719	PCI/L	36.00		

Site ID : 097-314

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	03/08/2023	21.3	0.763	1.27	PCI/L	40.00		

Site ID : 097-315

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	03/07/2023	7.69	0.761	0.739	PCI/L	38.68		

Table 12-4
OU III Strontium-90 Chemical Holes Extraction Well Data
'Hits Only' January through March 2023

Site ID : 106-123 (EW-2)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	01/06/2023	3.31	0.672	0.507	PCI/L	0.00		

Site ID : 106-92 (EW-1)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	01/06/2023	19.1	0.505	0.68	PCI/L	0.00		

Qualifiers :

J = Estimated value.

D = Compound was identified in an analysis at a secondary dilution factor.

N2 = Not usable based on the results that are not distinguishable from background. The value is less than or equal to the sum of the MDA and the uncertainty or RDL.

U = Compound not detected.

Organic Compounds :

B = Compound was found in both the sample And associated laboratory blank.

Inorganic Compounds :

B = Result Is between instrument detection limit And contract required reporting limit.

OU III Former Industrial Park East Pump & Treat System (System Closed)

The Petition for Closure for the OU III Industrial Park East Groundwater Treatment System was submitted to the regulators for review in May 2013. Approval was received in June and July 2013 that the system met its treatment goals was subsequently dismantled. Based on modeling, the remaining contaminants in the downgradient portion of the plume beyond the capture zone of the extraction wells will attenuate to below MCLs in the Upper Glacial and Magothy aquifers before the required 2030 and 2065 cleanup timeframes, respectively.

Decommissioning activities included the abandonment of four groundwater monitoring wells (000-489, 000-493, 000-513, 000-514) and the two groundwater extraction wells (EWI-1 and EWI-2) in September 2013. Final decommissioning of the treatment system will be performed following the completion of remediation of the deep VOC contamination in the Industrial Park.

The building, carbon units, and the two recharge wells are currently being used with the two new extraction wells for remediation of the deep VOC contamination in the Industrial Park.

The post closure monitoring network consists of four wells. In accordance with the recommendation in the *2015 Groundwater Status Report*, VOC monitoring for seven wells was discontinued in the fourth quarter of 2016 since these wells have been below the MCLs for a minimum of four consecutive sampling events. The data from the four active monitoring wells are also evaluated as part of the North Street and Magothy monitoring programs. Monitoring in these wells will continue until MCLs are achieved for a minimum of four consecutive sampling events. The monitoring schedule is described in the BNL Environmental Monitoring Plan (EMP).

OU III North Street Pump & Treat System
(System Closed)

Process: Groundwater extraction and liquid phase granular activated carbon (GAC) treatment, with discharge to injection wells.

Goal: Reach Maximum Contaminant Levels (MCLs) or asymptotic conditions in core monitoring wells within 30 years for the Upper Glacial aquifer and within 65 years for the Magothy aquifer (by 2030 and 2065, respectively).

Start Date: May 2004

Table 14-1
Pumping Rates (gpm)

Extraction Well	NS-1	NS-2
Site ID #	000-471	000-473
Screen Interval (ft bls)	165-205	190-220
Design Flow Rate (GPM)	0	0
January	0	0
February	0	0
March	0	0
Actual (Avg. over Qtr.)	0	0

The system is shut down and approved for closure in March 2020.

OU III North Street Pump & Treat System
(System Closed)

Figure 14-1
Cumulative Mass Removal of VOCs vs. Time

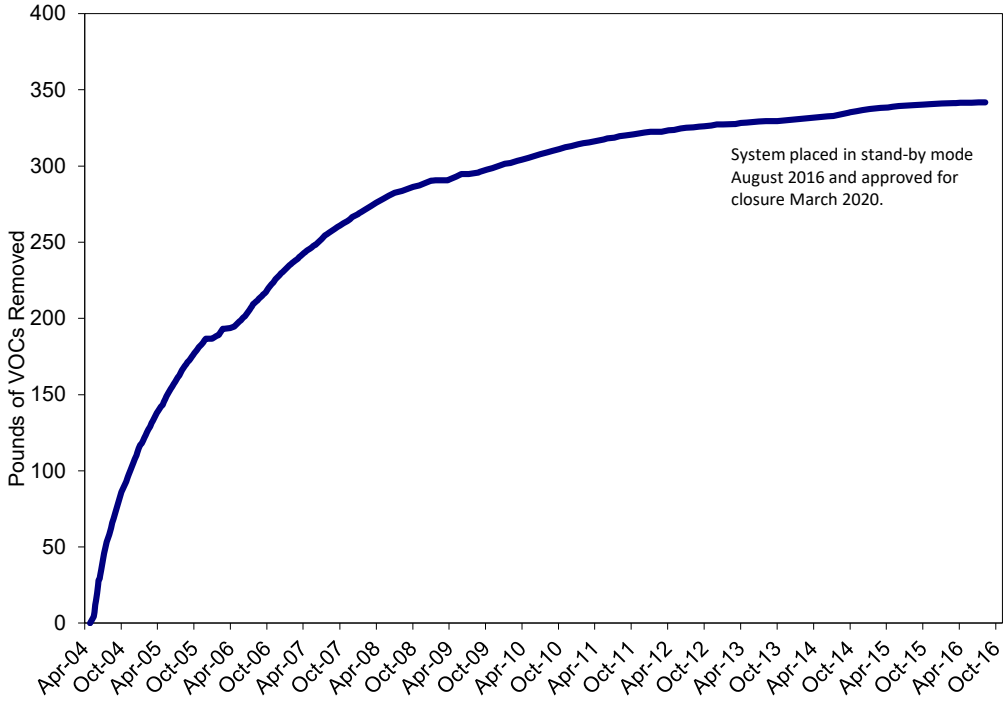
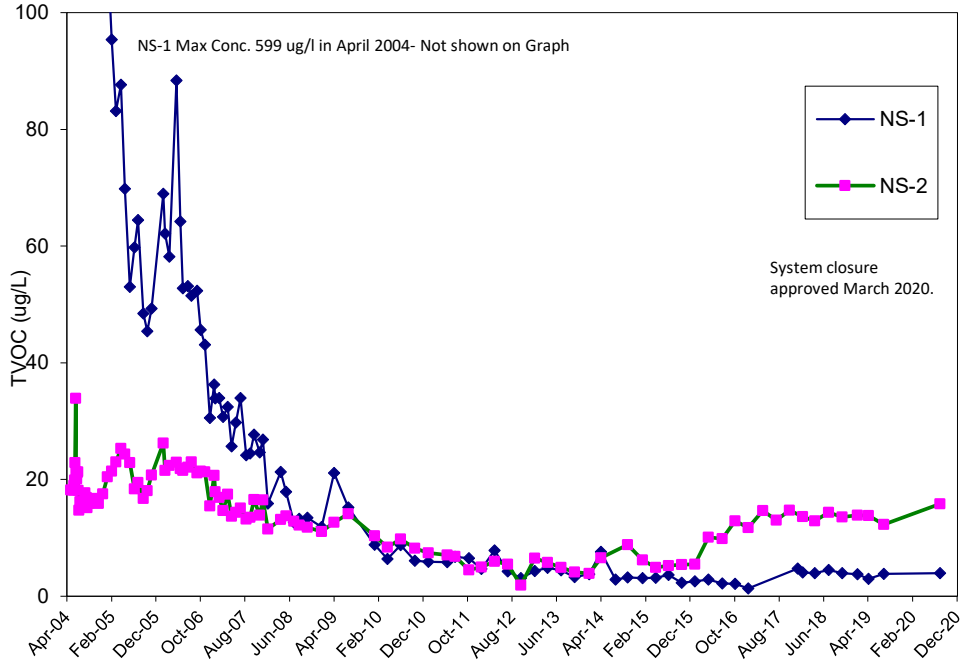


Figure 14-2
Extraction Well TVOC Concentrations vs. Time



OU III North Street Pump & Treat System
(System Closed)

Table 14-2
Effluent Water Quality
SPDES Equivalency Permit Concentrations January 1 through March 31, 2023

Parameter	Permit Limit	Max. Measured Value	Units	Frequency
Flow	**Monitor**	NA [1]	**GPD**	**Continuous**
pH (range)	**5.5 - 8.5**	NA [1]	**SU**	**Monthly**
Carbon Tetrachloride	**5.0**	NA [1]	**µg/L**	**Monthly**
Chloroform	**5.0**	NA [1]	**µg/L**	**Monthly**
1,1-Dichloroethane	**5.0**	NA [1]	**µg/L**	**Monthly**
1,2-Dichloroethane	**0.6**	NA [1]	**µg/L**	**Monthly**
1,1-Dichloroethylene	**5.0**	NA [1]	**µg/L**	**Monthly**
Tetrachloroethylene	**5.0**	NA [1]	**µg/L**	**Monthly**
Toluene	**5.0**	NA [1]	**µg/L**	**Monthly**
1,1,1-Trichloroethane	**5.0**	NA [1]	**µg/L**	**Monthly**
Trichloroethylene	**5.0**	NA [1]	**µg/L**	**Monthly**
Ethylene Dibromide (EDB)	**0.03**	NA [1]	**µg/L**	**Monthly**

[1] The system is closed. NA = Not Applicable.

Monitoring Activities:

Monitoring was discontinued following approval of system closure. The remaining North Street monitoring wells are shown on **Figure 14-3**.

System Operations

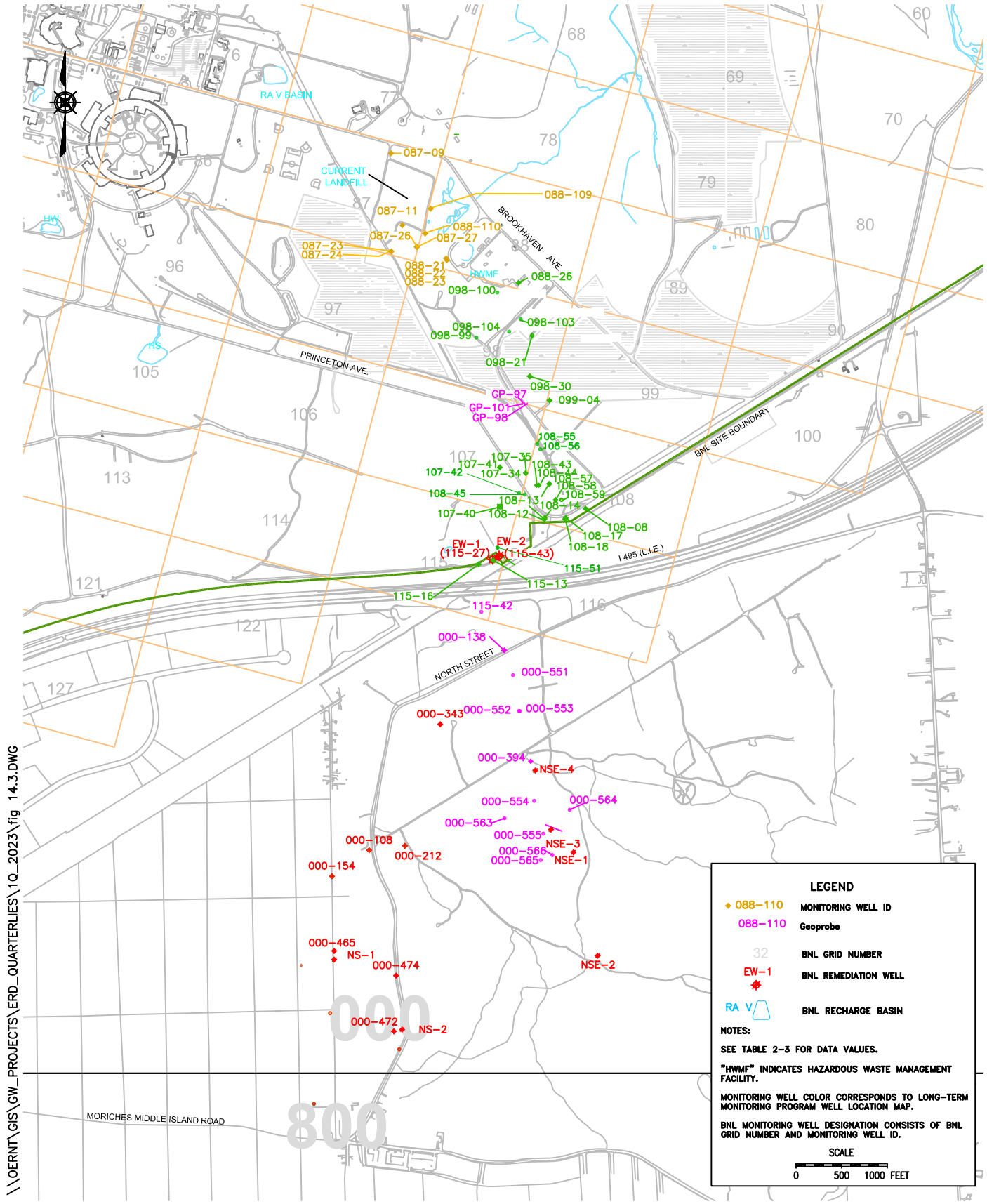
January through March 2023:

The system remained closed.

OU III North Street Pump & Treat System
(System Closed)

Planned Operational Changes

- NS-1 and NS-2 will remain shut down until the PFAS and 1,4 dioxane characterization is completed. After the completion of this characterization, a determination of the potential future use of these wells and treatment system infrastructure will be determined. The seven remaining monitoring wells are sampled annually in the fourth quarter.



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ENVIRONMENTAL PROTECTION DIVISION

TITLE:
OUIII NORTH STREET/NORTH STREET EAST
OU I SOUTH BOUNDARY
MONITORING WELL NETWORK

SITEWIDE REMEDIATION SYSTEMS
FIRST QUARTER 2023 OPERATIONS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
JEB	–	08/08/11	NA
CHKD:	APPD:	REV.:	NOTES:
LDS	––	07/07/23	–

FIGURE NO.: 14-3

OU III North Street East EDB Pump & Treat System

Process: Groundwater extraction and liquid phase granular activated carbon (GAC) treatment, with discharge to injection wells.

Goal: Reach Maximum Contaminant Levels (MCLs) in core monitoring wells within 30 years for the Upper Glacial aquifer (by 2030).

Start Date: June 2004

Table 15-1
Pumping Rates (gpm)

Extraction Well	NSE-1	NSE-2	NSE-EDB-EW-3	NSE-EDB-EW-4
Site ID #	000-487	000-488	000-561	000-562
Screen Interval (ft bls)	161-191	152-182	195-215	182-202
Desired Flow Rate (GPM)	0	0	100	100
January	0*	0*	94	101
February	0*	0*	108	105
March	0*	0*	98	100
Actual (Avg. over Qtr.)	0*	0*	100	102

*As documented in the 2019 Groundwater Status Report, the original VOC system (NSE-1 and NSE-2) is administratively closed for its originally designed purpose. NSE-EDB-EW-3 and NSE-EDB-EW-4 began operation in July 2020.

OU III North Street East EDB Pump & Treat System

Figure 15-1
Cumulative Mass Removal of VOCs vs. Time

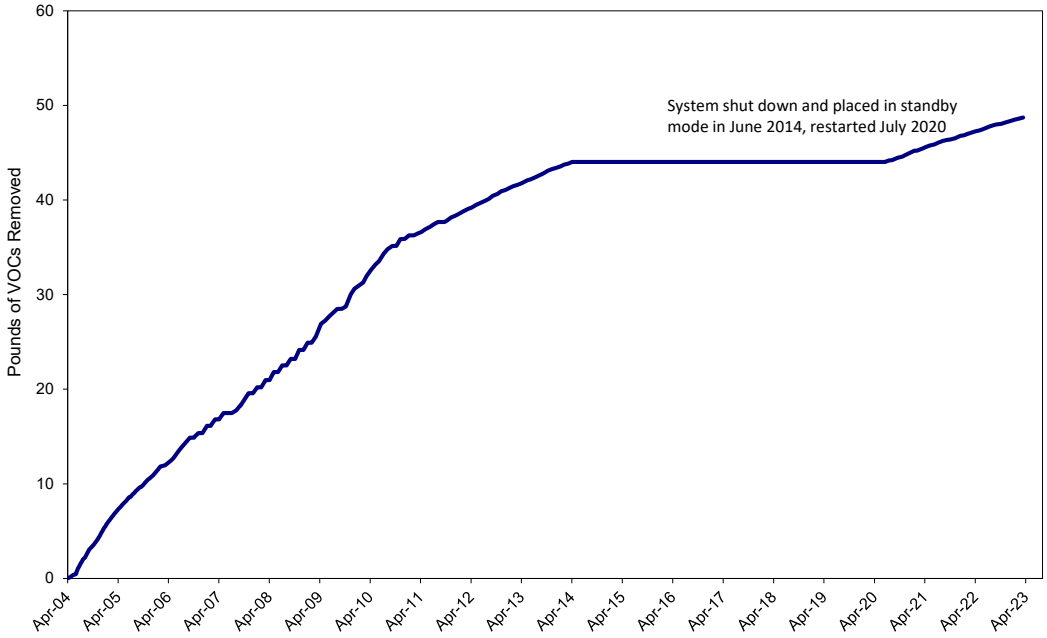
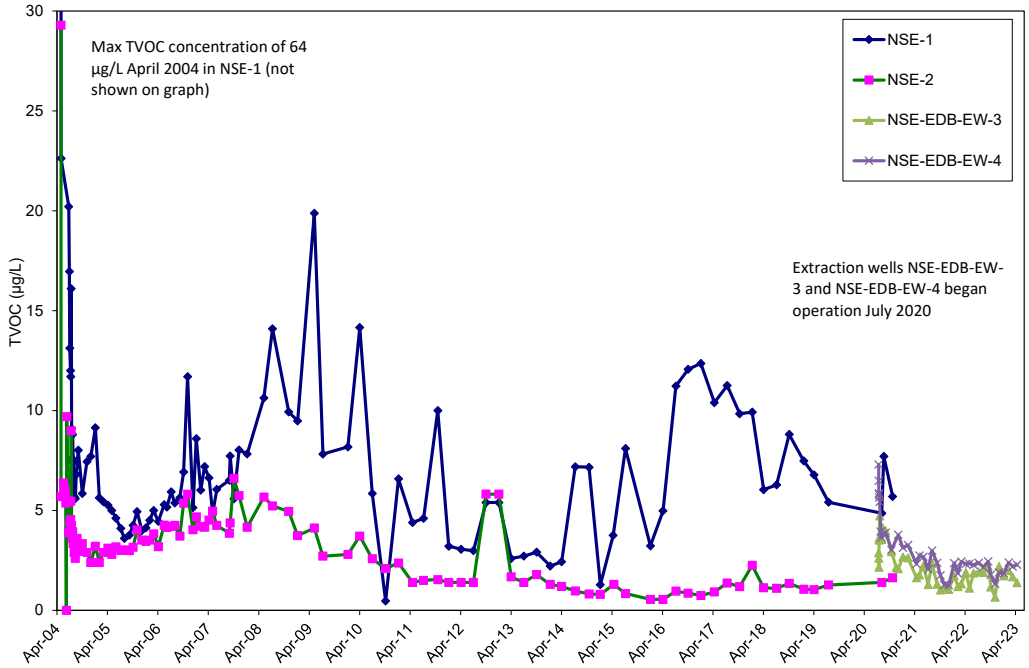


Figure 15-2
Extraction Well TVOC Concentrations vs. Time



OU III North Street East EDB Pump & Treat System

Figure 15-3
Extraction Well EDB Concentrations vs. Time

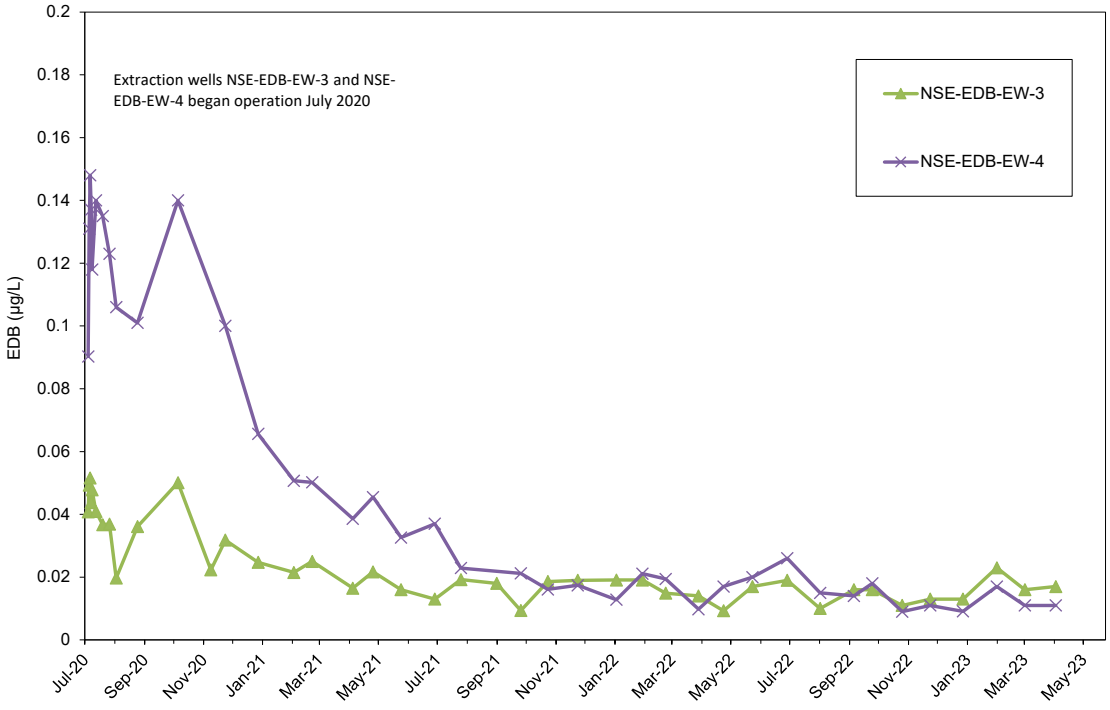


Table 15-2
Effluent Water Quality
SPDES Equivalency Permit Concentrations January 1 through March 31, 2023

Parameter	Permit Limit	Max. Measured Value	Units	Frequency
Flow	Monitor	279,903	GPD	Continuous
pH (range)	5.5 - 8.5	5.7-6.6*	SU	Monthly
Carbon Tetrachloride	5.0	<0.5	µg/L	Monthly
Chloroform	5.0	1.2	µg/L	Monthly
1,1-Dichloroethane	5.0	<0.5	µg/L	Monthly
1,2-Dichloroethane	0.6	<0.5	µg/L	Monthly
1,1-Dichloroethylene	5.0	<0.5	µg/L	Monthly
Tetrachloroethylene	5.0	<0.5	µg/L	Monthly

Toluene	**5.0**	**<0.5**	**µg/L**	**Monthly**
1,1,1-Trichloroethane	**5.0**	**<0.5**	**µg/L**	**Monthly**
Trichloroethylene	**5.0**	**0.21J**	**µg/L**	**Monthly**
Ethylene Dibromide (EDB)	**0.03**	**<0.011**	**µg/L**	**Monthly**

* Minimum to maximum value for pH during this operational period.
J = Estimated value.

Monitoring Activities:

The first quarter 2023 monitoring well analytical results reported the concentration of EDB (0.073 µg/L and 0.067 µg/L) above the MCL of 0.05 µg/L in two monitoring wells, 000-394 and 000-554, respectively. The 'Hits Only' analytical results are summarized in **Table 15-3**. The OU III North Street EDB monitoring well network is shown on **Figure 15-4**.

System Operations

January 2023:

Extraction wells NSE-EDB-EW-3 and NSE-EDB-EW-4 operated normally for the month. The system treated approximately 9 million gallons of water.

February 2023:

Extraction wells NSE-EDB-EW-3 and NSE-EDB-EW-4 were operational. The system treated approximately 9 million gallons of water.

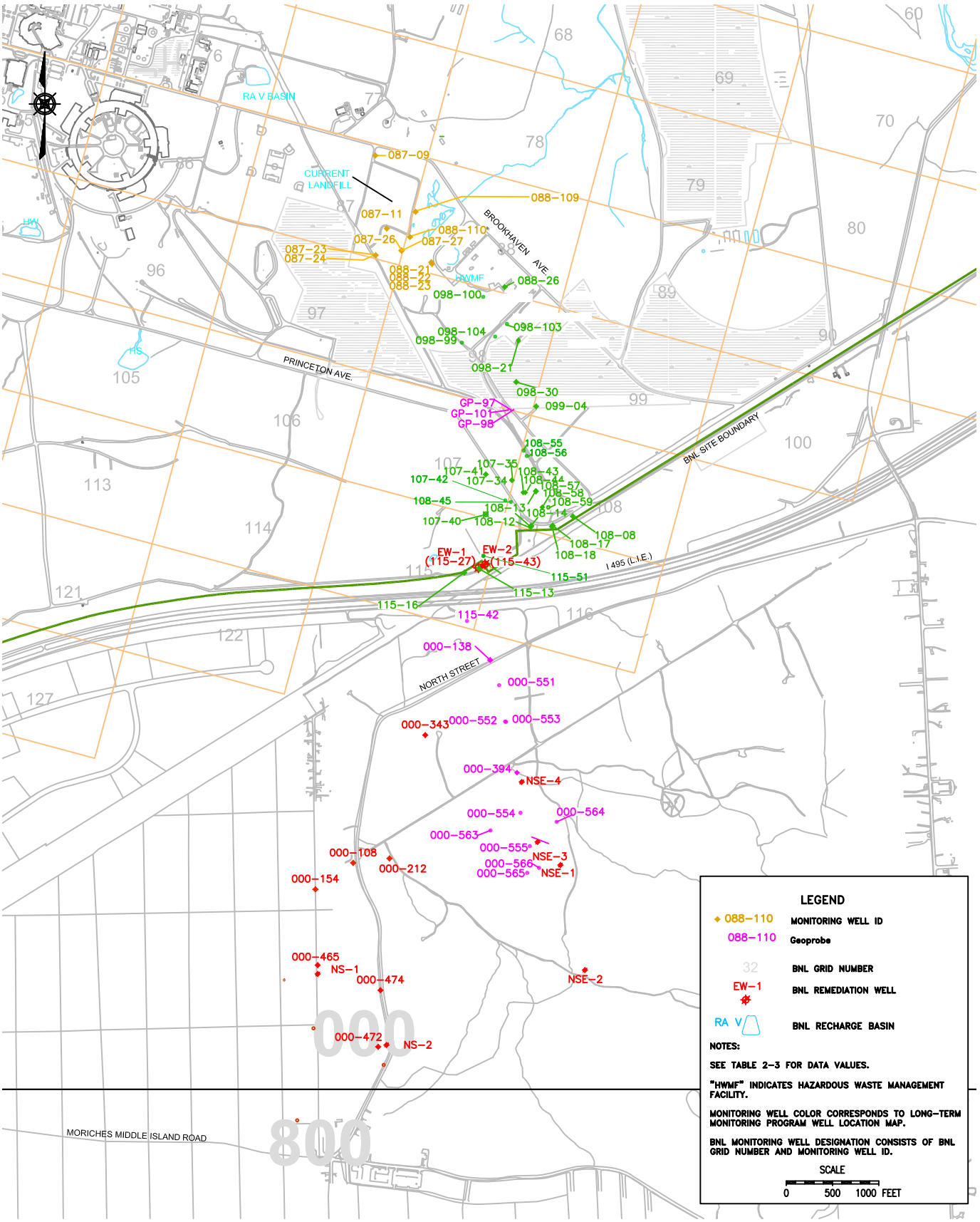
March 2023:

Extraction wells NSE-EDB-EW-3 and NSE-EDB-EW-4 were operational. The system treated approximately 9 million gallons of water.

The system treated approximately 27 million gallons of water during the first quarter of 2023. The concentration of EDB was non-detect in the treatment system effluent. The treatment system 'Hits Only' data, including extraction wells, combined influent, and effluent is summarized in **Table 15-4** through **Table 15-6**.

Planned Operational Changes

- Continue full time operation of the NSE EDB Treatment System and reduce the sampling frequency of extraction wells NSE-EDB-EW-3 and NSE-EDB-EW-4 from monthly to quarterly.



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ENVIRONMENTAL PROTECTION DIVISION

TITLE:
OUIII NORTH STREET/NORTH STREET EAST
OU I SOUTH BOUNDARY
MONITORING WELL NETWORK

SITEWIDE REMEDIATION SYSTEMS
FIRST QUARTER 2023 OPERATIONS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
JEB	–	08/08/11	NA
CHKD:	APPD:	REV.:	NOTES:
LDS	––	07/07/23	–

FIGURE NO.: 15-4

Table 15-3
OU III North Street East Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 000-394

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
EDB	03/09/2023	0.073	0.011	--	UG/L	178.00		

Site ID : 000-552

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
EDB	03/08/2023	0.034	0.011	--	UG/L	155.00		

Site ID : 000-553

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
EDB	03/08/2023	0.014	0.011	--	UG/L	175.00		

Site ID : 000-554

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
EDB	03/09/2023	0.067	0.01	--	UG/L	195.00		

Site ID : 000-565

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
EDB	03/09/2023	0.014	0.01	--	UG/L	210.00		

Table 15-4
OU III North Street East Extraction Well Data
'Hits Only' January through March 2023

Site ID : 000-561 (NSE-EDB-3)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/05/2023	1.73	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/05/2023	0.3	0.5	--	UG/L	0.00	J	
Chloroform	01/05/2023	1	0.5	--	UG/L	0.00		
EDB	01/05/2023	0.013	0.011	--	UG/L	0.00		
Trichloroethylene	01/05/2023	0.43	0.5	--	UG/L	0.00	J	
8260 TVOC	02/09/2023	1.99	--	--	UG/L	0.00		
1,1,1-Trichloroethane	02/09/2023	0.28	0.5	--	UG/L	0.00	J	
Chloroform	02/09/2023	1	0.5	--	UG/L	0.00		
EDB	02/09/2023	0.023	0.011	--	UG/L	0.00		
Trichloroethylene	02/09/2023	0.71	0.5	--	UG/L	0.00		
8260 TVOC	03/10/2023	1.68	--	--	UG/L	0.00		
1,1,1-Trichloroethane	03/10/2023	0.3	0.5	--	UG/L	0.00	J	
Chloroform	03/10/2023	1.1	0.5	--	UG/L	0.00		
EDB	03/10/2023	0.016	0.011	--	UG/L	0.00		
Trichloroethylene	03/10/2023	0.28	0.5	--	UG/L	0.00	J	

Site ID : 000-562 (NSE-EDB-4)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/05/2023	1.85	--	--	UG/L	0.00		
Chloroform	01/05/2023	0.91	0.5	--	UG/L	0.00		
EDB	01/05/2023	0.0091	0.011	--	UG/L	0.00	J	
Tetrachloroethylene	01/05/2023	0.72	0.5	--	UG/L	0.00		
Trichloroethylene	01/05/2023	0.22	0.5	--	UG/L	0.00	J	
8260 TVOC	02/09/2023	2.4	--	--	UG/L	0.00		
Chloroform	02/09/2023	0.87	0.5	--	UG/L	0.00		
EDB	02/09/2023	0.017	0.011	--	UG/L	0.00		
Methyl tert-butyl ether	02/09/2023	0.18	0.5	--	UG/L	0.00	J	
Tetrachloroethylene	02/09/2023	0.8	0.5	--	UG/L	0.00		
Trichloroethylene	02/09/2023	0.55	0.5	--	UG/L	0.00		
8260 TVOC	03/10/2023	2.19	--	--	UG/L	0.00		
Chloroform	03/10/2023	0.92	0.5	--	UG/L	0.00		
EDB	03/10/2023	0.011	0.011	--	UG/L	0.00		
Methyl tert-butyl ether	03/10/2023	0.19	0.5	--	UG/L	0.00	J	
Tetrachloroethylene	03/10/2023	0.79	0.5	--	UG/L	0.00		

Table 15-4
OU III North Street East Extraction Well Data
'Hits Only' January through March 2023

Site ID : 000-562 (NSE-EDB-4)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Trichloroethylene	03/10/2023	0.29	0.5	--	UG/L	0.00	J	

Table 15-5
OU III North Street East Influent Data
'Hits Only' January through March 2023

Site ID : 000-441 (Combined Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/05/2023	1.67	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/05/2023	0.2	0.5	--	UG/L	0.00	J	
Chloroform	01/05/2023	0.99	0.5	--	UG/L	0.00		
EDB	01/05/2023	0.012	0.011	--	UG/L	0.00		
Tetrachloroethylene	01/05/2023	0.25	0.5	--	UG/L	0.00	J	
Trichloroethylene	01/05/2023	0.23	0.5	--	UG/L	0.00	J	
8260 TVOC	02/09/2023	2.08	--	--	UG/L	0.00		
Chloroform	02/09/2023	1	0.5	--	UG/L	0.00		
EDB	02/09/2023	0.018	0.011	--	UG/L	0.00		
Tetrachloroethylene	02/09/2023	0.49	0.5	--	UG/L	0.00	J	
Trichloroethylene	02/09/2023	0.59	0.5	--	UG/L	0.00		
8260 TVOC	03/10/2023	1.42	--	--	UG/L	0.00		
Chloroform	03/10/2023	0.95	0.5	--	UG/L	0.00		
Tetrachloroethylene	03/10/2023	0.47	0.5	--	UG/L	0.00	J	

Table 15-6
OU III North Street East Effluent Data
'Hits Only' January through March 2023

Site ID : 000-444 (System Effluent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/05/2023	1.2	--	--	UG/L	0.00		
Chloroform	01/05/2023	1.2	0.5	--	UG/L	0.00		
EDB	01/05/2023	0.011	0.011	--	UG/L	0.00	U	
EDB	01/05/2023	0.5	0.5	--	UG/L	0.00	U	
8260 TVOC	02/09/2023	1.48	--	--	UG/L	0.00		
Chloroform	02/09/2023	1.1	0.5	--	UG/L	0.00		
EDB	02/09/2023	0.011	0.011	--	UG/L	0.00	U	
EDB	02/09/2023	0.5	0.5	--	UG/L	0.00	U	
Methyl tert-butyl ether	02/09/2023	0.17	0.5	--	UG/L	0.00	J	
Trichloroethylene	02/09/2023	0.21	0.5	--	UG/L	0.00	J	
8260 TVOC	03/10/2023	0	--	--	UG/L	0.00		
EDB	03/10/2023	0.01	0.01	--	UG/L	0.00	U	
EDB	03/10/2023	0.5	0.5	--	UG/L	0.00	U	

Qualifiers :

J = Estimated value.

D = Compound was identified in an analysis at a secondary dilution factor.

N2 = Not usable based on the results that are not distinguishable from background. The value is less than or equal to the sum of the MDA and the uncertainty or RDL.

U = Compound not detected.

Organic Compounds :

B = Compound was found in both the sample And associated laboratory blank.

Inorganic Compounds :

B = Result Is between instrument detection limit And contract required reporting limit.

OU III LIPA/Airport Pump & Treat System

Process: Groundwater extraction and liquid phase granular activated carbon (GAC) treatment, with discharge to injection wells.

Goal: Reach Maximum Contaminant Levels (MCLs) in core monitoring wells within 30 years for the Upper Glacial aquifer (by 2030), and within 65 years for the Magothy aquifer (by 2065).

Start Date: August 2004

Table 16-1
OU III LIPA/Airport Treatment System
Pumping Rates (gpm)

Extraction Well	EW-1L	EW-2L	EW-3L	EW-4L*	RTW-1A	RTW-2A	RTW-3A	RTW-4A*	RTW-5A	RW-6A
Site ID	000-453	000-455	000-457	000-461	800-109	800-110	800-111	800-112	800-113	800-132
Screen Interval (ft bls)	217-237	224-244	216-236	304-324	188-208	188-208	210-230	268-288	220-240	165-185
Desired Flow Rate (GPM)	0**	0**	0**	0**	100	0**	0**	100	0***	200
January	0	0	0	0	90	0	0	145	0	136
February	0	0	0	0	106	0	0	154	0	158
March	0	0	0	0	91	0	0	130	0	137
Actual (Avg. over QTR.)	**0**	**0**	**0**	**0**	**96**	**0**	**0**	**143**	**0**	**144**

* EW-4L and RTW-4A are Magothy aquifer extraction wells.
** EW-1L and EW-3L were placed in standby mode in 2007, EW-2L in 2010 and EW-4L in 2017. RTW-2A and RTW-3A were placed in standby in March 2020.
*** RTW-5A was placed in standby mode in September 2016.

OU III LIPA/Airport Pump & Treat System

Figure 16-1
Cumulative Mass Removal of VOCs vs. Time

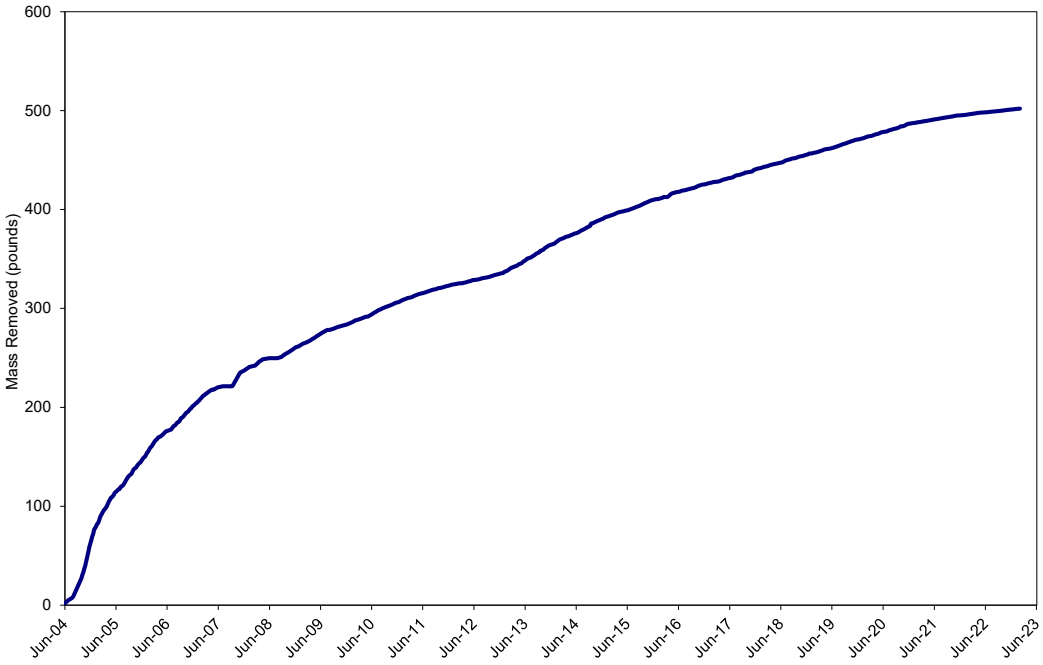
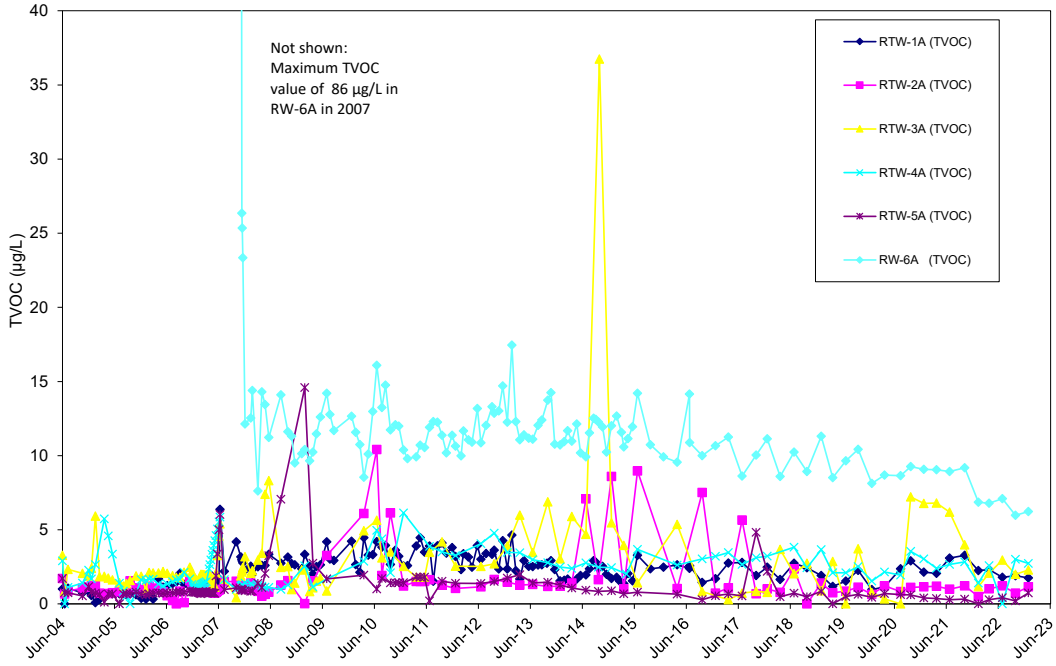


Figure 16-2
Airport Extraction Well TVOC Concentrations vs. Time



OU III LIPA/Airport Pump & Treat System

Figure 16-3
LIPA Extraction Well TVOC Concentrations vs. Time

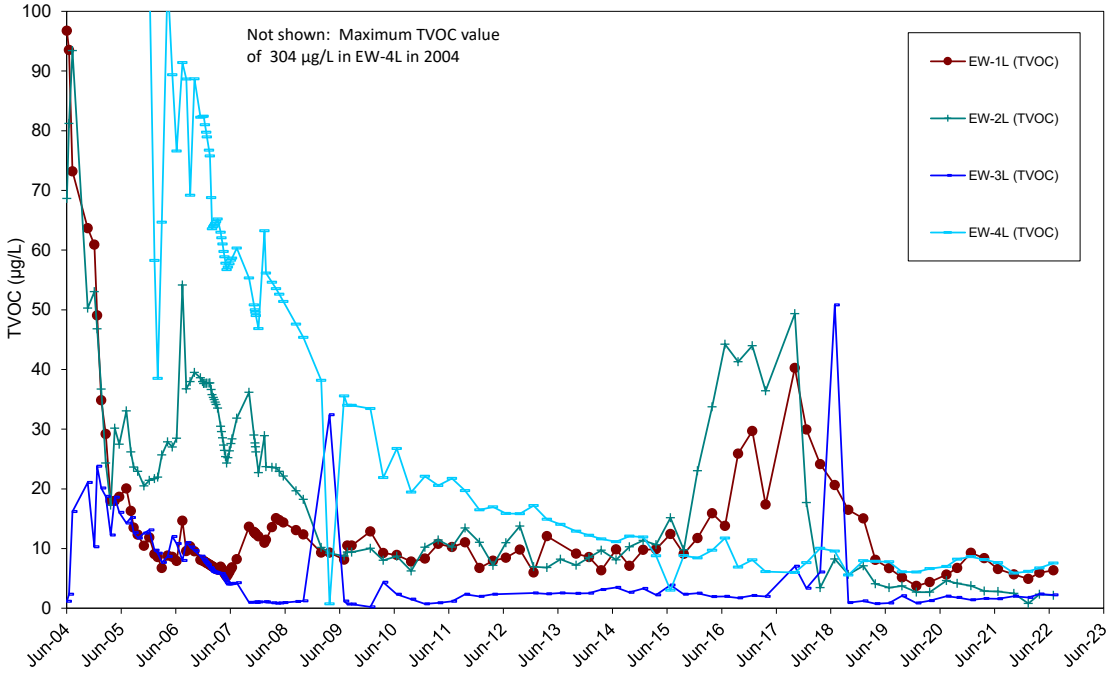


Table 16-2
Effluent Water Quality
SPDES Equivalency Permit Concentrations - January 1 through March 31, 2023

Parameter	Permit Limit	Max. Measured Value	Units	Frequency
Flow	**Monitor**	**543,717 [1]**	**GPD**	**Continuous**
pH (range)	**5.5 – 7.5**	**5.6-5.8***	**SU**	**Monthly**
Carbon Tetrachloride	**5.0**	**<0.50**	**µg/L**	**Monthly**
Chloroform	**7.0**	**0.97**	**µg/L**	**Monthly**
1,1-Dichloroethane	**5.0**	**<0.50**	**µg/L**	**Monthly**
1,1-Dichloroethylene	**5.0**	**<0.50**	**µg/L**	**Monthly**
Methylene Chloride	**5.0**	**<0.50**	**µg/L**	**Monthly**
1,1,1-Trichloroethane	**5.0**	**<0.50**	**µg/L**	**Monthly**
Trichloroethylene	**10.0**	**<0.50**	**µg/L**	**Monthly**

[1] The average flow for the operational period at the influent flow meter.
* Minimum to maximum value for pH during this operational period.

OU III LIPA/Airport Pump & Treat System

Monitoring Activities:

The first quarter 2023 monitoring well analytical results reported the highest concentration of TVOCs in 800-96 and 800-94, at 57.9 µg/L and 56.56 µg/L, respectively. The highest concentrations of individual VOCs in these wells were carbon tetrachloride and trichloroethylene, reported at 25 µg/L and 26 µg/L in 800-96, and 27 µg/L and 23 µg/L in 800-94. These monitoring wells are located downgradient of the LIPA system extraction wells. The OU III LIPA/Airport monitoring well network is shown on **Figure 16-4.** The 'Hits Only' first quarter 2023 data are summarized in **Table 16-3.**

System Operations

January 2023:

Extraction wells RTW-1A, RTW-4A and RW-6A ran normally for the month. The four LIPA extraction wells and Airport extraction wells RTW-2A, RTW-3A, and RTW-5A remained in standby mode. The system treated approximately 17 million gallons of water.

February 2023:

Extraction wells RTW-1A, RTW-4A and RW-6A ran normally for the month. The four LIPA extraction wells and Airport extraction wells RTW-2A, RTW-3A, and RTW-5A remained in standby mode. The system treated approximately 17 million gallons of water.

March 2023:

Extraction wells RTW-1A, RTW-4A and RW-6A ran normally for the month. The four LIPA extraction wells and Airport extraction wells RTW-2A, RTW-3A, and RTW-5A remained in standby mode. The system treated approximately 16 million gallons of water.

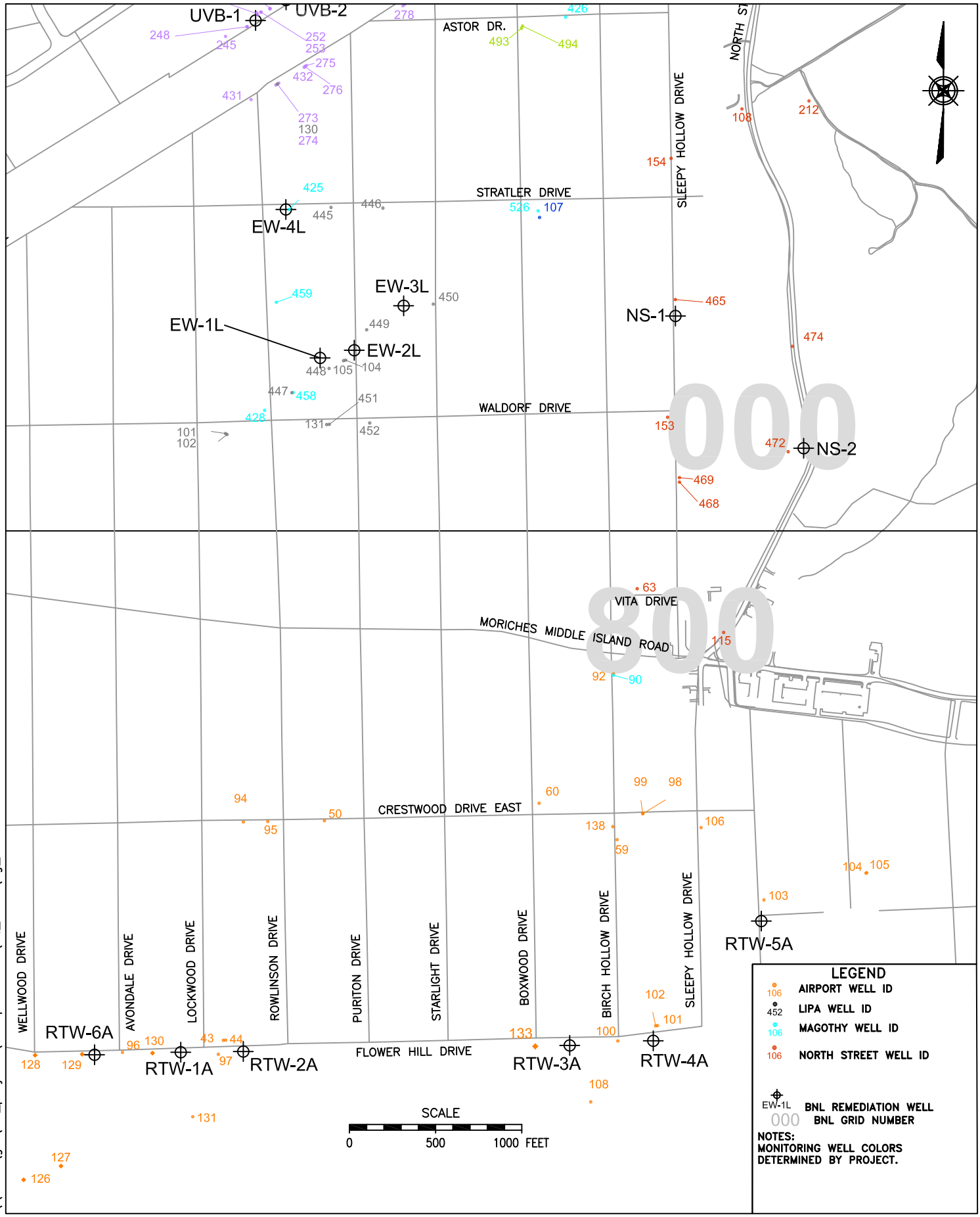
The system treated approximately 50 million gallons of water during the first quarter of 2023. The treatment system 'Hits Only' data, including individual extraction wells, combined influent, and effluent is summarized in **Table 16-4** through **Table 16-6**.

Planned Operational Changes

- Continue full time operation of Airport extraction wells RTW-1A, RTW-4A and RW-6A. Maintain wells RTW-2A, RTW-3A and RTW-5A in standby mode. If TVOC concentrations above the capture goal of 10 µg/L are observed in any of the extraction wells, or the monitoring wells adjacent to extraction wells that are not operating, the well(s) will be put back into full-time operation. During the first

quarter of 2023, extraction wells RTW-2A, RTW-3A, RTW-5A, and adjacent monitoring wells did not exceed TVOC concentrations of 10 µg/L.

- Maintain LIPA wells EW-1L, EW-2L, EW-3L and EW-4L in standby mode. All of the monitoring wells for the LIPA system were below MCL's during 2022 for individual VOCs. During the first quarter of 2023, none of the LIPA extraction wells or adjacent monitoring wells detected TVOCs above the capture goal of 50 µg/L. Based on the low VOC concentrations for the past several years in the LIPA monitoring and extraction wells, submit a petition for closure of the LIPA system to the regulators.
- Decrease the sampling frequency for the 17 LIPA monitoring wells from quarterly to semiannual.



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ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III AIRPORT/LIPA

SITEWIDE REMEDIATION SYSTEMS
FIRST QUARTER 2023 OPERATIONS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
JEB	–	09/26/05	–
CHKD:	APPD:	REV.:	NOTES:
LDS	––	07/07/23	–

FIGURE NO.: 16–4

Table 16-3
OU III LIPA/Airport Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 000-101

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/24/2023	0.91	--	--	UG/L	195.00		
Chloroform	02/24/2023	0.91	0.5	--	UG/L	195.00		

Site ID : 000-104

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/27/2023	0.72	--	--	UG/L	205.00		
1,1,1-Trichloroethane	02/27/2023	0.28	0.5	--	UG/L	205.00	J	
1,1-Dichloroethylene	02/27/2023	0.3	0.5	--	UG/L	205.00	J	
1,2-Dichloroethane	02/27/2023	0.14	0.5	--	UG/L	205.00	J	

Site ID : 000-131

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/27/2023	2.16	--	--	UG/L	227.50		
1,1,1-Trichloroethane	02/27/2023	0.32	0.5	--	UG/L	227.50	J	
1,1-Dichloroethylene	02/27/2023	0.64	0.5	--	UG/L	227.50		
Chloroform	02/27/2023	1.2	0.5	--	UG/L	227.50		

Site ID : 000-425

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/03/2023	3.35	--	--	UG/L	315.00		
1,1,1-Trichloroethane	03/03/2023	0.36	0.5	--	UG/L	315.00	J	
1,1-Dichloroethylene	03/03/2023	0.18	0.5	--	UG/L	315.00	J	
Carbon tetrachloride	03/03/2023	0.3	0.5	--	UG/L	315.00	J	
Chloroform	03/03/2023	0.44	0.5	--	UG/L	315.00	J	
Tetrachloroethylene	03/03/2023	1.7	0.5	--	UG/L	315.00		
Trichloroethylene	03/03/2023	0.37	0.5	--	UG/L	315.00	J	

Site ID : 000-446

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/02/2023	0.61	--	--	UG/L	212.00		
Chloroform	03/02/2023	0.61	0.5	--	UG/L	212.00		

Site ID : 000-447

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/03/2023	1.02	--	--	UG/L	219.00		
1,1-Dichloroethylene	03/03/2023	0.3	0.5	--	UG/L	219.00	J	
Chloroform	03/03/2023	0.72	0.5	--	UG/L	219.00		

Site ID : 000-448

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/27/2023	3.33	--	--	UG/L	212.00		

Table 16-3
OU III LIPA/Airport Monitoring Well Data
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Site ID : 000-448

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1,1,1-Trichloroethane	02/27/2023	1.2	0.5	--	UG/L	212.00		
1,1-Dichloroethylene	02/27/2023	1.3	0.5	--	UG/L	212.00		
1,2-Dichloroethane	02/27/2023	0.22	0.5	--	UG/L	212.00	J	
Carbon tetrachloride	02/27/2023	0.19	0.5	--	UG/L	212.00	J	
Trichloroethylene	02/27/2023	0.42	0.5	--	UG/L	212.00	J	

Site ID : 000-449

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/02/2023	2.23	--	--	UG/L	193.00		
1,1,1-Trichloroethane	03/02/2023	0.9	0.5	--	UG/L	193.00		
1,1-Dichloroethylene	03/02/2023	0.91	0.5	--	UG/L	193.00		
1,2-Dichloroethane	03/02/2023	0.24	0.5	--	UG/L	193.00	J	
Trichloroethylene	03/02/2023	0.18	0.5	--	UG/L	193.00	J	

Site ID : 000-450

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/03/2023	1.5	--	--	UG/L	208.00		
Chloroform	03/03/2023	1.5	0.5	--	UG/L	208.00		

Site ID : 000-451

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/27/2023	2.68	--	--	UG/L	193.00		
1,1,1-Trichloroethane	02/27/2023	0.31	0.5	--	UG/L	193.00	J	
Chloroform	02/27/2023	1.8	0.5	--	UG/L	193.00		
Trichloroethylene	02/27/2023	0.57	0.5	--	UG/L	193.00		

Site ID : 000-452

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/02/2023	1.69	--	--	UG/L	217.00		
1,1,1-Trichloroethane	03/02/2023	0.31	0.5	--	UG/L	217.00	J	
Chloroform	03/02/2023	0.95	0.5	--	UG/L	217.00		
Trichloroethylene	03/02/2023	0.43	0.5	--	UG/L	217.00	J	

Site ID : 800-101

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/11/2023	39.62	--	--	UG/L	280.00		
1,1,1-Trichloroethane	01/11/2023	2.5	0.5	--	UG/L	280.00		
1,1,2,2-Tetrachloroethane	01/11/2023	4.5	0.5	--	UG/L	280.00		

Table 16-3
OU III LIPA/Airport Monitoring Well Data
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Site ID : 800-101

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1,1-Dichloroethane	01/11/2023	0.26	0.5	--	UG/L	280.00	J	
1,1-Dichloroethylene	01/11/2023	3	0.5	--	UG/L	280.00		
1,2-Dichloroethane	01/11/2023	0.99	0.5	--	UG/L	280.00		
Carbon tetrachloride	01/11/2023	4.1	0.5	--	UG/L	280.00		
Chloroform	01/11/2023	9	0.5	--	UG/L	280.00		
Trichloroethylene	01/11/2023	15	0.5	--	UG/L	280.00		
Trichlorofluoromethane	01/11/2023	0.27	0.5	--	UG/L	280.00	J	

Site ID : 800-105

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/11/2023	2.4	--	--	UG/L	233.00		
Chloroform	01/11/2023	2.4	0.5	--	UG/L	233.00		

Site ID : 800-108

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/16/2023	0.57	--	--	UG/L	216.00		
Chloroform	03/16/2023	0.57	0.5	--	UG/L	216.00		

Site ID : 800-130

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/06/2023	14.7	--	--	UG/L	185.00		
Carbon tetrachloride	01/06/2023	3.7	0.5	--	UG/L	185.00		
Trichloroethylene	01/06/2023	11	0.5	--	UG/L	185.00		

Site ID : 800-131

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/06/2023	0.61	--	--	UG/L	194.00		
Carbon tetrachloride	01/06/2023	0.61	0.5	--	UG/L	194.00		
8260 TVOC	03/15/2023	0.49	--	--	UG/L	194.00		
Carbon tetrachloride	03/15/2023	0.49	0.5	--	UG/L	194.00	J	

Site ID : 800-133

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/11/2023	0.92	--	--	UG/L	225.00		
1,1,1-Trichloroethane	01/11/2023	0.35	0.5	--	UG/L	225.00	J	
Carbon tetrachloride	01/11/2023	0.57	0.5	--	UG/L	225.00		
8260 TVOC	03/16/2023	2.32	--	--	UG/L	225.00		
1,1,1-Trichloroethane	03/16/2023	0.3	0.5	--	UG/L	225.00	J	

Table 16-3
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Site ID : 800-133

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Carbon tetrachloride	03/16/2023	0.62	0.5	--	UG/L	225.00		
Chloroform	03/16/2023	1.4	0.5	--	UG/L	225.00		

Site ID : 800-138

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	0.58	--	--	UG/L	250.00		
Trichloroethylene	01/09/2023	0.58	0.5	--	UG/L	250.00		

Site ID : 800-43

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/13/2023	1.7	--	--	UG/L	157.00		
Chloroform	01/13/2023	1.7	0.5	--	UG/L	157.00		

Site ID : 800-44

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/13/2023	4.87	--	--	UG/L	212.00		
Carbon tetrachloride	01/13/2023	4.4	0.5	--	UG/L	212.00		
Chloroform	01/13/2023	0.47	0.5	--	UG/L	212.00	J	

Site ID : 800-50

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/16/2023	1.03	--	--	UG/L	205.00		
Carbon tetrachloride	01/16/2023	0.22	0.5	--	UG/L	205.00	J	
Chloroform	01/16/2023	0.81	0.5	--	UG/L	205.00		

Site ID : 800-60

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/16/2023	0.48	--	--	UG/L	210.00		
Chloroform	03/16/2023	0.48	0.5	--	UG/L	210.00	J	

Site ID : 800-63

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/16/2023	0.85	--	--	UG/L	206.00		
Chloroform	01/16/2023	0.35	0.5	--	UG/L	206.00	J	
Trichloroethylene	01/16/2023	0.5	0.5	--	UG/L	206.00		

Site ID : 800-90

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	3.3	--	--	UG/L	255.00		
Carbon tetrachloride	01/09/2023	0.7	0.5	--	UG/L	255.00		

Table 16-3
OU III LIPA/Airport Monitoring Well Data
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Site ID : 800-90

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Chloroform	01/09/2023	1.6	0.5	--	UG/L	255.00		
Trichloroethylene	01/09/2023	1	0.5	--	UG/L	255.00		

Site ID : 800-92

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	1.79	--	--	UG/L	200.00		
Carbon tetrachloride	01/09/2023	0.39	0.5	--	UG/L	200.00	J	
Trichloroethylene	01/09/2023	1.4	0.5	--	UG/L	200.00		

Site ID : 800-94

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/11/2023	56.56	--	--	UG/L	185.00		
1,1,1-Trichloroethane	01/11/2023	1.9	0.5	--	UG/L	185.00		
1,1-Dichloroethylene	01/11/2023	3.5	0.5	--	UG/L	185.00		
1,2-Dichloroethane	01/11/2023	0.46	0.5	--	UG/L	185.00	J	
Carbon tetrachloride	01/11/2023	27	0.5	--	UG/L	185.00		
cis-1,2-Dichloroethylene	01/11/2023	0.7	0.5	--	UG/L	185.00		
Trichloroethylene	01/11/2023	23	0.5	--	UG/L	185.00		

Site ID : 800-95

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/11/2023	15.45	--	--	UG/L	187.00		
1,1,1-Trichloroethane	01/11/2023	0.45	0.5	--	UG/L	187.00	J	
1,1-Dichloroethylene	01/11/2023	1	0.5	--	UG/L	187.00		
Carbon tetrachloride	01/11/2023	8.6	0.5	--	UG/L	187.00		
Trichloroethylene	01/11/2023	5.4	0.5	--	UG/L	187.00		

Site ID : 800-96

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/06/2023	57.9	--	--	UG/L	189.00		
1,1,1-Trichloroethane	01/06/2023	1.8	0.5	--	UG/L	189.00		
1,1-Dichloroethylene	01/06/2023	3.5	0.5	--	UG/L	189.00		
1,2-Dichloroethane	01/06/2023	0.4	0.5	--	UG/L	189.00	J	
Carbon tetrachloride	01/06/2023	25	0.5	--	UG/L	189.00		
cis-1,2-Dichloroethylene	01/06/2023	1.2	0.5	--	UG/L	189.00		
Trichloroethylene	01/06/2023	26	0.5	--	UG/L	189.00		

Site ID : 800-97

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/06/2023	3.7	--	--	UG/L	199.00		

Table 16-3
OU III LIPA/Airport Monitoring Well Data
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Site ID : 800-97

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Carbon tetrachloride	01/06/2023	3.7	0.5	--	UG/L	199.00		

Site ID : 800-99

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/09/2023	7.6	--	--	UG/L	248.00		
1,1,1-Trichloroethane	01/09/2023	0.97	0.5	--	UG/L	248.00		
1,1-Dichloroethylene	01/09/2023	1.1	0.5	--	UG/L	248.00		
1,2-Dichloroethane	01/09/2023	0.19	0.5	--	UG/L	248.00	J	
Carbon tetrachloride	01/09/2023	0.2	0.5	--	UG/L	248.00	J	
Chloroform	01/09/2023	4.1	0.5	--	UG/L	248.00		
Dichlorodifluoromethane	01/09/2023	0.18	0.5	--	UG/L	248.00	J	
Trichloroethylene	01/09/2023	0.86	0.5	--	UG/L	248.00		

Table 16-4
OU III LIPA/Airport Extraction Well Data
'Hits Only' January through March 2023

Site ID : 000-453 (EW-1L)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/12/2023	6.47	--	--	UG/L	227.00		
1,1-Dichloroethane	01/12/2023	0.38	0.5	--	UG/L	227.00	J	
1,1-Dichloroethylene	01/12/2023	1.7	0.5	--	UG/L	227.00		
1,2-Dichloroethane	01/12/2023	0.34	0.5	--	UG/L	227.00	J	
Chloroform	01/12/2023	0.39	0.5	--	UG/L	227.00	J	
Toluene	01/12/2023	3	0.5	--	UG/L	227.00		
Trichloroethylene	01/12/2023	0.66	0.5	--	UG/L	227.00		

Site ID : 000-455 (EW-2L)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/12/2023	1.62	--	--	UG/L	234.00		
1,1,1-Trichloroethane	01/12/2023	0.21	0.5	--	UG/L	234.00	J	
1,1-Dichloroethylene	01/12/2023	0.22	0.5	--	UG/L	234.00	J	
Chloroform	01/12/2023	0.79	0.5	--	UG/L	234.00		
Trichloroethylene	01/12/2023	0.4	0.5	--	UG/L	234.00	J	

Site ID : 000-457 (EW-3L)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/12/2023	4.73	--	--	UG/L	226.00		
Chloroform	01/12/2023	0.93	0.5	--	UG/L	226.00		
Toluene	01/12/2023	3.6	0.5	--	UG/L	226.00		
Trichloroethylene	01/12/2023	0.2	0.5	--	UG/L	226.00	J	

Site ID : 000-461 (EW-4L)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/12/2023	5.36	--	--	UG/L	314.00		
Carbon tetrachloride	01/12/2023	0.54	0.5	--	UG/L	314.00		
Chloroform	01/12/2023	0.62	0.5	--	UG/L	314.00		
Tetrachloroethylene	01/12/2023	3.5	0.5	--	UG/L	314.00		
Trichloroethylene	01/12/2023	0.7	0.5	--	UG/L	314.00		

Site ID : 800-109 (RTW-1A)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/12/2023	1.75	--	--	UG/L	198.00		
Carbon tetrachloride	01/12/2023	0.74	0.5	--	UG/L	198.00		
Chloroform	01/12/2023	0.64	0.5	--	UG/L	198.00		
Trichloroethylene	01/12/2023	0.37	0.5	--	UG/L	198.00	J	

Table 16-4
OU III LIPA/Airport Extraction Well Data
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Site ID : 800-110 (RTW-2A)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/12/2023	1.15	--	--	UG/L	198.00		
Carbon tetrachloride	01/12/2023	0.56	0.5	--	UG/L	198.00		
Chloroform	01/12/2023	0.59	0.5	--	UG/L	198.00		

Site ID : 800-111 (RTW-3A)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/12/2023	2.29	--	--	UG/L	220.00		
1,1,1-Trichloroethane	01/12/2023	0.34	0.5	--	UG/L	220.00	J	
1,1-Dichloroethylene	01/12/2023	0.21	0.5	--	UG/L	220.00	J	
Carbon tetrachloride	01/12/2023	0.55	0.5	--	UG/L	220.00		
Chloroform	01/12/2023	0.59	0.5	--	UG/L	220.00		
Trichloroethylene	01/12/2023	0.6	0.5	--	UG/L	220.00		

Site ID : 800-112 (RTW-4A)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/12/2023	2.73	--	--	UG/L	278.00		
1,1,1-Trichloroethane	01/12/2023	0.19	0.5	--	UG/L	278.00	J	
1,1,2,2-Tetrachloroethane	01/12/2023	0.32	0.5	--	UG/L	278.00	J	
Carbon tetrachloride	01/12/2023	0.27	0.5	--	UG/L	278.00	J	
Chloroform	01/12/2023	0.85	0.5	--	UG/L	278.00		
Trichloroethylene	01/12/2023	1.1	0.5	--	UG/L	278.00		

Site ID : 800-113 (RTW-5A)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/12/2023	0.74	--	--	UG/L	230.00		
Chloroform	01/12/2023	0.74	0.5	--	UG/L	230.00		

Site ID : 800-132 (RTW-6A)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/12/2023	6.23	--	--	UG/L	175.00		
1,1,1-Trichloroethane	01/12/2023	0.17	0.5	--	UG/L	175.00	J	
1,1-Dichloroethylene	01/12/2023	0.2	0.5	--	UG/L	175.00	J	
Carbon tetrachloride	01/12/2023	1.6	0.5	--	UG/L	175.00		
Chloroform	01/12/2023	0.76	0.5	--	UG/L	175.00		
Trichloroethylene	01/12/2023	3.5	0.5	--	UG/L	175.00		

Table 16-5
OU III LIPA/Airport Influent Data
'Hits Only' January through March 2023

Site ID : 800-122 (Combined Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/12/2023	2.88	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/12/2023	0.21	0.5	--	UG/L	0.00	J	
1,1-Dichloroethylene	01/12/2023	0.17	0.5	--	UG/L	0.00	J	
Carbon tetrachloride	01/12/2023	0.62	0.5	--	UG/L	0.00		
Chloroform	01/12/2023	0.68	0.5	--	UG/L	0.00		
Trichloroethylene	01/12/2023	1.2	0.5	--	UG/L	0.00		
8260 TVOC	02/03/2023	3.67	--	--	UG/L	0.00		
Aluminum	02/03/2023	65	19	--	UG/L	0.00		
Barium	02/03/2023	42	0.95	--	UG/L	0.00		
Calcium	02/03/2023	12000	100	--	UG/L	0.00		
Carbon tetrachloride	02/03/2023	0.91	0.5	--	UG/L	0.00		
Chloroform	02/03/2023	0.76	0.5	--	UG/L	0.00		
Chromium	02/03/2023	0.91	1.8	--	UG/L	0.00	B	
Copper	02/03/2023	12	1.8	--	UG/L	0.00		
Iron	02/03/2023	2200	10	--	UG/L	0.00		
Lead	02/03/2023	2.4	1	--	UG/L	0.00		
Magnesium	02/03/2023	4300	25	--	UG/L	0.00		
Manganese	02/03/2023	36	1.8	--	UG/L	0.00		
Nickel	02/03/2023	0.87	2	--	UG/L	0.00	B	
Potassium	02/03/2023	1400	76	--	UG/L	0.00		
Sodium	02/03/2023	19000	150	--	UG/L	0.00		
Strontium	02/03/2023	69	10	--	UG/L	0.00		
Trichloroethylene	02/03/2023	2	0.5	--	UG/L	0.00		
Zinc	02/03/2023	81	8	--	UG/L	0.00		
8260 TVOC	03/03/2023	3.36	--	--	UG/L	0.00		
Carbon tetrachloride	03/03/2023	0.94	0.5	--	UG/L	0.00		
Chloroform	03/03/2023	0.72	0.5	--	UG/L	0.00		
Trichloroethylene	03/03/2023	1.7	0.5	--	UG/L	0.00		

Table 16-6
OU III LIPA/Airport Effluent Data
'Hits Only' January through March 2023

Site ID : 800-124 (System Effluent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/12/2023	0.97	--	--	UG/L	0.00		
Chloroform	01/12/2023	0.97	0.5	--	UG/L	0.00		
8260 TVOC	02/03/2023	0.62	--	--	UG/L	0.00		
Chloroform	02/03/2023	0.62	0.5	--	UG/L	0.00		
8260 TVOC	03/03/2023	0	--	--	UG/L	0.00		

Qualifiers :

J = Estimated value.

D = Compound was identified in an analysis at a secondary dilution factor.

N2 = Not usable based on the results that are not distinguishable from background. The value is less than or equal to the sum of the MDA and the uncertainty or RDL.

U = Compound not detected.

Organic Compounds :

B = Compound was found in both the sample And associated laboratory blank.

Inorganic Compounds :

B = Result Is between instrument detection limit And contract required reporting limit.

OU III Strontium-90 BGRR/WCF Pump & Treat System

Process: Groundwater extraction with liquid phase granular activated carbon (GAC) treatment for volatile organic compounds (VOCs), followed by clinoptilolite zeolite resin treatment for the removal of strontium-90 (Sr-90), with discharge to dry wells.

Goal: Reach Maximum Contaminant Levels (MCLs) in core monitoring wells within 70 years for the Upper Glacial aquifer (by 2070).

Start Date: June 2005

Table 17-1
Pumping Rates (gpm)

Extraction Well	SR-1	SR-2	SR-3*	SR-4*	SR-5*	SR-6*	SR-7*	SR-8*	SR-9*
Site Id #	065-368	065-369	075-676	075-677	075-678	065-403	075-702	075-703	075-704
Screen Interval (ft bls)	33-53	33.5-53.5	51-71	35-75	35-75	85-105	82-102	77-97	67-87
Desired Flow Rate (gpm)	**5**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**10**
January (Avg gpm)	6.9	5.4	0	0	0	0	0	0	0
February "	5.4	5.4	0	0	0	0	0	0	10
March "	5.4	5.4	0	0	0	0	0	0	0
Actual (Avg. over Qtr.)	**5.9**	**5.4**	**0**	**0**	**0**	**0**	**0**	**0**	**3.3**

*Wells SR-4 and SR-5 were placed in standby mode in September 2016. Well SR-6 was placed in standby mode in October 2017. Wells SR-3 and SR-7 were placed in standby mode October 2018. Well SR-8 was placed in pulsed pumping mode in October 2018. Well SR-3 was put back in operation in February 2019. Well SR-3 and SR-8 were put in standby mode May 2022. Well SR-9 was placed in pulsed pumping mode May 2022.

OU III Strontium-90 BGRR/WCF Pump & Treat System

Figure 17-1
Cumulative Millicuries Removed

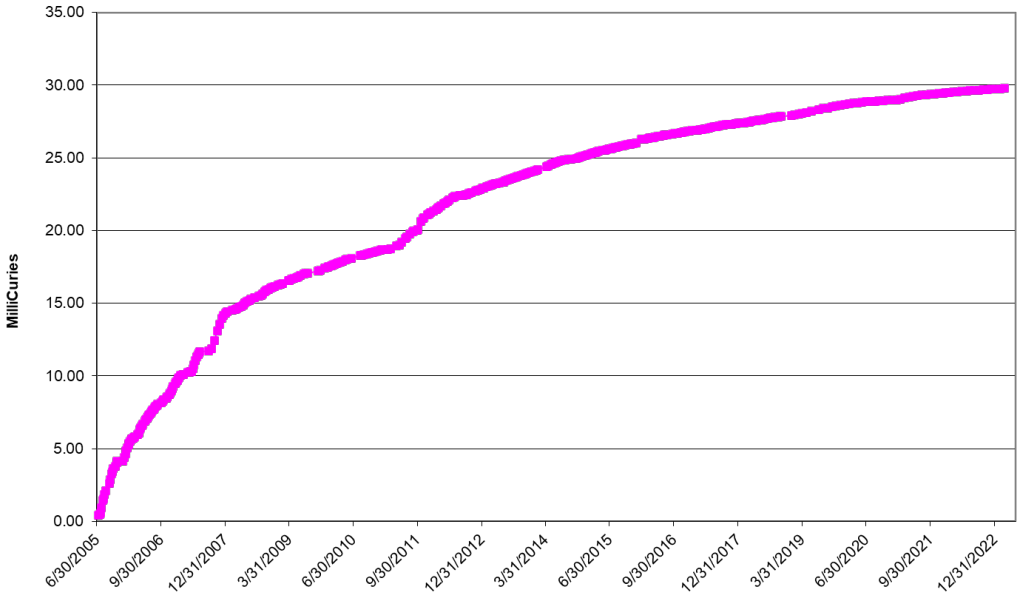
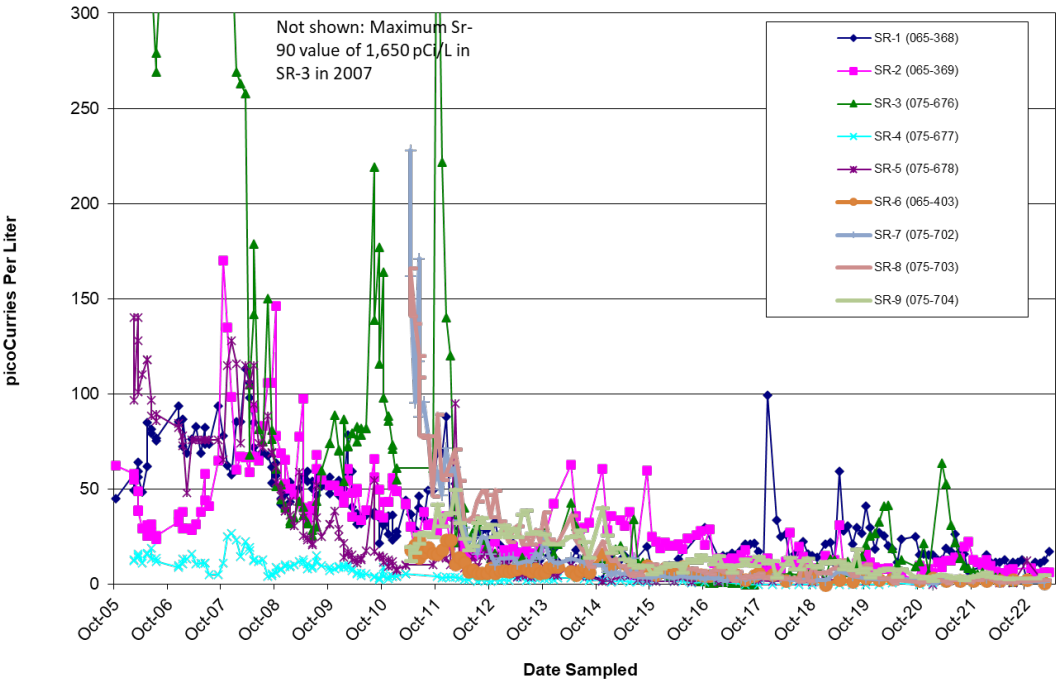


Figure 17-2
Extraction Well Sr-90 Concentrations vs. Time



OU III Strontium-90 BGRR/WCF Pump & Treat System

Table 17-2
SPDES Equivalency Permit Concentrations January 1 through March 31, 2023

Parameter	Permit Limit	Max. Measured Value	Units	Frequency
Flow	**75**	**21**	**GPM**	**Continuous**
pH (range)	**5.5 – 8.5**	**6.4– 6.5***	**SU**	**Weekly**
Strontium-90	**8.0**	**1.8**	**PCi/L**	**Monthly[1]**
Chloroform	**7.0**	**0.53J**	**µg/L**	**Monthly[1]**
1,1-Dichloroethane	**5.0**	**<0.5**	**µg/L**	**Monthly[1]**
Ethylbenzene	**5.0**	**<0.5**	**µg/L**	**Monthly[1]**
Methyl Chloride	**5.0**	**<0.5**	**µg/L**	**Monthly[1]**
Methylene Chloride	**5.0**	**<0.5**	**µg/L**	**Monthly[1]**
Toluene	**5.0**	**<0.5**	**µg/L**	**Monthly[1]**
1,2,3-Trichlorobenzene	**5.0**	**<0.5**	**µg/L**	**Monthly[1]**
1,1,1-Trichloroethane	**5.0**	**0.5**	**µg/L**	**Monthly[1]**
1,2,4-Trimethylbenzene	**5.0**	**<0.5**	**µg/L**	**Monthly[1]**
Xylene, total	**10.0**	**<0.5**	**µg/L**	**Monthly[1]**

[1] The minimum measurement frequency shall be monthly following a period of 24 consecutive weekly sampling events showing no exceedances of the stated discharge limitations.
* Minimum to maximum value for pH during this operational period.
J = Estimated value.

Monitoring Activities:

The first quarter 2023 monitoring results reported the highest concentration of Sr-90 in monitoring well 075-701, immediately south of the BGRR and upgradient of extraction well SR-3, at 3.41 pCi/L. The OU III BGRR/WCF monitoring well network is shown on **Figure 17-3**. The 'Hits Only' first quarter 2023 data are summarized in **Table 17-3**.

OU III Strontium-90 BGRR/WCF Pump & Treat System

System Operations

January 2023:

The system ran normally for the month with extraction wells SR-1, SR-2 operating. Extraction well SR-9 was off for pulsed-pumping. The system treated approximately 0.5 million gallons of water.

February 2022:

The system ran normally for the month with extraction wells SR-1, SR-2 and SR-9 operating. The system treated approximately 0.9 million gallons of water.

March 2023:

The system ran normally for the month with extraction wells SR-1, SR-2 operating. Extraction well SR-9 was off for pulsed-pumping. The system treated approximately 0.5 million gallons of water.

Extraction wells SR-3 through SR-8 were off in stand-by mode for this quarter. The system treated approximately 1.9 million gallons of water during the first quarter of 2023.

As identified in the 2022 Groundwater Status Report, in May 2023 extraction well SR-9 was placed in standby mode. The treatment system 'Hits Only' data, including individual extraction wells, influent, and effluent is summarized in **Table 17-4** through **Table 17-6**.

Planned Operational Changes

- Continue operating wells SR-1 and SR-2 in full time mode, and maintain wells SR-3, SR-4, SR-5, SR-6, SR-7, SR-8, and SR-9 in standby mode. If significant rebound occurs, place these extraction wells back in full time operation. Sr-90 concentrations in SR-4, SR-5, SR-6, and SR-7 have remained below the MCL since May 2016. Sr-90 concentrations in SR-8 have remained below the MCL since November 2019. The last Sr-90 detection above the MCL for SR-3 or 075-701 was in SR-3 in September 2021.
- Install a temporary vertical profile well to a depth of 140 feet below ground surface adjacent to well 085-402 to monitor for the high Sr-90 concentration segment of the PFS plume migrating beneath Building 725.

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ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III BGRR/WCF

SITEWIDE REMEDIATION SYSTEMS FIRST QUARTER 2023 OPERATIONS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
JEB	–	03/15/13	
CHKD:	APPD:	REV.:	NOTES:
LDS	--	07/07/23	
FIGURE NO.:		17–3	

Table 17-3
OU III Strontium-90 BGRR/WCF Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 075-664

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	02/10/2023	1.15	0.777	0.537	PCI/L	68.00		N2

Site ID : 075-701

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	01/05/2023	3.25	0.781	0.694	PCI/L	62.63		
Strontium-90	02/10/2023	3.41	0.763	0.684	PCI/L	62.25		
Strontium-90	03/03/2023	2.45	0.787	0.626	PCI/L	64.00		

Site ID : 075-87

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/15/2023	28.27	--	--	NG/L	107.50		
Perfluorobutanesulfonate (PFBS)	02/15/2023	1.6	1.5	--	NG/L	107.50		
Perfluorobutyric acid (PFBA)	02/15/2023	3.6	6.1	--	NG/L	107.50	J	
Perfluorodecanoic acid (PFDA)	02/15/2023	0.87	1.5	--	NG/L	107.50	J	
Perfluoroheptanoic acid (PFHpA)	02/15/2023	0.63	1.5	--	NG/L	107.50	J	
Perfluorohexanesulfonate (PFHxS)	02/15/2023	2.5	1.5	--	NG/L	107.50		
Perfluorohexanoic acid (PFHxA)	02/15/2023	1.4	1.5	--	NG/L	107.50	J	
Perfluorononanoic acid (PFNA)	02/15/2023	3.4	1.5	--	NG/L	107.50		
Perfluorooctanesulfonate (PFOS)	02/15/2023	9	1.5	--	NG/L	107.50		
Perfluorooctanoic acid (PFOA)	02/15/2023	1.8	1.5	--	NG/L	107.50		
Perfluoropentanesulfonate (PFPeS)	02/15/2023	0.27	1.5	--	NG/L	107.50	J	
Perfluoropentanoic acid (PFPeA)	02/15/2023	1.2	3	--	NG/L	107.50	J	
Perfluoroundecanoic acid (PFUdA)	02/15/2023	2	1.5	--	NG/L	107.50		
solids-tot	02/15/2023	20	4	--	MG/L	107.50		

Table 17-4
OU III Strontium-90 BGRR/WCF Extraction Well Data
'Hits Only' January through March 2023

Site ID : 065-368 (SR-1)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	01/11/2023	11.1	0.727	1.09	PCI/L	0.00		
Strontium-90	02/10/2023	12.5	0.784	1.08	PCI/L	0.00		

Site ID : 065-369 (SR-2)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	01/11/2023	5.53	0.741	0.883	PCI/L	0.00		
Strontium-90	02/10/2023	6.22	0.788	0.793	PCI/L	0.00		

Site ID : 075-676 (SR-3)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	02/15/2023	1.83	0.774	0.607	PCI/L	0.00		

Site ID : 075-677 (SR-4)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	02/15/2023	1.99	0.765	0.604	PCI/L	0.00		

Site ID : 075-702 (SR-7)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	02/15/2023	1.29	0.782	0.55	PCI/L	0.00		N2

Site ID : 075-703 (SR-8)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	02/15/2023	2.32	0.786	0.631	PCI/L	0.00		

Site ID : 075-704 (SR-9)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	02/10/2023	4.85	0.774	0.783	PCI/L	0.00		

Table 17-5
OU III Strontium-90 BGRR/WCF Influent Data
'Hits Only' January through March 2023

Site ID : 066-216 (Combined Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/11/2023	0.89	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/11/2023	0.45	0.5	--	UG/L	0.00	J	
Chloroform	01/11/2023	0.44	0.5	--	UG/L	0.00	J	
Strontium-90	01/11/2023	6.91	0.741	0.972	PCI/L	0.00		
8260 TVOC	02/10/2023	0.94	--	--	UG/L	0.00		
1,1,1-Trichloroethane	02/10/2023	0.44	0.5	--	UG/L	0.00	J	
Chloroform	02/10/2023	0.5	0.5	--	UG/L	0.00	J	
Strontium-90	02/10/2023	6.81	0.781	0.824	PCI/L	0.00		
8260 TVOC	03/13/2023	1.26	--	--	UG/L	0.00		
1,1,1-Trichloroethane	03/13/2023	0.35	0.5	--	UG/L	0.00	J	
Chloroform	03/13/2023	0.47	0.5	--	UG/L	0.00	J	
Tetrachloroethylene	03/13/2023	0.44	0.5	--	UG/L	0.00	J	

Table 17-6
OU III Strontium-90 BGRR/WCF Effluent Data
'Hits Only' January through March 2023

Site ID : 066-219 (System Effluent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/11/2023	0.85	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/11/2023	0.47	0.5	--	UG/L	0.00	J	
Chloroform	01/11/2023	0.38	0.5	--	UG/L	0.00	J	
Strontium-90	01/11/2023	1.79	0.693	0.543	PCI/L	0.00		
8260 TVOC	02/10/2023	1.03	--	--	UG/L	0.00		
1,1,1-Trichloroethane	02/10/2023	0.5	0.5	--	UG/L	0.00	J	
Chloroform	02/10/2023	0.53	0.5	--	UG/L	0.00	J	
Strontium-90	02/10/2023	-0.717	0.759	0.334	PCI/L	0.00	U	
8260 TVOC	03/13/2023	0.82	--	--	UG/L	0.00		
1,1,1-Trichloroethane	03/13/2023	0.35	0.5	--	UG/L	0.00	J	
Chloroform	03/13/2023	0.47	0.5	--	UG/L	0.00	J	
Strontium-90	03/13/2023	0.68	0.767	0.486	PCI/L	0.00	U	UJ(-)B

Qualifiers :

J = Estimated value.

D = Compound was identified in an analysis at a secondary dilution factor.

N2 = Not usable based on the results that are not distinguishable from background. The value is less than or equal to the sum of the MDA and the uncertainty or RDL.

U = Compound not detected.

Organic Compounds :

B = Compound was found in both the sample And associated laboratory blank.

Inorganic Compounds :

B = Result Is between instrument detection limit And contract required reporting limit.

g-2 Source Area & Tritium Plume Monitoring Summary

Background:

In November 1999, tritium was detected in the groundwater near the g-2 experiment at concentrations above the 20,000 pCi/L maximum contaminant level (MCL). Sodium-22 was also detected in the groundwater, but at concentrations well below the 400 pCi/L MCL. An investigation into the source of the contamination revealed that the tritium and sodium-22 originated from activated soil shielding located adjacent to the g-2 target building. Rainwater was able to infiltrate the activated soils and carry tritium and sodium-22 into the groundwater. To prevent additional rainwater infiltration into the activated soil shielding, a concrete cap was constructed over the soil shielding in December 1999.

Following the concurrence of the NYSDEC, a Record of Decision (ROD) was signed by the U.S. DOE and U.S. EPA in early 2007. This ROD requires continued routine inspection and maintenance of the impermeable cap, groundwater monitoring of the source area to verify the continued effectiveness of the storm water controls and monitoring the tritium plume until it attenuates to less than the 20,000 pCi/L MCL.

Monitoring Activities:

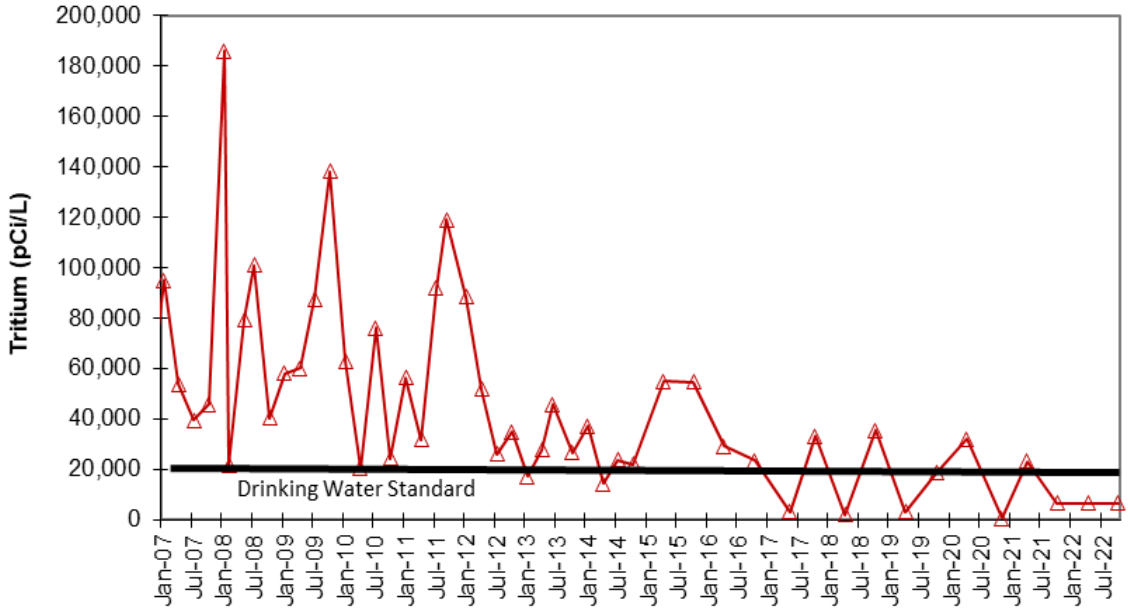
Surveillance of groundwater quality is accomplished using six wells located immediately downgradient of the source area, and 10 wells located further downgradient, southeast of AGS facility Building 912. The monitoring frequency for the six wells located immediately downgradient of the source area wells is semi-annual, with samples collected during the 2nd and 4th quarters of the year. The 10 wells located downgradient of Building 912 are sampled during the 4th quarter.

Source Area Monitoring Results:

No samples were collected during the 1st Quarter. During the 4th Quarter 2022 sampling period, the maximum tritium concentration in source area monitoring wells was 6,480 pCi/L in well 054-124 (Figure 18-1). The overall reductions in tritium concentrations observed in source area monitoring wells indicate that the cap is effectively preventing rainwater infiltration into the activated soil shielding and the amount of residual tritium that is available to be flushed out of the deep vadose zone is decreasing.

g-2 Source Area & Tritium Plume Monitoring Summary

Figure 18-1
Maximum Tritium Concentrations – January 2007 through October 2022



Maximum tritium concentrations observed from January 2007 through October 2022 in groundwater downgradient of the g-2 source area.

Recommendations:

- Continue to sample the five monitoring wells directly downgradient of the source area (near Building 912A) semiannually (2nd and 4th Quarters), and the 10 wells located near Building 912 annually (4th Quarter).
- Continue scheduled inspections and perform required maintenance of the g-2 cap.
- Monitoring results will be communicated to the regulatory agencies via quarterly and annual reports.

BLIP Source Area Monitoring Summary

Background:

The Brookhaven Linac Isotope Producer (BLIP) is an active accelerator facility located in the central portion of the site. The BLIP facility has been in operation since 1972 and is a national resource for producing the radioisotopes that are crucial in nuclear medicine for both research and clinical use. BLIP also supports BNL's research on diagnostic and therapeutic radiopharmaceuticals.

Beam line operations have resulted in the activation of soils that surround the BLIP target vessel. These activated soils are approximately 30 feet below the BLIP building, in a small zone surrounding the target vessel. In 1998, low levels of tritium were detected in the groundwater near the BLIP facility experiment at concentrations of approximately three times the 20,000 pCi/L MCL. Sodium-22 was also detected in the groundwater, but the levels were less than the 400 pCi/L MCL. Corrective actions were implemented in 1998 to prevent additional rainwater from entering the activated soil. These included repairing and reconfiguring the building's roof gutters and downspouts, resealing the paved areas south of the building, and installing a concrete cap in the remaining areas around the building. In 2000, a colloidal silica grout was injected into the activated soil to further immobilize the tritium and sodium-22, and in 2004 an additional impermeable cap was constructed over the beam line that runs from the Linac to the BLIP facility. During 2015, this cap section was extended in several areas to provide protection of soil shielding that was expected to become activated following a change in beamline operations.

Following the concurrence of the NYSDEC, a Record of Decision (ROD) was signed by the U.S. DOE and U.S. EPA in early 2007. This ROD requires continued routine inspection and maintenance of the impermeable cap and groundwater monitoring to verify the continued effectiveness of the storm water controls.

Monitoring Activities:

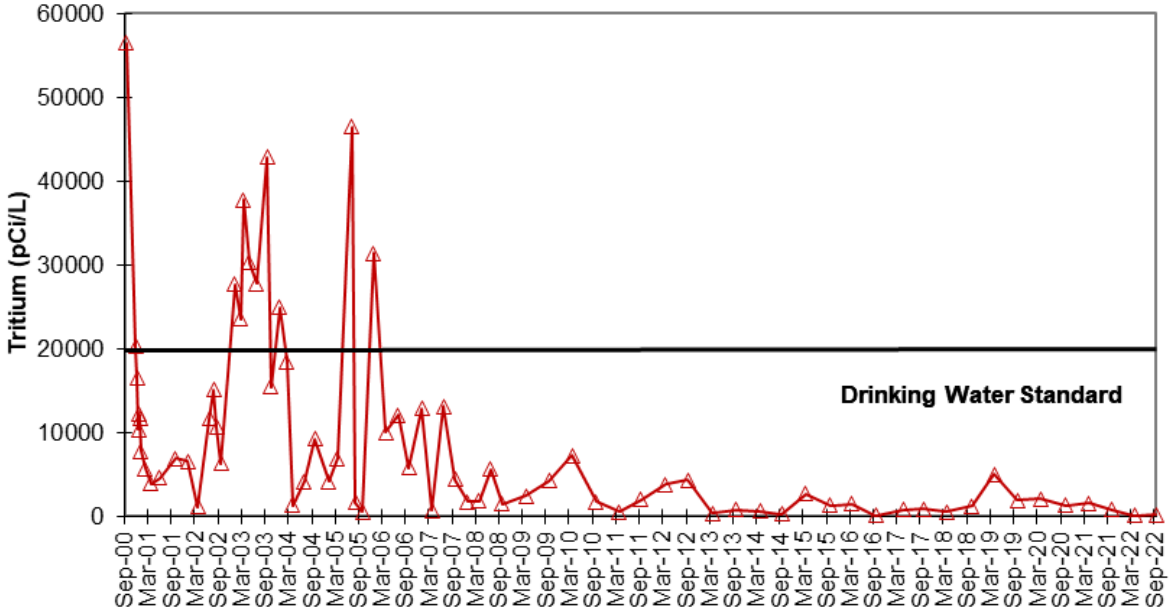
Three groundwater monitoring wells are positioned immediately downgradient of the BLIP facility. The wells are currently monitored on a semi-annual basis (during the 2nd and 4th Quarters).

Monitoring Results:

No samples were collected during the 1st Quarter 2023. During 2022, tritium was not detected above MDLs in any of the BLIP monitoring wells. Since early 2006, tritium concentrations in the groundwater downgradient of BLIP have been continually less than the 20,000 pCi/L MCL (Figure 19-1). The overall reductions in tritium concentrations observed in the source area wells since 2006 indicate that the cap is effectively preventing rainwater infiltration into the activated soil shielding and the amount of residual tritium that is available to be flushed out of the deep vadose zone is decreasing.

BLIP Source Area Monitoring Summary

Figure 19-1
Maximum Tritium Concentrations – September 2000 through October 2022



Maximum tritium concentrations observed from September 2000 through October 2022 in groundwater immediately downgradient of the BLIP Facility.

Recommendations:

- Continue monitoring the three wells immediately downgradient of BLIP for tritium on a semiannual basis (2nd and 4th Quarters).
- Continue scheduled inspections and perform required maintenance of the BLIP cap.
- Monitoring results will continue to be communicated to the regulatory agencies via quarterly and annual reports.

OU III Building 452 Freon-11 Pump & Treat System (System Closed)

Process: Groundwater extraction and air stripping treatment, with discharge to a drainage channel leading to Recharge Basin HS.

Goal: Remediation of Freon-11 in the groundwater and reach Maximum Contaminant Levels (MCLs) in core monitoring wells within 30 years for the Upper Glacial aquifer (by 2030). NYSDEC and EPA approved the Petition for Closure in August and September 2019, respectively.

Start Date: March 2012

Table 20-1
Pumping Rate (gpm)

Extraction Well	EW-18
Site Id #	095-316
Screened Interval (feet below grade)	55-65
Desired Flow Rate (GPM)	0*
Actual Flow Rate	0*

* The system was approved for closure in September 2019.

OU III Building 452 Freon-11 Pump & Treat System (System Closed)

Figure 20-1
Cumulative Mass Removal of Trichlorofluoromethane vs. Time

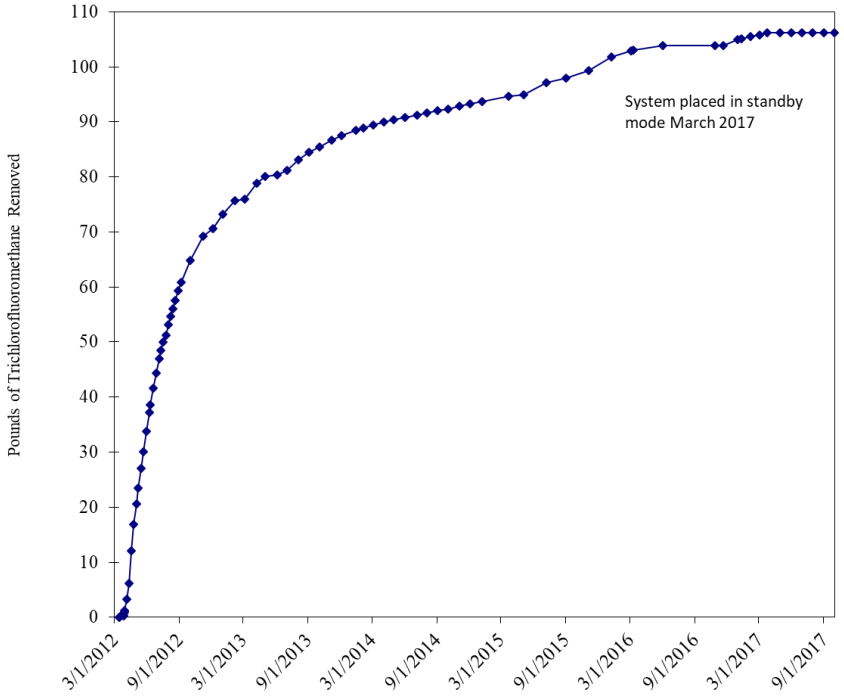
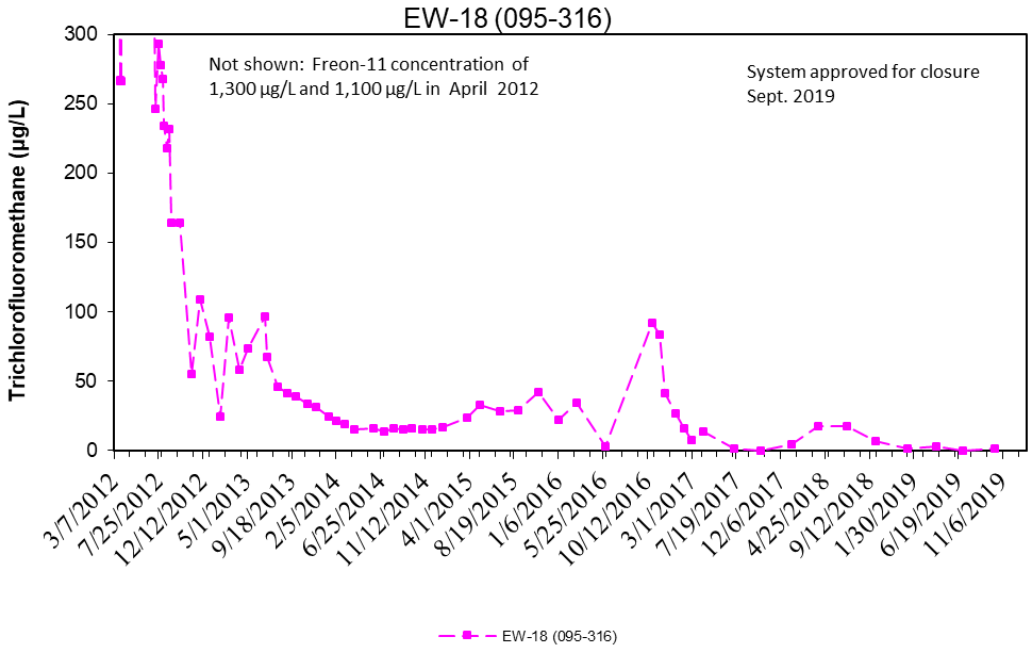


Figure 20-2
Influent Trichlorofluoromethane Concentration vs. Time



OU III Building 452 Freon-11 Pump & Treat System
(System Closed)

Table 20-2
Effluent Water Quality
SPDES Equivalency Permit Concentrations (System Closed)

Parameter	Permit Limit	Max. Measured Value	Units	Frequency*
Flow	120	NA	GPM	Continuous
pH (range)	5.0 - 8.5	NA	SU	Weekly
Benzene	1.0	NA	µg/L	Monthly
Bromodichloromethane	50	NA	µg/L	Monthly
Carbon Tetrachloride	5.0	NA	µg/L	Monthly
Chloroform	7.0	NA	µg/L	Monthly
Dichlorodifluoromethane	5.0	NA	µg/L	Monthly
1,1-Dichloroethylene	5.0	NA	µg/L	Monthly
4-Isopropyltoluene	5.0	NA	µg/L	Monthly
Methyl Chloride	5.0	NA	µg/L	Monthly
Methylene Chloride	5.0	NA	µg/L	Monthly
Tetrachloroethylene	5.0	NA	µg/L	Monthly
Toluene	5.0	NA	µg/L	Monthly
1,2,3-Trichlorobenzene	5.0	NA	µg/L	Monthly
1,1,1-Trichloroethane	5.0	NA	µg/L	Monthly
Trichlorofluoromethane	5.0	NA	µg/L	Monthly
1,2,4-Trimethylbenzene	5.0	NA	µg/L	Monthly
Xylene (meta + para)	10.0	NA	µg/L	Monthly

NA = Not analyzed. The system is closed.

OU III Building 452 Freon-11 Pump & Treat System (System Closed)

Monitoring Activities:

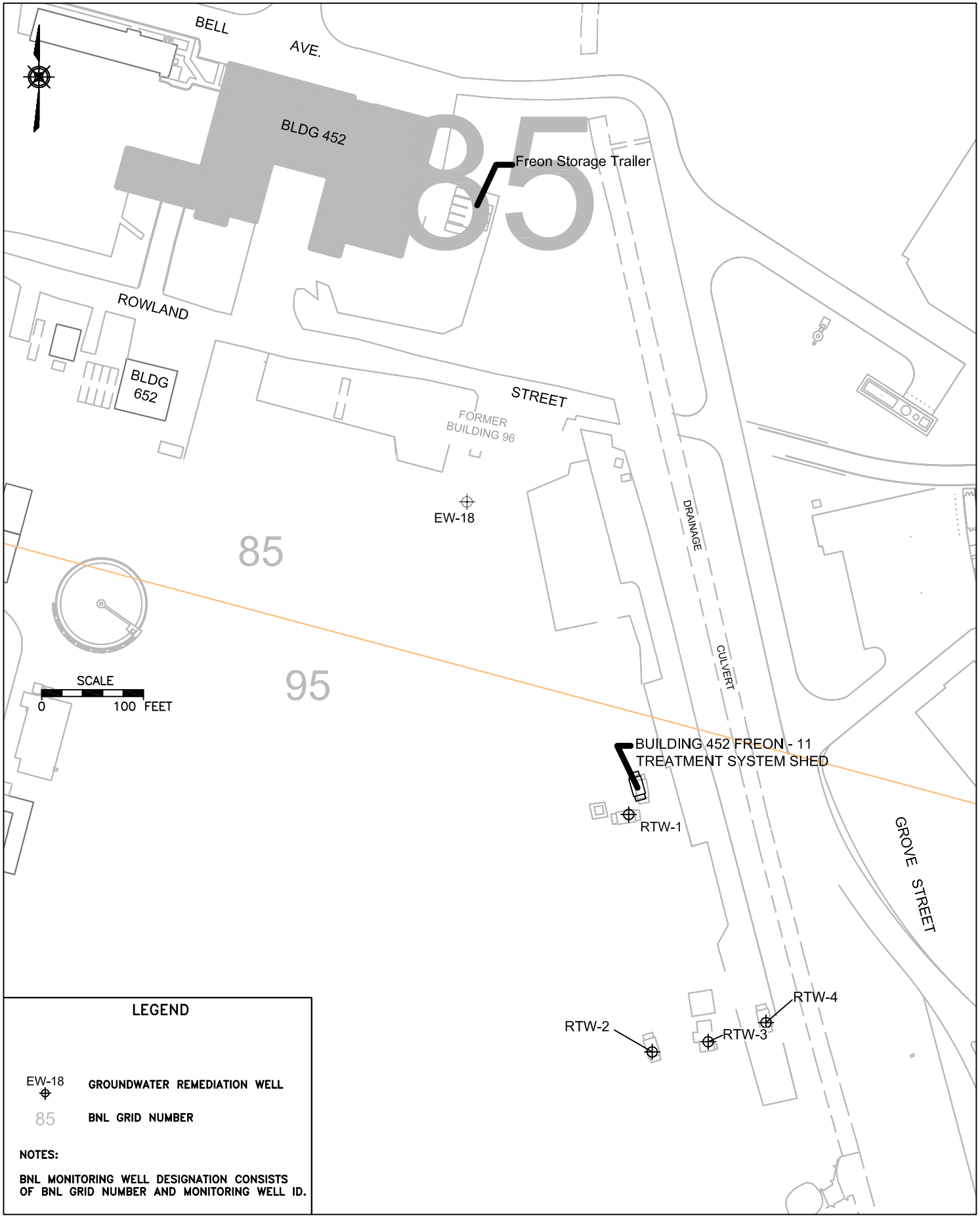
Monitoring was discontinued following the approval from regulators to close the treatment system. The former extraction well EW-18 and treatment building are shown on **Figure 20-3.**

System Operations

Treatment of the former Freon-11 plume is complete. The air stripping treatment system is being used to treat groundwater from the Building 96 extraction well RTW-1.

Planned Operational Changes

- Postpone decisions to abandon extraction well EW-18 and the remaining monitoring wells until PFAS has been fully characterized and a determination is made on their utilization related to emerging contaminants.



LEGEND

EW-18 — GROUNDWATER REMEDIATION WELL

85 — BNL GRID NUMBER

NOTES:

BNL MONITORING WELL DESIGNATION CONSISTS OF BNL GRID NUMBER AND MONITORING WELL ID.

R:\Gw_projects\ERD_Quarterlies\1Q_2023\Fig_20-3.dwg

ENVIRONMENTAL PROTECTION DIVISION

TITLE:

BUILDING 452 AREA FREON-11 MONITORING WELL NETWORK

SITEWIDE REMEDIATION SYSTEMS
FIRST QUARTER 2023 OPERATIONS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	08/24/12	
CHKD:	APPD:	REV.:	NOTES:
LDS	--	01/06/23	--

FIGURE NO.: 20-3

OU X Current Firehouse/Building 170 PFAS Pump & Treat System

Process: Groundwater extraction with liquid phase granular activated carbon (GAC) treatment for per- and polyfluoroalkyl substances (PFAS), with discharge to recharge basins.

Goal: Final cleanup goals will be determined following the completion of the forthcoming Remedial Investigation/Feasibility Study and documented in the future OU X Record of Decision (ROD).

Start Date: October 2022

Table 21-1
Pumping Rates (gpm)

Extraction Well	RW-A	RW-B	RW-C	RW-D	RW-E	RW-F	RW-G	RW-H	RW-I
Site Id #	073-34	073-35	083-45	083-46	084-102	102-32	102-33	102-34	102-35
Screen Interval (ft bls)	48-68	54-74	117-137	70-90	132-152	121-141	88-108	98-118	70-90
Desired Flow Rate (gpm)	**50**	**50**	**60**	**60**	**60**	**50**	**50**	**40**	**90**
January (Avg gpm)	66	59	1	42	71	1	50	52	95
February " "	40	39	11	24	48	9	35	34	70
March " "	52	53	18	34	68	47	55	41	97
Actual (Avg. over Qtr.)	**53**	**50**	**10**	**33**	**62**	**19**	**47**	**42**	**87**

OU X Current Firehouse/Building 170 PFAS Pump & Treat System

Figure 21-1
Cumulative Pounds of PFAS Removed

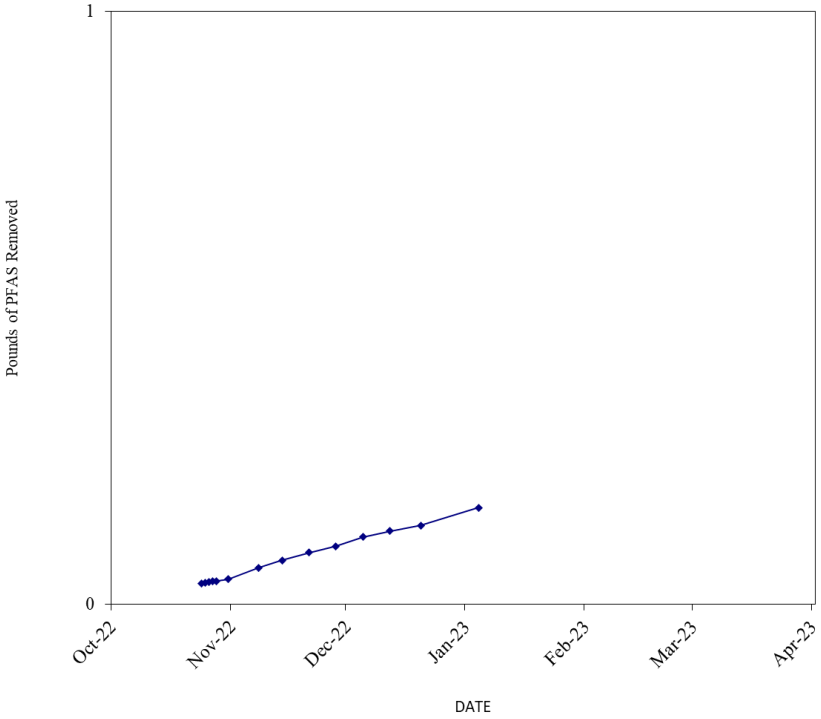
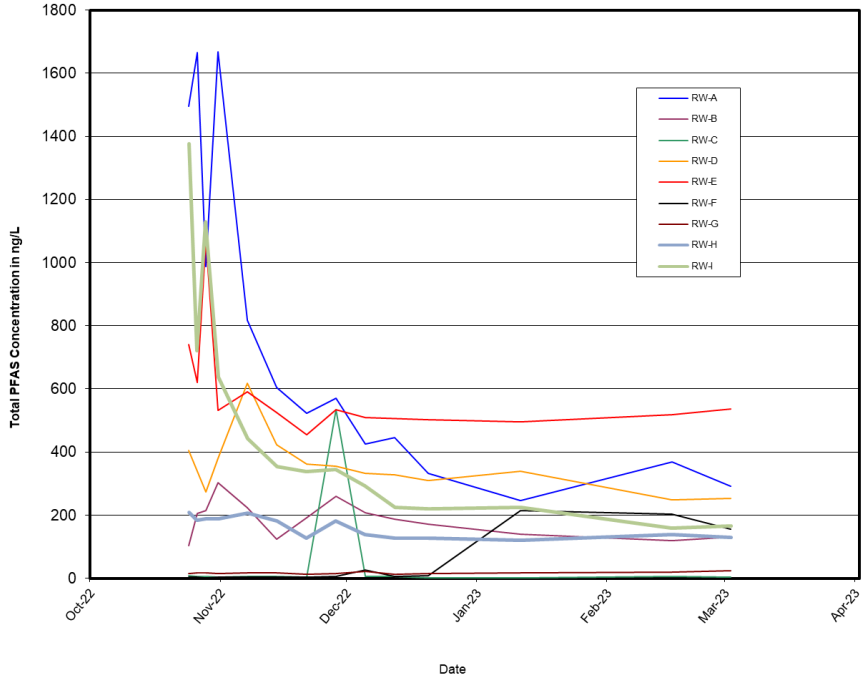


Figure 21-2
Extraction Well Total PFAS Concentration vs. Time



OU X Current Firehouse/Building 170 PFAS Pump & Treat System

Table 21-2
Effluent Water Quality
SPDES Equivalency Permit Concentrations January 1 through March 31, 2023

Parameter	Permit Limit	Max. Measured Value	Units	Frequency
Flow	1000	465	GPM	Continuous
pH (range)	5.0 – 8.5	6.4– 6.5*	SU	Monthly
Carbon Tetrachloride	5.0	<0.5	µg/L	Monthly
Perfluoroocanesulfonic acid (PFOS)	2.7	<1.73	ng/L	Monthly[1]
Perfluorooctanoic acid (PFOA)	6.7	<1.73	ng/L	Monthly[1]
1,4-Dioxane	0.35	0.24	µg/L	Monthly[1]
Chloroform	7.0	<0.5	µg/L	Monthly[1]
Methyl Chloride	5.0	<0.5	µg/L	Monthly[1]
Methylene Chloride	5.0	<0.5	µg/L	Monthly[1]

[1] The minimum measurement frequency shall be monthly following a period of 8 consecutive weekly sampling events showing no exceedances of the stated discharge limitations. This was achieved in March 2023 and monthly sampling started in April 2023.
* Minimum to maximum value for pH during this operational period.

Monitoring Activities:

The Current Firehouse/Building 170 monitoring well data show the highest total PFAS concentration (12,692.7 ng/L) in monitoring well 073-31, immediately downgradient of the Current Firehouse former training area. The highest total PFAS concentration recorded at Building 170 was 7,330.87 ng/L in monitoring well 093-94, downgradient of the former Building 170 training area. The Current Firehouse/Building 170 monitoring well network is shown on **Figure 21-3**. The 'Hits Only' first quarter 2023 data are summarized in **Table 21-3**.

OU X Current Firehouse/Building 170 PFAS Pump & Treat System

System Operations

January 2023:

The system ran normally for the month except for wells CF-RW-C and CF-RW-F. These wells were off due to fouling issues with the GAC vessels. The system treated approximately 19.5 million gallons of water.

February 2023:

Extraction wells CF-RW-C and CF-RW-F were restarted February 1, 2023. The system was turned off from February 6 through February 10, 2023, for piping modifications. When the system was restarted February 10, 2023, wells CF-RW-C and CF-RW-F were left off due to continued fouling of the GAC vessels. The system was off from February 22 through February 24, 2023, to backwash the lead carbon vessel. The system treated approximately 12.5 million gallons of water.

March 2023:

The lead GAC vessel was backwashed March 3, 16, and 30, 2023 due to increased pressure due to fouling of the lead carbon vessel. Wells CF-RW-C and CF-RW-F were restarted on March 3, 2023. On March 16, 2023, well CF-RW-F was turned off to reduce fouling issues with the system. The system treated approximately 20 million gallons of water.

The system treated approximately 52 million gallons of water during the first quarter of 2023. The treatment system 'Hits Only' data, including individual extraction wells, influent, and effluent is summarized in **Table 21-4** through **Table 21-6**.

Planned Operational Changes

- Maintain full time operation of the treatment system.
- Discontinue monthly sampling of EPA Method 8260LL on extraction wells CF-RW-A through CF-RW-I.
- When the analytical laboratories can provide turnaround times that allow for compliance with required SPDES report submission dates, transition from EPA Method 537.1 to EPA Method 1633 for the PFAS analysis of treatment system influent and effluent samples.

LEGEND

29 — NEW MONITORING WELL ID

02 — EXISTING MONITORING WELL & PERMANENT MONITORING WELLS FOR WILLIAM FLOYD WELL FIELD

BNL-4 — POTABLE SUPPLY WELL (PRESENTLY INACTIVE)

GENERAL GROUNDWATER FLOW DIRECTION

SUSPECTED FOAM RELEASE AREA

NOTE:
PFAS RESULTS BASED ON METHOD 537.1

Water Treatment Plant Recharge Basins
Training Area
Training Areas
Current Fire House
BNL Paint Shop
Bldg. 170
Stormwater Discharge Area
Recreation Center Area
Suffolk County Water Authority
William Floyd Well Field
CF-RW-A
CF-RW-B
CF-RW-C
CF-RW-D
CF-RW-E
CF-RW-F
CF-RW-G
CF-RW-H
CF-RW-I
BNL-4
BNL-6
BNL-7
Well 1
Well 2
Well 3A
000-42
000-43
000-44
Upton Road
West Princeton Ave.
East Princeton Ave.
West Brookhaven Avenue
Cornell Avenue
Mitchell Lane
Bell Avenue
Woods Road
Upton Road
Yale Road
Yale Lane
York Lane
Aston
Yaphank
Mendel Lane
William Floyd Parkway
Drywell
72
73
74
82
83
84
92
93
94
101
102
103
109
110
111
117
118
119
123

SCALE
0 400 800 FEET

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:
CURRENT FIREHOUSE AND BUILDING 170 MONITORING WELL NETWORK
SITEWIDE REMEDIATION SYSTEMS
FIRST QUARTER 2023 OPERATIONS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	05/19/23	–
CHKD:	APPD:	REV.:	NOTES:
LDS		07/07/23	–

FIGURE NO.: 3.5.1–1

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 073-01

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/30/2023	84.56	--	--	NG/L	47.00		
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/30/2023	55	6.1	--	NG/L	47.00		
Perfluorobutyric acid (PFBA)	01/30/2023	18	6.1	--	NG/L	47.00		
Perfluoroheptanoic acid (PFHpA)	01/30/2023	0.35	1.5	--	NG/L	47.00	J	
Perfluorohexanesulfonate (PFHxS)	01/30/2023	0.93	1.5	--	NG/L	47.00	J	
Perfluorohexanoic acid (PFHxA)	01/30/2023	0.94	1.5	--	NG/L	47.00	J	
Perfluorononanoic acid (PFNA)	01/30/2023	0.6	1.5	--	NG/L	47.00	J	
Perfluorooctanesulfonate (PFOS)	01/30/2023	6.3	1.5	--	NG/L	47.00		
Perfluorooctanoic acid (PFOA)	01/30/2023	0.84	1.5	--	NG/L	47.00	J	
Perfluoropentanoic acid (PFPeA)	01/30/2023	1.6	3.1	--	NG/L	47.00	J	

Site ID : 073-26

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/17/2023	1815.08	--	--	NG/L	44.50		
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/17/2023	1	6.2	--	NG/L	44.50	J	
Perfluorobutanesulfonate (PFBS)	01/17/2023	3.3	1.5	--	NG/L	44.50		
Perfluorobutyric acid (PFBA)	01/17/2023	5.6	6.2	--	NG/L	44.50	J	
Perfluorodecanoic acid (PFDA)	01/17/2023	0.35	1.5	--	NG/L	44.50	J	
Perfluoroheptanesulfonate (PFHpS)	01/17/2023	22	1.5	--	NG/L	44.50		
Perfluoroheptanoic acid (PFHpA)	01/17/2023	6	1.5	--	NG/L	44.50		
Perfluorohexanesulfonate (PFHxS)	01/17/2023	120	1.5	--	NG/L	44.50		
Perfluorohexanoic acid (PFHxA)	01/17/2023	13	1.5	--	NG/L	44.50		
Perfluorononanoic acid (PFNA)	01/17/2023	2.3	1.5	--	NG/L	44.50		
Perfluorooctane sulfonamide (PFOSAm)	01/17/2023	0.14	1.5	--	NG/L	44.50	J	
Perfluorooctanesulfonate (PFOS)	01/17/2023	1600	15	--	NG/L	44.50	D	
Perfluorooctanoic acid (PFOA)	01/17/2023	14	1.5	--	NG/L	44.50		
Perfluoropentanesulfonate (PFPeS)	01/17/2023	4.2	1.5	--	NG/L	44.50		
Perfluoropentanoic acid (PFPeA)	01/17/2023	7.5	3.1	--	NG/L	44.50		
Perfluorotridecanoic acid (PFTrDA)	01/17/2023	0.69	1.5	--	NG/L	44.50	J	
Perfluoroundecanoic acid (PFUdA)	01/17/2023	15	1.5	--	NG/L	44.50		

Site ID : 073-27

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/23/2023	195.3	--	--	NG/L	42.50		
Perfluorobutanesulfonate (PFBS)	01/23/2023	2.2	1.6	--	NG/L	42.50		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 073-27

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorobutyric acid (PFBA)	01/23/2023	1.3	6.4	--	NG/L	42.50	J	
Perfluorohexanesulfonate (PFHxS)	01/23/2023	18	1.6	--	NG/L	42.50		
Perfluorohexanoic acid (PFHxA)	01/23/2023	1.4	1.6	--	NG/L	42.50	J	
Perfluorooctane sulfonamide (PFOSAm)	01/23/2023	0.14	1.6	--	NG/L	42.50	J	
Perfluorooctanesulfonate (PFOS)	01/23/2023	170	1.6	--	NG/L	42.50		
Perfluoropentanesulfonate (PFPeS)	01/23/2023	1.7	1.6	--	NG/L	42.50		
Perfluoropentanoic acid (PFPeA)	01/23/2023	0.56	3.2	--	NG/L	42.50	J	

Site ID : 073-28

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/23/2023	470.9	--	--	NG/L	42.50		
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/23/2023	1.2	6.4	--	NG/L	42.50	J	
Perfluorobutanesulfonate (PFBS)	01/23/2023	11	1.6	--	NG/L	42.50		
Perfluorobutyric acid (PFBA)	01/23/2023	4.8	6.4	--	NG/L	42.50	J	
Perfluoroheptanesulfonate (PFHpS)	01/23/2023	1.8	1.6	--	NG/L	42.50		
Perfluoroheptanoic acid (PFHpA)	01/23/2023	5.5	1.6	--	NG/L	42.50		
Perfluorohexanesulfonate (PFHxS)	01/23/2023	47	1.6	--	NG/L	42.50		
Perfluorohexanoic acid (PFHxA)	01/23/2023	28	1.6	--	NG/L	42.50		
Perfluorooctanesulfonate (PFOS)	01/23/2023	330	1.6	--	NG/L	42.50		
Perfluorooctanoic acid (PFOA)	01/23/2023	1.6	1.6	--	NG/L	42.50		
Perfluoropentanesulfonate (PFPeS)	01/23/2023	17	1.6	--	NG/L	42.50		
Perfluoropentanoic acid (PFPeA)	01/23/2023	23	3.2	--	NG/L	42.50		

Site ID : 073-29

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/30/2023	55.22	--	--	NG/L	42.50		
Perfluorobutanesulfonate (PFBS)	01/30/2023	7.3	1.5	--	NG/L	42.50		
Perfluorobutyric acid (PFBA)	01/30/2023	6.7	6	--	NG/L	42.50		
Perfluoroheptanoic acid (PFHpA)	01/30/2023	1.3	1.5	--	NG/L	42.50	J	
Perfluorohexanesulfonate (PFHxS)	01/30/2023	9.8	1.5	--	NG/L	42.50		
Perfluorohexanoic acid (PFHxA)	01/30/2023	9.6	1.5	--	NG/L	42.50		
Perfluorooctane sulfonamide (PFOSAm)	01/30/2023	0.14	1.5	--	NG/L	42.50	J	
Perfluorooctanesulfonate (PFOS)	01/30/2023	0.98	1.5	--	NG/L	42.50	J	
Perfluoropentanesulfonate (PFPeS)	01/30/2023	4.4	1.5	--	NG/L	42.50		
Perfluoropentanoic acid (PFPeA)	01/30/2023	15	3	--	NG/L	42.50		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 073-30

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/17/2023	187.19	--	--	NG/L	43.50		
Perfluorobutanesulfonate (PFBS)	01/17/2023	2.6	1.5	--	NG/L	43.50		
Perfluorobutyric acid (PFBA)	01/17/2023	4.2	6.1	--	NG/L	43.50	J	
Perfluorodecanoic acid (PFDA)	01/17/2023	0.4	1.5	--	NG/L	43.50	J	
Perfluoroheptanesulfonate (PFHpS)	01/17/2023	16	1.5	--	NG/L	43.50		
Perfluoroheptanoic acid (PFHpA)	01/17/2023	0.55	1.5	--	NG/L	43.50	J	
Perfluorohexanesulfonate (PFHxS)	01/17/2023	7.2	1.5	--	NG/L	43.50		
Perfluorohexanoic acid (PFHxA)	01/17/2023	2.2	1.5	--	NG/L	43.50		
Perfluorononanoic acid (PFNA)	01/17/2023	0.34	1.5	--	NG/L	43.50	J	
Perfluorooctanesulfonate (PFOS)	01/17/2023	150	1.5	--	NG/L	43.50		
Perfluorooctanoic acid (PFOA)	01/17/2023	2.5	1.5	--	NG/L	43.50		
Perfluoropentanoic acid (PFPeA)	01/17/2023	1.2	3	--	NG/L	43.50	J	

Site ID : 073-31

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/23/2023	12692.7	--	--	NG/L	42.50		
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	01/23/2023	10	6.2	--	NG/L	42.50		
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/23/2023	70	6.2	--	NG/L	42.50		
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	01/23/2023	3	1.5	--	NG/L	42.50		
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	01/23/2023	1.7	1.5	--	NG/L	42.50		
Perfluorobutanesulfonate (PFBS)	01/23/2023	100	1.5	--	NG/L	42.50		
Perfluorobutyric acid (PFBA)	01/23/2023	74	6.2	--	NG/L	42.50		
Perfluorodecanesulfonate (PFDS)	01/23/2023	3.8	1.5	--	NG/L	42.50		
Perfluorodecanoic acid (PFDA)	01/23/2023	4	1.5	--	NG/L	42.50		
Perfluoroheptanesulfonate (PFHpS)	01/23/2023	110	1.5	--	NG/L	42.50		
Perfluoroheptanoic acid (PFHpA)	01/23/2023	120	1.5	--	NG/L	42.50		
Perfluorohexanesulfonate (PFHxS)	01/23/2023	1600	15	--	NG/L	42.50	D	
Perfluorohexanoic acid (PFHxA)	01/23/2023	390	1.5	--	NG/L	42.50		
Perfluorononanesulfonate (PFNS)	01/23/2023	40	1.5	--	NG/L	42.50		
Perfluorononanoic acid (PFNA)	01/23/2023	7.2	1.5	--	NG/L	42.50		
Perfluorooctane sulfonamide (PFOSAm)	01/23/2023	18	1.5	--	NG/L	42.50		
Perfluorooctanesulfonate (PFOS)	01/23/2023	9400	140	--	NG/L	42.50		
Perfluorooctanoic acid (PFOA)	01/23/2023	160	1.5	--	NG/L	42.50		
Perfluoropentanesulfonate (PFPeS)	01/23/2023	260	1.5	--	NG/L	42.50		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 073-31

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluoropentanoic acid (PFPeA)	01/23/2023	320	3.1	--	NG/L	42.50		
Perfluoroundecanoic acid (PFUdA)	01/23/2023	1	1.5	--	NG/L	42.50	J	

Site ID : 073-32

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/23/2023	3337.4	--	--	NG/L	60.00		
1H, 1H, 2H, 2H-Perfluorodecane sulfonic acid (8:2 FTS)	01/23/2023	5.4	5.6	--	NG/L	60.00	J	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/23/2023	20	5.6	--	NG/L	60.00		
Perfluorobutanesulfonate (PFBS)	01/23/2023	17	1.4	--	NG/L	60.00		
Perfluorobutyric acid (PFBA)	01/23/2023	17	5.6	--	NG/L	60.00		
Perfluorodecanoic acid (PFDA)	01/23/2023	1.4	1.4	--	NG/L	60.00		
Perfluoroheptanesulfonate (PFHpS)	01/23/2023	43	1.4	--	NG/L	60.00		
Perfluoroheptanoic acid (PFHpA)	01/23/2023	21	1.4	--	NG/L	60.00		
Perfluorohexanesulfonate (PFHxS)	01/23/2023	480	1.4	--	NG/L	60.00		
Perfluorohexanoic acid (PFHxA)	01/23/2023	120	1.4	--	NG/L	60.00		
Perfluorononanesulfonate (PFNS)	01/23/2023	14	1.4	--	NG/L	60.00		
Perfluorononanoic acid (PFNA)	01/23/2023	3.2	1.4	--	NG/L	60.00		
Perfluorooctane sulfonamide (PFOSAm)	01/23/2023	5.4	1.4	--	NG/L	60.00		
Perfluorooctanesulfonate (PFOS)	01/23/2023	2400	14	--	NG/L	60.00	D	
Perfluorooctanoic acid (PFOA)	01/23/2023	110	1.4	--	NG/L	60.00		
Perfluoropentanesulfonate (PFPeS)	01/23/2023	29	1.4	--	NG/L	60.00		
Perfluoropentanoic acid (PFPeA)	01/23/2023	51	2.8	--	NG/L	60.00		

Site ID : 073-33

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/23/2023	5202.8	--	--	NG/L	49.95		
Perfluorobutanesulfonate (PFBS)	01/23/2023	16	3.2	--	NG/L	49.95		
Perfluorobutyric acid (PFBA)	01/23/2023	8.1	13	--	NG/L	49.95	J	
Perfluoroheptanesulfonate (PFHpS)	01/23/2023	12	3.2	--	NG/L	49.95		
Perfluoroheptanoic acid (PFHpA)	01/23/2023	7.9	3.2	--	NG/L	49.95		
Perfluorohexanesulfonate (PFHxS)	01/23/2023	91	3.2	--	NG/L	49.95		
Perfluorohexanoic acid (PFHxA)	01/23/2023	26	3.2	--	NG/L	49.95		
Perfluorononanoic acid (PFNA)	01/23/2023	3.9	3.2	--	NG/L	49.95		
Perfluorooctane sulfonamide (PFOSAm)	01/23/2023	0.9	3.2	--	NG/L	49.95	J	
Perfluorooctanesulfonate (PFOS)	01/23/2023	5000	32	--	NG/L	49.95	D	

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 073-33

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorooctanoic acid (PFOA)	01/23/2023	11	3.2	--	NG/L	49.95		
Perfluoropentanesulfonate (PFPeS)	01/23/2023	11	3.2	--	NG/L	49.95		
Perfluoropentanoic acid (PFPeA)	01/23/2023	15	6.4	--	NG/L	49.95		

Site ID : 074-135

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/23/2023	614.97	--	--	NG/L	60.00		
Perfluorobutanesulfonate (PFBS)	01/23/2023	32	1.5	--	NG/L	60.00		
Perfluorobutyric acid (PFBA)	01/23/2023	16	6.1	--	NG/L	60.00		
Perfluoroheptanesulfonate (PFHpS)	01/23/2023	5.4	1.5	--	NG/L	60.00		
Perfluoroheptanoic acid (PFHpA)	01/23/2023	22	1.5	--	NG/L	60.00		
Perfluorohexanesulfonate (PFHxS)	01/23/2023	260	1.5	--	NG/L	60.00		
Perfluorohexanoic acid (PFHxA)	01/23/2023	54	1.5	--	NG/L	60.00		
Perfluorononanoic acid (PFNA)	01/23/2023	0.57	1.5	--	NG/L	60.00	J	
Perfluorooctanesulfonate (PFOS)	01/23/2023	100	1.5	--	NG/L	60.00		
Perfluorooctanoic acid (PFOA)	01/23/2023	31	1.5	--	NG/L	60.00		
Perfluoropentanesulfonate (PFPeS)	01/23/2023	43	1.5	--	NG/L	60.00		
Perfluoropentanoic acid (PFPeA)	01/23/2023	51	3.1	--	NG/L	60.00		

Site ID : 083-01

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/03/2023	6.55	--	--	NG/L	85.00		
Perfluoroheptanoic acid (PFHpA)	02/03/2023	0.32	1.4	--	NG/L	85.00	J	
Perfluorohexanesulfonate (PFHxS)	02/03/2023	0.53	1.4	--	NG/L	85.00	J	
Perfluorooctanesulfonate (PFOS)	02/03/2023	5.7	1.4	--	NG/L	85.00		

Site ID : 083-02

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/03/2023	22	--	--	NG/L	135.00		
Perfluorohexanesulfonate (PFHxS)	02/03/2023	3	1.6	--	NG/L	135.00		
Perfluorooctanesulfonate (PFOS)	02/03/2023	19	1.6	--	NG/L	135.00		
solids-tot	02/03/2023	10	4	--	MG/L	135.00		

Site ID : 083-05

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/07/2023	19.48	--	--	NG/L	72.00		
Perfluorobutyric acid (PFBA)	02/07/2023	16	13	--	NG/L	72.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 083-05

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorohexanesulfonate (PFHxS)	02/07/2023	0.68	3.2	--	NG/L	72.00	J	
Perfluorooctanesulfonate (PFOS)	02/07/2023	2.8	3.2	--	NG/L	72.00	J	

Site ID : 083-33

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/31/2023	31.06	--	--	NG/L	55.00		
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/31/2023	7	5.9	--	NG/L	55.00		
Perfluorobutanesulfonate (PFBS)	01/31/2023	1.1	1.5	--	NG/L	55.00	J	
Perfluorobutyric acid (PFBA)	01/31/2023	1.5	5.9	--	NG/L	55.00	J	
Perfluoroheptanoic acid (PFHpA)	01/31/2023	0.82	1.5	--	NG/L	55.00	J	
Perfluorohexanesulfonate (PFHxS)	01/31/2023	1.9	1.5	--	NG/L	55.00		
Perfluorononanoic acid (PFNA)	01/31/2023	0.7	1.5	--	NG/L	55.00	J	
Perfluorooctanesulfonate (PFOS)	01/31/2023	13	1.5	--	NG/L	55.00		
Perfluorooctanoic acid (PFOA)	01/31/2023	3.2	1.5	--	NG/L	55.00		
Perfluoropentanoic acid (PFPeA)	01/31/2023	0.64	2.9	--	NG/L	55.00	J	
Perfluorotridecanoic acid (PFTrDA)	01/31/2023	1.2	1.5	--	NG/L	55.00	J	

Site ID : 083-34

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/31/2023	18.89	--	--	NG/L	55.00		
Perfluorobutanesulfonate (PFBS)	01/31/2023	0.6	1.5	--	NG/L	55.00	J	
Perfluorobutyric acid (PFBA)	01/31/2023	0.6	6.2	--	NG/L	55.00	J	
Perfluoroheptanoic acid (PFHpA)	01/31/2023	0.25	1.5	--	NG/L	55.00	J	
Perfluorohexanesulfonate (PFHxS)	01/31/2023	2	1.5	--	NG/L	55.00		
Perfluorohexanoic acid (PFHxA)	01/31/2023	1	1.5	--	NG/L	55.00	J	
Perfluorooctanesulfonate (PFOS)	01/31/2023	14	1.5	--	NG/L	55.00		
Perfluoropentanoic acid (PFPeA)	01/31/2023	0.44	3.1	--	NG/L	55.00	J	

Site ID : 083-35

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/31/2023	486.02	--	--	NG/L	55.00		
Perfluorobutanesulfonate (PFBS)	01/31/2023	3.2	1.6	--	NG/L	55.00		
Perfluorobutyric acid (PFBA)	01/31/2023	3	6.4	--	NG/L	55.00	J	
Perfluorodecanoic acid (PFDA)	01/31/2023	0.42	1.6	--	NG/L	55.00	J	
Perfluoroheptanesulfonate (PFHpS)	01/31/2023	1.6	1.6	--	NG/L	55.00		
Perfluoroheptanoic acid (PFHpA)	01/31/2023	2.5	1.6	--	NG/L	55.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
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Site ID : 083-35

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorohexanesulfonate (PFHxS)	01/31/2023	11	1.6	--	NG/L	55.00		
Perfluorohexanoic acid (PFHxA)	01/31/2023	5.4	1.6	--	NG/L	55.00		
Perfluorononanoic acid (PFNA)	01/31/2023	8.4	1.6	--	NG/L	55.00		
Perfluorooctanesulfonate (PFOS)	01/31/2023	440	1.6	--	NG/L	55.00		
Perfluorooctanoic acid (PFOA)	01/31/2023	6.4	1.5	--	NG/L	55.00		
Perfluoropentanoic acid (PFPeA)	01/31/2023	2.7	3.2	--	NG/L	55.00	J	
Perfluoroundecanoic acid (PFUdA)	01/31/2023	1.4	1.6	--	NG/L	55.00	J	

Site ID : 083-36

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/31/2023	249	--	--	NG/L	75.00		
Perfluorobutanesulfonate (PFBS)	01/31/2023	2.3	1.6	--	NG/L	75.00		
Perfluorobutyric acid (PFBA)	01/31/2023	3.4	6.3	--	NG/L	75.00	J	
Perfluoroheptanesulfonate (PFHpS)	01/31/2023	1.6	1.6	--	NG/L	75.00		
Perfluoroheptanoic acid (PFHpA)	01/31/2023	3	1.6	--	NG/L	75.00		
Perfluorohexanesulfonate (PFHxS)	01/31/2023	58	1.6	--	NG/L	75.00		
Perfluorohexanoic acid (PFHxA)	01/31/2023	7.2	1.6	--	NG/L	75.00		
Perfluorononanoic acid (PFNA)	01/31/2023	4.8	1.6	--	NG/L	75.00		
Perfluorooctanesulfonate (PFOS)	01/31/2023	150	1.6	--	NG/L	75.00		
Perfluorooctanoic acid (PFOA)	01/31/2023	6.8	1.5	--	NG/L	75.00		
Perfluoropentanesulfonate (PFPeS)	01/31/2023	3.2	1.5	--	NG/L	75.00		
Perfluoropentanoic acid (PFPeA)	01/31/2023	6.3	3.1	--	NG/L	75.00		
Perfluoroundecanoic acid (PFUdA)	01/31/2023	2.4	1.6	--	NG/L	75.00		

Site ID : 083-37

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/31/2023	519.48	--	--	NG/L	55.00		
Perfluorobutanesulfonate (PFBS)	01/31/2023	1.6	1.6	--	NG/L	55.00		
Perfluorobutyric acid (PFBA)	01/31/2023	2.1	6.2	--	NG/L	55.00	J	
Perfluoroheptanesulfonate (PFHpS)	01/31/2023	1.3	1.6	--	NG/L	55.00	J	
Perfluoroheptanoic acid (PFHpA)	01/31/2023	1.3	1.6	--	NG/L	55.00	J	
Perfluorohexanesulfonate (PFHxS)	01/31/2023	29	1.6	--	NG/L	55.00		
Perfluorohexanoic acid (PFHxA)	01/31/2023	4.6	1.6	--	NG/L	55.00		
Perfluorononanoic acid (PFNA)	01/31/2023	12	1.6	--	NG/L	55.00		
Perfluorooctanesulfonate (PFOS)	01/31/2023	460	1.6	--	NG/L	55.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
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Site ID : 083-37

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorooctanoic acid (PFOA)	01/31/2023	1.2	1.6	--	NG/L	55.00	J	
Perfluoropentanesulfonate (PFPeS)	01/31/2023	0.68	1.6	--	NG/L	55.00	J	
Perfluoropentanoic acid (PFPeA)	01/31/2023	1.7	3.1	--	NG/L	55.00	J	
Perfluoroundecanoic acid (PFUdA)	01/31/2023	4	1.6	--	NG/L	55.00		

Site ID : 083-38

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/01/2023	25.62	--	--	NG/L	75.00		
Perfluorobutyric acid (PFBA)	02/01/2023	0.86	5.7	--	NG/L	75.00	J	
Perfluorohexanesulfonate (PFHxS)	02/01/2023	3.1	1.4	--	NG/L	75.00		
Perfluorononanoic acid (PFNA)	02/01/2023	2	1.4	--	NG/L	75.00		
Perfluorooctanesulfonate (PFOS)	02/01/2023	19	1.4	--	NG/L	75.00		
Perfluoroundecanoic acid (PFUdA)	02/01/2023	0.66	1.4	--	NG/L	75.00	J	

Site ID : 083-39

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/06/2023	2409.08	--	--	NG/L	65.00		
Perfluorobutanesulfonate (PFBS)	02/06/2023	4.1	1.5	--	NG/L	65.00		
Perfluorobutyric acid (PFBA)	02/06/2023	4.3	5.8	--	NG/L	65.00	J	
Perfluorodecanoic acid (PFDA)	02/06/2023	0.58	1.5	--	NG/L	65.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/06/2023	15	1.5	--	NG/L	65.00		
Perfluoroheptanoic acid (PFHpA)	02/06/2023	3.9	1.5	--	NG/L	65.00		
Perfluorohexanesulfonate (PFHxS)	02/06/2023	170	1.5	--	NG/L	65.00		
Perfluorohexanoic acid (PFHxA)	02/06/2023	22	1.5	--	NG/L	65.00		
Perfluorononanoic acid (PFNA)	02/06/2023	260	1.5	--	NG/L	65.00		
Perfluorooctane sulfonamide (PFOSAm)	02/06/2023	1	1.5	--	NG/L	65.00	J	
Perfluorooctanesulfonate (PFOS)	02/06/2023	1900	15	--	NG/L	65.00	D	
Perfluorooctanoic acid (PFOA)	02/06/2023	12	1.5	--	NG/L	65.00		
Perfluoropentanesulfonate (PFPeS)	02/06/2023	8.8	1.5	--	NG/L	65.00		
Perfluoropentanoic acid (PFPeA)	02/06/2023	7.4	2.9	--	NG/L	65.00		

Site ID : 083-40

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/02/2023	69.74	--	--	NG/L	105.00		
Perfluorobutanesulfonate (PFBS)	02/02/2023	0.86	1.5	--	NG/L	105.00	J	
Perfluorobutyric acid (PFBA)	02/02/2023	2	5.9	--	NG/L	105.00	J	

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 083-40

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluoroheptanoic acid (PFHpA)	02/02/2023	0.87	1.5	--	NG/L	105.00	J	
Perfluorohexanesulfonate (PFHxS)	02/02/2023	9.2	1.5	--	NG/L	105.00		
Perfluorohexanoic acid (PFHxA)	02/02/2023	3.5	1.5	--	NG/L	105.00		
Perfluorononanoic acid (PFNA)	02/02/2023	12	1.5	--	NG/L	105.00		
Perfluorooctane sulfonamide (PFOSAm)	02/02/2023	0.16	1.5	--	NG/L	105.00	J	
Perfluorooctanesulfonate (PFOS)	02/02/2023	35	1.5	--	NG/L	105.00		
Perfluorooctanoic acid (PFOA)	02/02/2023	3.7	1.5	--	NG/L	105.00		
Perfluoropentanesulfonate (PFPeS)	02/02/2023	0.85	1.5	--	NG/L	105.00	J	
Perfluoropentanoic acid (PFPeA)	02/02/2023	1.6	2.9	--	NG/L	105.00	J	

Site ID : 083-41

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/01/2023	21.9	--	--	NG/L	125.00		
1,4-Dioxane	02/01/2023	1	1	--	UG/L	125.00		
Perfluorobutanesulfonate (PFBS)	02/01/2023	0.87	3.2	--	NG/L	125.00	J	
Perfluorobutyric acid (PFBA)	02/01/2023	2	13	--	NG/L	125.00	J	
Perfluoroheptanoic acid (PFHpA)	02/01/2023	0.57	3.2	--	NG/L	125.00	J	
Perfluorohexanesulfonate (PFHxS)	02/01/2023	5.6	3.2	--	NG/L	125.00		
Perfluorooctanesulfonate (PFOS)	02/01/2023	12	3.2	--	NG/L	125.00		
Perfluoropentanoic acid (PFPeA)	02/01/2023	0.86	6.3	--	NG/L	125.00	J	

Site ID : 083-42

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/18/2023	13.4	--	--	NG/L	95.00		
Perfluorobutyric acid (PFBA)	01/18/2023	2.6	19	--	NG/L	95.00	J	
Perfluorohexanesulfonate (PFHxS)	01/18/2023	2.4	4.8	--	NG/L	95.00	J	
Perfluorooctanesulfonate (PFOS)	01/18/2023	8.4	4.8	--	NG/L	95.00		

Site ID : 083-43

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/18/2023	192.83	--	--	NG/L	125.00		
Perfluorobutanesulfonate (PFBS)	01/18/2023	1.1	2.5	--	NG/L	125.00	J	
Perfluorobutyric acid (PFBA)	01/18/2023	1.6	10	--	NG/L	125.00	J	
Perfluoroheptanoic acid (PFHpA)	01/18/2023	0.53	2.5	--	NG/L	125.00	J	
Perfluorohexanesulfonate (PFHxS)	01/18/2023	30	2.5	--	NG/L	125.00		
Perfluorohexanoic acid (PFHxA)	01/18/2023	3.1	2.5	--	NG/L	125.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
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Site ID : 083-43

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorononanoic acid (PFNA)	01/18/2023	2.2	2.5	--	NG/L	125.00	J	
Perfluorooctanesulfonate (PFOS)	01/18/2023	150	2.5	--	NG/L	125.00		
Perfluoropentanesulfonate (PFPeS)	01/18/2023	1.1	2.5	--	NG/L	125.00	J	
Perfluoropentanoic acid (PFPeA)	01/18/2023	3.2	5	--	NG/L	125.00	J	

Site ID : 083-44

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/01/2023	5.326	--	--	NG/L	75.00		
Perfluorobutyric acid (PFBA)	02/01/2023	1.6	5.7	--	NG/L	75.00	J	
Perfluoroheptanoic acid (PFHpA)	02/01/2023	0.35	1.4	--	NG/L	75.00	J	
Perfluorohexanesulfonate (PFHxS)	02/01/2023	0.96	1.4	--	NG/L	75.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/01/2023	0.096	1.4	--	NG/L	75.00	J	
Perfluorooctanesulfonate (PFOS)	02/01/2023	1.5	1.4	--	NG/L	75.00		
Perfluoropentanoic acid (PFPeA)	02/01/2023	0.82	2.8	--	NG/L	75.00	J	

Site ID : 083-47

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/03/2023	10.85	--	--	NG/L	60.00		
Perfluorobutanesulfonate (PFBS)	02/03/2023	0.38	1.5	--	NG/L	60.00	J	
Perfluorobutyric acid (PFBA)	02/03/2023	0.78	6	--	NG/L	60.00	J	
Perfluoroheptanoic acid (PFHpA)	02/03/2023	0.26	1.5	--	NG/L	60.00	J	
Perfluorohexanesulfonate (PFHxS)	02/03/2023	3.4	1.5	--	NG/L	60.00		
Perfluorooctane sulfonamide (PFOSAm)	02/03/2023	0.13	1.5	--	NG/L	60.00	J	
Perfluorooctanesulfonate (PFOS)	02/03/2023	5.9	1.6	--	NG/L	60.00		
solids-tot	02/03/2023	20	4	--	MG/L	60.00		

Site ID : 084-03

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/06/2023	90.1	--	--	NG/L	105.00		
Perfluorobutanesulfonate (PFBS)	02/06/2023	2.8	1.4	--	NG/L	105.00		
Perfluorobutyric acid (PFBA)	02/06/2023	2.1	5.7	--	NG/L	105.00	J	
Perfluoroheptanoic acid (PFHpA)	02/06/2023	1.1	1.4	--	NG/L	105.00	J	
Perfluorohexanesulfonate (PFHxS)	02/06/2023	22	1.4	--	NG/L	105.00		
Perfluorohexanoic acid (PFHxA)	02/06/2023	4.7	1.4	--	NG/L	105.00		
Perfluorononanoic acid (PFNA)	02/06/2023	2.1	1.4	--	NG/L	105.00		
Perfluorooctanesulfonate (PFOS)	02/06/2023	48	1.4	--	NG/L	105.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
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Site ID : 084-03

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorooctanoic acid (PFOA)	02/06/2023	1.8	1.4	--	NG/L	105.00		
Perfluoropentanesulfonate (PFPeS)	02/06/2023	3.3	1.4	--	NG/L	105.00		
Perfluoropentanoic acid (PFPeA)	02/06/2023	2.2	2.8	--	NG/L	105.00	J	
solids-tot	02/06/2023	20	4	--	MG/L	105.00		

Site ID : 084-04

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/06/2023	7.28	--	--	NG/L	150.00		
Perfluorobutanesulfonate (PFBS)	02/06/2023	0.46	1.5	--	NG/L	150.00	J	
Perfluorobutyric acid (PFBA)	02/06/2023	0.55	6	--	NG/L	150.00	J	
Perfluorohexanesulfonate (PFHxS)	02/06/2023	2.9	1.5	--	NG/L	150.00		
Perfluorooctanesulfonate (PFOS)	02/06/2023	3	1.5	--	NG/L	150.00		
Perfluoropentanesulfonate (PFPeS)	02/06/2023	0.37	1.5	--	NG/L	150.00	J	

Site ID : 084-28

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/07/2023	121.79	--	--	NG/L	55.50		
Perfluorobutanesulfonate (PFBS)	02/07/2023	9.5	1.5	--	NG/L	55.50		
Perfluorobutyric acid (PFBA)	02/07/2023	12	6.2	--	NG/L	55.50		
Perfluorodecanoic acid (PFDA)	02/07/2023	3.5	1.5	--	NG/L	55.50		
Perfluorododecanoic acid (PFDoA)	02/07/2023	0.79	1.5	--	NG/L	55.50	J	
Perfluoroheptanoic acid (PFHpA)	02/07/2023	6.6	1.5	--	NG/L	55.50		
Perfluorohexanesulfonate (PFHxS)	02/07/2023	15	1.5	--	NG/L	55.50		
Perfluorohexanoic acid (PFHxA)	02/07/2023	10	1.5	--	NG/L	55.50		
Perfluorononanoic acid (PFNA)	02/07/2023	8.7	1.5	--	NG/L	55.50		
Perfluorooctanesulfonate (PFOS)	02/07/2023	26	1.5	--	NG/L	55.50		
Perfluorooctanoic acid (PFOA)	02/07/2023	12	1.5	--	NG/L	55.50		
Perfluoropentanesulfonate (PFPeS)	02/07/2023	1.5	1.5	--	NG/L	55.50		
Perfluoropentanoic acid (PFPeA)	02/07/2023	9.5	3.1	--	NG/L	55.50		
Perfluoroundecanoic acid (PFUdA)	02/07/2023	6.7	1.5	--	NG/L	55.50		

Site ID : 084-86

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/02/2023	35.73	--	--	NG/L	125.00		
Perfluorobutanesulfonate (PFBS)	02/02/2023	0.76	1.4	--	NG/L	125.00	J	
Perfluorobutyric acid (PFBA)	02/02/2023	1.3	5.7	--	NG/L	125.00	J	

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 084-86

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluoroheptanoic acid (PFHpA)	02/02/2023	0.58	1.4	--	NG/L	125.00	J	
Perfluorohexanesulfonate (PFHxS)	02/02/2023	7.8	1.4	--	NG/L	125.00		
Perfluorohexanoic acid (PFHxA)	02/02/2023	2.8	1.4	--	NG/L	125.00		
Perfluorononanoic acid (PFNA)	02/02/2023	1.4	1.4	--	NG/L	125.00		
Perfluorooctane sulfonamide (PFOSAm)	02/02/2023	0.2	1.4	--	NG/L	125.00	J	
Perfluorooctanesulfonate (PFOS)	02/02/2023	19	1.4	--	NG/L	125.00		
Perfluoropentanesulfonate (PFPeS)	02/02/2023	0.95	1.4	--	NG/L	125.00	J	
Perfluoropentanoic acid (PFPeA)	02/02/2023	0.94	2.8	--	NG/L	125.00	J	

Site ID : 084-87

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/02/2023	436.94	--	--	NG/L	65.00		
Perfluorobutanesulfonate (PFBS)	02/02/2023	5.7	1.5	--	NG/L	65.00		
Perfluorobutyric acid (PFBA)	02/02/2023	4	5.9	--	NG/L	65.00	J	
Perfluorodecanoic acid (PFDA)	02/02/2023	0.34	1.5	--	NG/L	65.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/02/2023	3.7	1.5	--	NG/L	65.00		
Perfluoroheptanoic acid (PFHpA)	02/02/2023	4.3	1.5	--	NG/L	65.00		
Perfluorohexanesulfonate (PFHxS)	02/02/2023	79	1.5	--	NG/L	65.00		
Perfluorohexanoic acid (PFHxA)	02/02/2023	11	1.5	--	NG/L	65.00		
Perfluorononanoic acid (PFNA)	02/02/2023	5.4	1.5	--	NG/L	65.00		
Perfluorooctane sulfonamide (PFOSAm)	02/02/2023	6.7	1.5	--	NG/L	65.00		
Perfluorooctanesulfonate (PFOS)	02/02/2023	280	1.5	--	NG/L	65.00		
Perfluorooctanoic acid (PFOA)	02/02/2023	23	1.5	--	NG/L	65.00		
Perfluoropentanesulfonate (PFPeS)	02/02/2023	6.2	1.5	--	NG/L	65.00		
Perfluoropentanoic acid (PFPeA)	02/02/2023	7.6	3	--	NG/L	65.00		

Site ID : 084-88

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/02/2023	36.18	--	--	NG/L	95.00		
Perfluorobutanesulfonate (PFBS)	02/02/2023	0.39	1.5	--	NG/L	95.00	J	
Perfluorobutyric acid (PFBA)	02/02/2023	1	6	--	NG/L	95.00	J	
Perfluoroheptanoic acid (PFHpA)	02/02/2023	0.77	1.5	--	NG/L	95.00	J	
Perfluorohexanesulfonate (PFHxS)	02/02/2023	5.6	1.5	--	NG/L	95.00		
Perfluorohexanoic acid (PFHxA)	02/02/2023	1.8	1.5	--	NG/L	95.00		
Perfluorononanoic acid (PFNA)	02/02/2023	0.51	1.5	--	NG/L	95.00	J	

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 084-88

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorooctane sulfonamide (PFOSAm)	02/02/2023	1.2	1.5	--	NG/L	95.00	J	
Perfluorooctanesulfonate (PFOS)	02/02/2023	23	1.5	--	NG/L	95.00		
Perfluoropentanesulfonate (PFPeS)	02/02/2023	0.51	1.5	--	NG/L	95.00	J	
Perfluoropentanoic acid (PFPeA)	02/02/2023	1.4	3	--	NG/L	95.00	J	

Site ID : 084-89

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/02/2023	955.4	--	--	NG/L	125.00		
Fluorotelomer sulfonate 6:2 (6:2 FTS)	02/02/2023	3.5	5.6	--	NG/L	125.00	J	
Perfluorobutanesulfonate (PFBS)	02/02/2023	9.3	1.4	--	NG/L	125.00		
Perfluorobutyric acid (PFBA)	02/02/2023	6.4	5.6	--	NG/L	125.00		
Perfluoroheptanesulfonate (PFHpS)	02/02/2023	10	1.4	--	NG/L	125.00		
Perfluoroheptanoic acid (PFHpA)	02/02/2023	8.3	1.4	--	NG/L	125.00		
Perfluorohexanesulfonate (PFHxS)	02/02/2023	200	1.4	--	NG/L	125.00		
Perfluorohexanoic acid (PFHxA)	02/02/2023	24	1.4	--	NG/L	125.00		
Perfluorononanoic acid (PFNA)	02/02/2023	1.2	1.4	--	NG/L	125.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/02/2023	2.7	1.4	--	NG/L	125.00		
Perfluorooctanesulfonate (PFOS)	02/02/2023	630	15	--	NG/L	125.00	D	
Perfluorooctanoic acid (PFOA)	02/02/2023	21	1.5	--	NG/L	125.00		
Perfluoropentanesulfonate (PFPeS)	02/02/2023	20	1.4	--	NG/L	125.00		
Perfluoropentanoic acid (PFPeA)	02/02/2023	19	2.8	--	NG/L	125.00		

Site ID : 084-90

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/12/2023	428.7	--	--	NG/L	95.00		
Perfluorobutanesulfonate (PFBS)	01/12/2023	1.5	1.4	--	NG/L	95.00		
Perfluorobutyric acid (PFBA)	01/12/2023	1.1	5.7	--	NG/L	95.00	J	
Perfluorodecanoic acid (PFDA)	01/12/2023	0.21	1.4	--	NG/L	95.00	J	
Perfluoroheptanesulfonate (PFHpS)	01/12/2023	4.2	1.4	--	NG/L	95.00		
Perfluoroheptanoic acid (PFHpA)	01/12/2023	1.6	1.4	--	NG/L	95.00		
Perfluorohexanesulfonate (PFHxS)	01/12/2023	46	1.4	--	NG/L	95.00		
Perfluorohexanoic acid (PFHxA)	01/12/2023	6.2	1.4	--	NG/L	95.00		
Perfluorononanoic acid (PFNA)	01/12/2023	98	1.4	--	NG/L	95.00		
Perfluorooctane sulfonamide (PFOSAm)	01/12/2023	0.39	1.4	--	NG/L	95.00	J	
Perfluorooctanesulfonate (PFOS)	01/12/2023	260	1.4	--	NG/L	95.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 084-90

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorooctanoic acid (PFOA)	01/12/2023	4.8	1.4	--	NG/L	95.00		
Perfluoropentanesulfonate (PFPeS)	01/12/2023	2	1.4	--	NG/L	95.00		
Perfluoropentanoic acid (PFPeA)	01/12/2023	2.7	2.9	--	NG/L	95.00	J	

Site ID : 084-91

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/12/2023	100.9	--	--	NG/L	125.00		
Perfluorobutanesulfonate (PFBS)	01/12/2023	2.1	1.6	--	NG/L	125.00		
Perfluorobutyric acid (PFBA)	01/12/2023	1.7	6.2	--	NG/L	125.00	J	
Perfluoroheptanoic acid (PFHpA)	01/12/2023	1.3	1.6	--	NG/L	125.00	J	
Perfluorohexanesulfonate (PFHxS)	01/12/2023	23	1.6	--	NG/L	125.00		
Perfluorohexanoic acid (PFHxA)	01/12/2023	5.7	1.6	--	NG/L	125.00		
Perfluorononanoic acid (PFNA)	01/12/2023	1.2	1.6	--	NG/L	125.00	J	
Perfluorooctanesulfonate (PFOS)	01/12/2023	56	1.6	--	NG/L	125.00		
Perfluorooctanoic acid (PFOA)	01/12/2023	5	1.6	--	NG/L	125.00		
Perfluoropentanesulfonate (PFPeS)	01/12/2023	2.7	1.6	--	NG/L	125.00		
Perfluoropentanoic acid (PFPeA)	01/12/2023	2.2	3.1	--	NG/L	125.00	J	

Site ID : 084-92

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/12/2023	1714.35	--	--	NG/L	145.00		
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/12/2023	2	6.3	--	NG/L	145.00	J	
Perfluorobutanesulfonate (PFBS)	01/12/2023	28	1.6	--	NG/L	145.00		
Perfluorobutyric acid (PFBA)	01/12/2023	11	6.3	--	NG/L	145.00		
Perfluoroheptanesulfonate (PFHpS)	01/12/2023	15	1.6	--	NG/L	145.00		
Perfluoroheptanoic acid (PFHpA)	01/12/2023	9.9	1.6	--	NG/L	145.00		
Perfluorohexanesulfonate (PFHxS)	01/12/2023	370	1.6	--	NG/L	145.00		
Perfluorohexanoic acid (PFHxA)	01/12/2023	69	1.6	--	NG/L	145.00		
Perfluorononanoic acid (PFNA)	01/12/2023	1	1.6	--	NG/L	145.00	J	
Perfluorooctane sulfonamide (PFOSAm)	01/12/2023	0.45	1.6	--	NG/L	145.00	J	
Perfluorooctanesulfonate (PFOS)	01/12/2023	1100	3.1	--	NG/L	145.00	D	
Perfluorooctanoic acid (PFOA)	01/12/2023	34	1.6	--	NG/L	145.00		
Perfluoropentanesulfonate (PFPeS)	01/12/2023	35	1.6	--	NG/L	145.00		
Perfluoropentanoic acid (PFPeA)	01/12/2023	39	3.1	--	NG/L	145.00		

Site ID : 084-93

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/23/2023	182.15	--	--	NG/L	95.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 084-93

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorobutanesulfonate (PFBS)	01/23/2023	1.9	1.6	--	NG/L	95.00		
Perfluorobutyric acid (PFBA)	01/23/2023	1.2	6.5	--	NG/L	95.00	J	
Perfluoroheptanesulfonate (PFHpS)	01/23/2023	1.1	1.6	--	NG/L	95.00	J	
Perfluoroheptanoic acid (PFHpA)	01/23/2023	1.1	1.6	--	NG/L	95.00	J	
Perfluorohexanesulfonate (PFHxS)	01/23/2023	30	1.6	--	NG/L	95.00		
Perfluorohexanoic acid (PFHxA)	01/23/2023	3.4	1.6	--	NG/L	95.00		
Perfluorononanoic acid (PFNA)	01/23/2023	70	1.6	--	NG/L	95.00		
Perfluorooctane sulfonamide (PFOSAm)	01/23/2023	0.55	1.6	--	NG/L	95.00	J	
Perfluorooctanesulfonate (PFOS)	01/23/2023	64	1.6	--	NG/L	95.00		
Perfluorooctanoic acid (PFOA)	01/23/2023	4.7	1.6	--	NG/L	95.00		
Perfluoropentanesulfonate (PFPeS)	01/23/2023	2.2	1.6	--	NG/L	95.00		
Perfluoropentanoic acid (PFPeA)	01/23/2023	2	3.2	--	NG/L	95.00	J	

Site ID : 084-94

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/23/2023	245.77	--	--	NG/L	125.00		
Perfluorobutanesulfonate (PFBS)	01/23/2023	5.7	1.5	--	NG/L	125.00		
Perfluorobutyric acid (PFBA)	01/23/2023	4.1	5.8	--	NG/L	125.00	J	
Perfluoroheptanesulfonate (PFHpS)	01/23/2023	2.5	1.5	--	NG/L	125.00		
Perfluoroheptanoic acid (PFHpA)	01/23/2023	4	1.5	--	NG/L	125.00		
Perfluorohexanesulfonate (PFHxS)	01/23/2023	69	1.5	--	NG/L	125.00		
Perfluorohexanoic acid (PFHxA)	01/23/2023	13	1.5	--	NG/L	125.00		
Perfluorononanoic acid (PFNA)	01/23/2023	1.1	1.5	--	NG/L	125.00	J	
Perfluorooctane sulfonamide (PFOSAm)	01/23/2023	0.77	1.5	--	NG/L	125.00	J	
Perfluorooctanesulfonate (PFOS)	01/23/2023	110	1.5	--	NG/L	125.00		
Perfluorooctanoic acid (PFOA)	01/23/2023	17	1.5	--	NG/L	125.00		
Perfluoropentanesulfonate (PFPeS)	01/23/2023	8.7	1.5	--	NG/L	125.00		
Perfluoropentanoic acid (PFPeA)	01/23/2023	9.9	2.9	--	NG/L	125.00		

Site ID : 084-95

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/24/2023	10.15	--	--	NG/L	145.00		
1,4-Dioxane	01/24/2023	1.5	0.2	--	UG/L	145.00		
Perfluorobutanesulfonate (PFBS)	01/24/2023	1.2	3.2	--	NG/L	145.00	J	
Perfluorobutyric acid (PFBA)	01/24/2023	1.5	13	--	NG/L	145.00	J	

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 084-95

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorohexanesulfonate (PFHxS)	01/24/2023	5.7	3.2	--	NG/L	145.00		
Perfluoropentanesulfonate (PFPeS)	01/24/2023	0.96	3.2	--	NG/L	145.00	J	
Perfluoropentanoic acid (PFPeA)	01/24/2023	0.79	6.4	--	NG/L	145.00	J	

Site ID : 084-96

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/24/2023	2708.2	--	--	NG/L	95.00		
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/24/2023	3.4	6	--	NG/L	95.00	J	
Perfluorobutanesulfonate (PFBS)	01/24/2023	28	1.5	--	NG/L	95.00		
Perfluorobutyric acid (PFBA)	01/24/2023	14	6	--	NG/L	95.00		
Perfluoroheptanesulfonate (PFHpS)	01/24/2023	33	1.5	--	NG/L	95.00		
Perfluoroheptanoic acid (PFHpA)	01/24/2023	20	1.5	--	NG/L	95.00		
Perfluorohexanesulfonate (PFHxS)	01/24/2023	520	1.5	--	NG/L	95.00		
Perfluorohexanoic acid (PFHxA)	01/24/2023	79	1.5	--	NG/L	95.00		
Perfluorononanoic acid (PFNA)	01/24/2023	1.2	1.5	--	NG/L	95.00	J	
Perfluorooctane sulfonamide (PFOSAm)	01/24/2023	1.6	1.5	--	NG/L	95.00		
Perfluorooctanesulfonate (PFOS)	01/24/2023	1700	15	--	NG/L	95.00	D	
Perfluorooctanoic acid (PFOA)	01/24/2023	210	1.5	--	NG/L	95.00		
Perfluoropentanesulfonate (PFPeS)	01/24/2023	41	1.5	--	NG/L	95.00		
Perfluoropentanoic acid (PFPeA)	01/24/2023	57	3	--	NG/L	95.00		

Site ID : 084-97

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/24/2023	950.83	--	--	NG/L	125.00		
1,4-Dioxane	01/24/2023	0.14	0.2	--	UG/L	125.00	J	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/24/2023	0.91	6.2	--	NG/L	125.00	J	
Perfluorobutanesulfonate (PFBS)	01/24/2023	14	1.5	--	NG/L	125.00		
Perfluorobutyric acid (PFBA)	01/24/2023	7.1	6.2	--	NG/L	125.00		
Perfluoroheptanesulfonate (PFHpS)	01/24/2023	10	1.5	--	NG/L	125.00		
Perfluoroheptanoic acid (PFHpA)	01/24/2023	7.9	1.5	--	NG/L	125.00		
Perfluorohexanesulfonate (PFHxS)	01/24/2023	190	1.5	--	NG/L	125.00		
Perfluorohexanoic acid (PFHxA)	01/24/2023	43	1.5	--	NG/L	125.00		
Perfluorononanoic acid (PFNA)	01/24/2023	1.8	1.5	--	NG/L	125.00		
Perfluorooctane sulfonamide (PFOSAm)	01/24/2023	0.12	1.5	--	NG/L	125.00	J	
Perfluorooctanesulfonate (PFOS)	01/24/2023	600	15	--	NG/L	125.00	D	

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 084-97

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorooctanoic acid (PFOA)	01/24/2023	38	1.5	--	NG/L	125.00		
Perfluoropentanesulfonate (PFPeS)	01/24/2023	14	1.5	--	NG/L	125.00		
Perfluoropentanoic acid (PFPeA)	01/24/2023	24	3.1	--	NG/L	125.00		

Site ID : 084-98

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/07/2023	8.4	--	--	NG/L	145.00		
1,4-Dioxane	02/07/2023	1.6	0.2	--	UG/L	145.00		
Perfluorobutanesulfonate (PFBS)	02/07/2023	2.7	3.2	--	NG/L	145.00	J	
Perfluorohexanesulfonate (PFHxS)	02/07/2023	3.8	3.2	--	NG/L	145.00		
Perfluoropentanesulfonate (PFPeS)	02/07/2023	1.9	3.2	--	NG/L	145.00	J	

Site ID : 093-04

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/22/2023	3693.7	--	--	NG/L	49.00		
Fluorotelomer sulfonate 6:2 (6:2 FTS)	02/22/2023	6.5	5.7	--	NG/L	49.00		
Perfluorobutanesulfonate (PFBS)	02/22/2023	77	1.4	--	NG/L	49.00		
Perfluorobutyric acid (PFBA)	02/22/2023	20	5.7	--	NG/L	49.00		
Perfluoroheptanesulfonate (PFHpS)	02/22/2023	46	1.4	--	NG/L	49.00		
Perfluoroheptanoic acid (PFHpA)	02/22/2023	43	1.4	--	NG/L	49.00		
Perfluorohexanesulfonate (PFHxS)	02/22/2023	1300	14	--	NG/L	49.00	D	
Perfluorohexanoic acid (PFHxA)	02/22/2023	84	1.4	--	NG/L	49.00		
Perfluorononanoic acid (PFNA)	02/22/2023	4.2	1.4	--	NG/L	49.00		
Perfluorooctanesulfonate (PFOS)	02/22/2023	1900	14	--	NG/L	49.00	D	
Perfluorooctanoic acid (PFOA)	02/22/2023	85	1.4	--	NG/L	49.00		
Perfluoropentanesulfonate (PFPeS)	02/22/2023	86	1.4	--	NG/L	49.00		
Perfluoropentanoic acid (PFPeA)	02/22/2023	42	2.8	--	NG/L	49.00		

Site ID : 093-88

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/03/2023	2.54	--	--	NG/L	125.00		
Perfluorohexanesulfonate (PFHxS)	02/03/2023	0.74	1.4	--	NG/L	125.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/03/2023	0.8	1.4	--	NG/L	125.00	J	
Perfluorooctanesulfonate (PFOS)	02/03/2023	1	1.4	--	NG/L	125.00	J	

Site ID : 093-89

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/30/2023	10.07	--	--	NG/L	75.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 093-89

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/30/2023	1.2	6.2	--	NG/L	75.00	J	
Perfluorobutanesulfonate (PFBS)	01/30/2023	0.65	1.6	--	NG/L	75.00	J	
Perfluorobutyric acid (PFBA)	01/30/2023	1.3	6.2	--	NG/L	75.00	J	
Perfluoroheptanoic acid (PFHpA)	01/30/2023	0.61	1.6	--	NG/L	75.00	J	
Perfluorohexanesulfonate (PFHxS)	01/30/2023	0.97	1.6	--	NG/L	75.00	J	
Perfluorononanoic acid (PFNA)	01/30/2023	0.76	1.6	--	NG/L	75.00	J	
Perfluorooctanesulfonate (PFOS)	01/30/2023	4	1.6	--	NG/L	75.00		
Perfluoropentanoic acid (PFPeA)	01/30/2023	0.58	3.1	--	NG/L	75.00	J	

Site ID : 093-90

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/30/2023	11.1	--	--	NG/L	105.00		
Perfluorobutanesulfonate (PFBS)	01/30/2023	0.35	1.5	--	NG/L	105.00	J	
Perfluorobutyric acid (PFBA)	01/30/2023	0.81	6.1	--	NG/L	105.00	J	
Perfluoroheptanoic acid (PFHpA)	01/30/2023	0.36	1.5	--	NG/L	105.00	J	
Perfluorohexanesulfonate (PFHxS)	01/30/2023	1.6	1.5	--	NG/L	105.00		
Perfluorohexanoic acid (PFHxA)	01/30/2023	1.2	1.5	--	NG/L	105.00	J	
Perfluorononanoic acid (PFNA)	01/30/2023	0.26	1.5	--	NG/L	105.00	J	
Perfluorooctanesulfonate (PFOS)	01/30/2023	5.9	1.5	--	NG/L	105.00		
Perfluoropentanoic acid (PFPeA)	01/30/2023	0.62	3	--	NG/L	105.00	J	

Site ID : 093-91

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/30/2023	48.03	--	--	NG/L	85.00		
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/30/2023	3.8	6.1	--	NG/L	85.00	J	
Perfluorobutanesulfonate (PFBS)	01/30/2023	0.53	1.5	--	NG/L	85.00	J	
Perfluorobutyric acid (PFBA)	01/30/2023	2.1	6.1	--	NG/L	85.00	J	
Perfluoroheptanoic acid (PFHpA)	01/30/2023	1.4	1.5	--	NG/L	85.00	J	
Perfluorohexanesulfonate (PFHxS)	01/30/2023	5.1	1.5	--	NG/L	85.00		
Perfluorohexanoic acid (PFHxA)	01/30/2023	4.8	1.5	--	NG/L	85.00		
Perfluorononanoic acid (PFNA)	01/30/2023	2	1.5	--	NG/L	85.00		
Perfluorooctanesulfonate (PFOS)	01/30/2023	22	1.5	--	NG/L	85.00		
Perfluorooctanoic acid (PFOA)	01/30/2023	3.3	1.5	--	NG/L	85.00		
Perfluoropentanoic acid (PFPeA)	01/30/2023	3	3.1	--	NG/L	85.00	J	

Site ID : 093-92

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/30/2023	124.26	--	--	NG/L	105.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 093-92

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/30/2023	11	5.7	--	NG/L	105.00		
Perfluorobutanesulfonate (PFBS)	01/30/2023	1.3	1.4	--	NG/L	105.00	J	
Perfluorobutyric acid (PFBA)	01/30/2023	2.3	5.7	--	NG/L	105.00	J	
Perfluoroheptanoic acid (PFHpA)	01/30/2023	1.4	1.4	--	NG/L	105.00		
Perfluorohexanesulfonate (PFHxS)	01/30/2023	17	1.4	--	NG/L	105.00		
Perfluorohexanoic acid (PFHxA)	01/30/2023	8.8	1.4	--	NG/L	105.00		
Perfluorononanoic acid (PFNA)	01/30/2023	3.1	1.4	--	NG/L	105.00		
Perfluorooctanesulfonate (PFOS)	01/30/2023	73	1.4	--	NG/L	105.00		
Perfluorooctanoic acid (PFOA)	01/30/2023	2.9	1.4	--	NG/L	105.00		
Perfluoropentanesulfonate (PFPeS)	01/30/2023	0.96	1.4	--	NG/L	105.00	J	
Perfluoropentanoic acid (PFPeA)	01/30/2023	2.5	2.9	--	NG/L	105.00	J	

Site ID : 093-93

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/03/2023	148.47	--	--	NG/L	60.00		
Perfluorobutanesulfonate (PFBS)	02/03/2023	1	1.5	--	NG/L	60.00	J	
Perfluorobutyric acid (PFBA)	02/03/2023	0.83	6	--	NG/L	60.00	J	
Perfluoroheptanoic acid (PFHpA)	02/03/2023	0.88	1.5	--	NG/L	60.00	J	
Perfluorohexanesulfonate (PFHxS)	02/03/2023	46	1.5	--	NG/L	60.00		
Perfluorohexanoic acid (PFHxA)	02/03/2023	2.9	1.5	--	NG/L	60.00		
Perfluorooctanesulfonate (PFOS)	02/03/2023	93	1.5	--	NG/L	60.00		
Perfluoropentanesulfonate (PFPeS)	02/03/2023	3.3	1.5	--	NG/L	60.00		
Perfluoropentanoic acid (PFPeA)	02/03/2023	0.56	3	--	NG/L	60.00	J	
solids-tot	02/03/2023	30	4	--	MG/L	60.00		

Site ID : 093-94

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/03/2023	7330.87	--	--	NG/L	50.00		
Fluorotelomer sulfonate 6:2 (6:2 FTS)	02/03/2023	1.1	5.5	--	NG/L	50.00	J	
Perfluorobutanesulfonate (PFBS)	02/03/2023	170	1.4	--	NG/L	50.00		
Perfluorobutyric acid (PFBA)	02/03/2023	18	5.5	--	NG/L	50.00		
Perfluoroheptanesulfonate (PFHpS)	02/03/2023	150	1.4	--	NG/L	50.00		
Perfluoroheptanoic acid (PFHpA)	02/03/2023	17	1.4	--	NG/L	50.00		
Perfluorohexanesulfonate (PFHxS)	02/03/2023	2400	15	--	NG/L	50.00	D	
Perfluorohexanoic acid (PFHxA)	02/03/2023	190	1.4	--	NG/L	50.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 093-94

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorononanoic acid (PFNA)	02/03/2023	0.77	1.4	--	NG/L	50.00	J	
Perfluorooctanesulfonate (PFOS)	02/03/2023	3800	15	--	NG/L	50.00	D	
Perfluorooctanoic acid (PFOA)	02/03/2023	87	1.5	--	NG/L	50.00		
Perfluoropentanesulfonate (PFPeS)	02/03/2023	450	1.4	--	NG/L	50.00		
Perfluoropentanoic acid (PFPeA)	02/03/2023	47	2.7	--	NG/L	50.00		
solids-tot	02/03/2023	20	4	--	MG/L	50.00		

Site ID : 093-95

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/03/2023	372.1	--	--	NG/L	65.00		
Perfluorobutanesulfonate (PFBS)	02/03/2023	3.4	1.7	--	NG/L	65.00		
Perfluorobutyric acid (PFBA)	02/03/2023	2.5	6.8	--	NG/L	65.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/03/2023	2.5	1.7	--	NG/L	65.00		
Perfluoroheptanoic acid (PFHpA)	02/03/2023	2.8	1.7	--	NG/L	65.00		
Perfluorohexanesulfonate (PFHxS)	02/03/2023	70	1.7	--	NG/L	65.00		
Perfluorohexanoic acid (PFHxA)	02/03/2023	6.7	1.7	--	NG/L	65.00		
Perfluorooctanesulfonate (PFOS)	02/03/2023	270	1.7	--	NG/L	65.00		
Perfluorooctanoic acid (PFOA)	02/03/2023	3	1.7	--	NG/L	65.00		
Perfluoropentanesulfonate (PFPeS)	02/03/2023	6.5	1.7	--	NG/L	65.00		
Perfluoropentanoic acid (PFPeA)	02/03/2023	4.7	3.4	--	NG/L	65.00		
solids-tot	02/03/2023	20	4	--	MG/L	65.00		

Site ID : 093-96

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/03/2023	275.26	--	--	NG/L	60.00		
Perfluorobutanesulfonate (PFBS)	02/03/2023	13	1.5	--	NG/L	60.00		
Perfluorobutyric acid (PFBA)	02/03/2023	1.5	5.9	--	NG/L	60.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/03/2023	5.9	1.5	--	NG/L	60.00		
Perfluoroheptanoic acid (PFHpA)	02/03/2023	0.96	1.5	--	NG/L	60.00	J	
Perfluorohexanesulfonate (PFHxS)	02/03/2023	150	1.5	--	NG/L	60.00		
Perfluorohexanoic acid (PFHxA)	02/03/2023	7.3	1.5	--	NG/L	60.00		
Perfluorooctanesulfonate (PFOS)	02/03/2023	68	1.5	--	NG/L	60.00		
Perfluorooctanoic acid (PFOA)	02/03/2023	10	1.6	--	NG/L	60.00		
Perfluoropentanesulfonate (PFPeS)	02/03/2023	16	1.5	--	NG/L	60.00		
Perfluoropentanoic acid (PFPeA)	02/03/2023	2.6	3	--	NG/L	60.00	J	

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 093-96

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
solids-tot	02/03/2023	90	4	--	MG/L	60.00		

Site ID : 093-97

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/03/2023	346.7	--	--	NG/L	63.00		
Perfluorobutanesulfonate (PFBS)	02/03/2023	4.9	1.5	--	NG/L	63.00		
Perfluorobutyric acid (PFBA)	02/03/2023	1.7	6.1	--	NG/L	63.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/03/2023	3.2	1.5	--	NG/L	63.00		
Perfluoroheptanoic acid (PFHpA)	02/03/2023	2.4	1.5	--	NG/L	63.00		
Perfluorohexanesulfonate (PFHxS)	02/03/2023	190	1.5	--	NG/L	63.00		
Perfluorohexanoic acid (PFHxA)	02/03/2023	7.4	1.5	--	NG/L	63.00		
Perfluorooctanesulfonate (PFOS)	02/03/2023	110	1.5	--	NG/L	63.00		
Perfluorooctanoic acid (PFOA)	02/03/2023	11	1.5	--	NG/L	63.00		
Perfluoropentanesulfonate (PFPeS)	02/03/2023	14	1.5	--	NG/L	63.00		
Perfluoropentanoic acid (PFPeA)	02/03/2023	2.1	3	--	NG/L	63.00	J	
solids-tot	02/03/2023	10	4	--	MG/L	63.00		

Site ID : 093-98

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/03/2023	2062.5	--	--	NG/L	65.00		
Fluorotelomer sulfonate 6:2 (6:2 FTS)	02/03/2023	5.6	6.2	--	NG/L	65.00	J	
Perfluorobutanesulfonate (PFBS)	02/03/2023	19	1.5	--	NG/L	65.00		
Perfluorobutyric acid (PFBA)	02/03/2023	8.8	6.2	--	NG/L	65.00		
Perfluoroheptanesulfonate (PFHpS)	02/03/2023	24	1.5	--	NG/L	65.00		
Perfluoroheptanoic acid (PFHpA)	02/03/2023	9.2	1.5	--	NG/L	65.00		
Perfluorohexanesulfonate (PFHxS)	02/03/2023	470	1.5	--	NG/L	65.00		
Perfluorohexanoic acid (PFHxA)	02/03/2023	63	1.5	--	NG/L	65.00		
Perfluorononanoic acid (PFNA)	02/03/2023	0.9	1.5	--	NG/L	65.00	J	
Perfluorooctanesulfonate (PFOS)	02/03/2023	1400	17	--	NG/L	65.00	D	
Perfluoropentanesulfonate (PFPeS)	02/03/2023	39	1.5	--	NG/L	65.00		
Perfluoropentanoic acid (PFPeA)	02/03/2023	23	3.1	--	NG/L	65.00		
solids-tot	02/03/2023	10	4	--	MG/L	65.00		

Site ID : 094-275

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/25/2023	21.15	--	--	NG/L	85.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 094-275

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorobutanesulfonate (PFBS)	01/25/2023	0.53	1.5	--	NG/L	85.00	J	
Perfluorobutyric acid (PFBA)	01/25/2023	1.6	6	--	NG/L	85.00	J	
Perfluoroheptanoic acid (PFHpA)	01/25/2023	0.62	1.5	--	NG/L	85.00	J	
Perfluorohexanesulfonate (PFHxS)	01/25/2023	4.2	1.5	--	NG/L	85.00		
Perfluorohexanoic acid (PFHxA)	01/25/2023	1.9	1.5	--	NG/L	85.00		
Perfluorononanoic acid (PFNA)	01/25/2023	1.4	1.5	--	NG/L	85.00	J	
Perfluorooctane sulfonamide (PFOSAm)	01/25/2023	0.1	1.5	--	NG/L	85.00	J	
Perfluorooctanesulfonate (PFOS)	01/25/2023	9.7	1.5	--	NG/L	85.00		
Perfluoropentanoic acid (PFPeA)	01/25/2023	1.1	3	--	NG/L	85.00	J	

Site ID : 094-276

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/25/2023	118.65	--	--	NG/L	105.00		
Perfluorobutanesulfonate (PFBS)	01/25/2023	0.94	1.5	--	NG/L	105.00	J	
Perfluorobutyric acid (PFBA)	01/25/2023	0.94	6.1	--	NG/L	105.00	J	
Perfluoroheptanoic acid (PFHpA)	01/25/2023	0.67	1.5	--	NG/L	105.00	J	
Perfluorohexanesulfonate (PFHxS)	01/25/2023	18	1.5	--	NG/L	105.00		
Perfluorohexanoic acid (PFHxA)	01/25/2023	2.4	1.5	--	NG/L	105.00		
Perfluorononanoic acid (PFNA)	01/25/2023	11	1.5	--	NG/L	105.00		
Perfluorooctanesulfonate (PFOS)	01/25/2023	81	1.5	--	NG/L	105.00		
Perfluoropentanesulfonate (PFPeS)	01/25/2023	2.4	1.7	--	NG/L	105.00		
Perfluoropentanoic acid (PFPeA)	01/25/2023	1.3	3	--	NG/L	105.00	J	

Site ID : 094-277

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/01/2023	70.9	--	--	NG/L	75.00		
Perfluorobutanesulfonate (PFBS)	02/01/2023	1.2	1.5	--	NG/L	75.00	J	
Perfluorobutyric acid (PFBA)	02/01/2023	3.8	5.9	--	NG/L	75.00	J	
Perfluoroheptanoic acid (PFHpA)	02/01/2023	1.4	1.5	--	NG/L	75.00	J	
Perfluorohexanesulfonate (PFHxS)	02/01/2023	13	1.5	--	NG/L	75.00		
Perfluorohexanoic acid (PFHxA)	02/01/2023	2.8	1.5	--	NG/L	75.00		
Perfluorononanoic acid (PFNA)	02/01/2023	5.9	1.5	--	NG/L	75.00		
Perfluorooctanesulfonate (PFOS)	02/01/2023	36	1.5	--	NG/L	75.00		
Perfluorooctanoic acid (PFOA)	02/01/2023	3.4	1.6	--	NG/L	75.00		
Perfluoropentanesulfonate (PFPeS)	02/01/2023	1.1	1.5	--	NG/L	75.00	J	

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 094-277

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluoropentanoic acid (PFPeA)	02/01/2023	2.3	2.9	--	NG/L	75.00	J	

Site ID : 094-278

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/01/2023	285.9	--	--	NG/L	105.00		
Perfluorobutanesulfonate (PFBS)	02/01/2023	8.1	1.5	--	NG/L	105.00		
Perfluorobutyric acid (PFBA)	02/01/2023	5.6	6	--	NG/L	105.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/01/2023	2.1	1.5	--	NG/L	105.00		
Perfluoroheptanoic acid (PFHpA)	02/01/2023	5.4	1.5	--	NG/L	105.00		
Perfluorohexanesulfonate (PFHxS)	02/01/2023	82	1.5	--	NG/L	105.00		
Perfluorohexanoic acid (PFHxA)	02/01/2023	19	1.5	--	NG/L	105.00		
Perfluorononanoic acid (PFNA)	02/01/2023	3.4	1.5	--	NG/L	105.00		
Perfluorooctanesulfonate (PFOS)	02/01/2023	130	1.5	--	NG/L	105.00		
Perfluorooctanoic acid (PFOA)	02/01/2023	4.3	1.5	--	NG/L	105.00		
Perfluoropentanesulfonate (PFPeS)	02/01/2023	13	1.5	--	NG/L	105.00		
Perfluoropentanoic acid (PFPeA)	02/01/2023	13	3	--	NG/L	105.00		

Site ID : 102-12

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/22/2023	197.94	--	--	NG/L	58.00		
Perfluorobutanesulfonate (PFBS)	02/22/2023	5.8	1.4	--	NG/L	58.00		
Perfluorobutyric acid (PFBA)	02/22/2023	4.5	5.7	--	NG/L	58.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/22/2023	1.9	1.4	--	NG/L	58.00		
Perfluoroheptanoic acid (PFHpA)	02/22/2023	3.4	1.4	--	NG/L	58.00		
Perfluorohexanesulfonate (PFHxS)	02/22/2023	69	1.4	--	NG/L	58.00		
Perfluorohexanoic acid (PFHxA)	02/22/2023	7.7	1.4	--	NG/L	58.00		
Perfluorooctane sulfonamide (PFOSAm)	02/22/2023	0.24	1.4	--	NG/L	58.00	J	
Perfluorooctanesulfonate (PFOS)	02/22/2023	88	1.4	--	NG/L	58.00		
Perfluorooctanoic acid (PFOA)	02/22/2023	4.6	1.4	--	NG/L	58.00		
Perfluoropentanesulfonate (PFPeS)	02/22/2023	4	1.4	--	NG/L	58.00		
Perfluoropentanoic acid (PFPeA)	02/22/2023	8.8	2.8	--	NG/L	58.00		
Settleable Solids	02/22/2023	70	4	--	MG/L	58.00		

Site ID : 102-26

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/25/2023	89.43	--	--	NG/L	95.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 102-26

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorobutanesulfonate (PFBS)	01/25/2023	0.75	1.5	--	NG/L	95.00	J	
Perfluorobutyric acid (PFBA)	01/25/2023	1.3	5.8	--	NG/L	95.00	J	
Perfluoroheptanoic acid (PFHpA)	01/25/2023	0.68	1.5	--	NG/L	95.00	J	
Perfluorohexanesulfonate (PFHxS)	01/25/2023	26	1.5	--	NG/L	95.00		
Perfluorohexanoic acid (PFHxA)	01/25/2023	1.3	1.5	--	NG/L	95.00	J	
Perfluorooctanesulfonate (PFOS)	01/25/2023	55	1.5	--	NG/L	95.00		
Perfluorooctanoic acid (PFOA)	01/25/2023	1.9	1.5	--	NG/L	95.00		
Perfluoropentanesulfonate (PFPeS)	01/25/2023	1.5	1.6	--	NG/L	95.00	J	
Perfluoropentanoic acid (PFPeA)	01/25/2023	1	2.9	--	NG/L	95.00	J	

Site ID : 102-27

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/25/2023	10.57	--	--	NG/L	115.00		
Perfluorobutyric acid (PFBA)	01/25/2023	0.93	6	--	NG/L	115.00	J	
Perfluoroheptanoic acid (PFHpA)	01/25/2023	0.41	1.5	--	NG/L	115.00	J	
Perfluorohexanesulfonate (PFHxS)	01/25/2023	1.6	1.5	--	NG/L	115.00		
Perfluorohexanoic acid (PFHxA)	01/25/2023	0.93	1.5	--	NG/L	115.00	J	
Perfluorooctanesulfonate (PFOS)	01/25/2023	5.6	1.5	--	NG/L	115.00		
Perfluoropentanoic acid (PFPeA)	01/25/2023	1.1	3	--	NG/L	115.00	J	

Site ID : 102-28

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/25/2023	40.31	--	--	NG/L	145.00		
Perfluorobutanesulfonate (PFBS)	01/25/2023	1.2	3.2	--	NG/L	145.00	J	
Perfluorohexanesulfonate (PFHxS)	01/25/2023	20	3.2	--	NG/L	145.00		
Perfluorooctanesulfonate (PFOS)	01/25/2023	16	3.2	--	NG/L	145.00		
Perfluoropentanesulfonate (PFPeS)	01/25/2023	2.2	3.2	--	NG/L	145.00	J	
Perfluoropentanoic acid (PFPeA)	01/25/2023	0.91	6.4	--	NG/L	145.00	J	

Site ID : 102-29

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/26/2023	181.32	--	--	NG/L	95.00		
Perfluorobutanesulfonate (PFBS)	01/26/2023	1.3	1.6	--	NG/L	95.00	J	
Perfluorobutyric acid (PFBA)	01/26/2023	2.6	6.2	--	NG/L	95.00	J	
Perfluoroheptanoic acid (PFHpA)	01/26/2023	1.5	1.6	--	NG/L	95.00	J	
Perfluorohexanesulfonate (PFHxS)	01/26/2023	29	1.6	--	NG/L	95.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 102-29

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorohexanoic acid (PFHxA)	01/26/2023	10	1.6	--	NG/L	95.00		
Perfluorononanoic acid (PFNA)	01/26/2023	6.3	1.6	--	NG/L	95.00		
Perfluorooctane sulfonamide (PFOSAm)	01/26/2023	0.22	1.6	--	NG/L	95.00	J	
Perfluorooctanesulfonate (PFOS)	01/26/2023	120	1.6	--	NG/L	95.00		
Perfluorooctanoic acid (PFOA)	01/26/2023	3.2	1.6	--	NG/L	95.00		
Perfluoropentanesulfonate (PFPeS)	01/26/2023	2.2	1.6	--	NG/L	95.00		
Perfluoropentanoic acid (PFPeA)	01/26/2023	5	3.1	--	NG/L	95.00		

Site ID : 102-30

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/26/2023	129.36	--	--	NG/L	115.00		
Perfluorobutanesulfonate (PFBS)	01/26/2023	1.2	1.5	--	NG/L	115.00	J	
Perfluorobutyric acid (PFBA)	01/26/2023	1.7	6	--	NG/L	115.00	J	
Perfluoroheptanoic acid (PFHpA)	01/26/2023	0.65	1.5	--	NG/L	115.00	J	
Perfluorohexanesulfonate (PFHxS)	01/26/2023	18	1.5	--	NG/L	115.00		
Perfluorohexanoic acid (PFHxA)	01/26/2023	4.3	1.5	--	NG/L	115.00		
Perfluorononanoic acid (PFNA)	01/26/2023	5.2	1.5	--	NG/L	115.00		
Perfluorooctane sulfonamide (PFOSAm)	01/26/2023	0.21	1.5	--	NG/L	115.00	J	
Perfluorooctanesulfonate (PFOS)	01/26/2023	94	1.5	--	NG/L	115.00		
Perfluorooctanoic acid (PFOA)	01/26/2023	1.1	1.5	--	NG/L	115.00	J	
Perfluoropentanesulfonate (PFPeS)	01/26/2023	1	1.6	--	NG/L	115.00	J	
Perfluoropentanoic acid (PFPeA)	01/26/2023	2	3	--	NG/L	115.00	J	

Site ID : 102-31

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/26/2023	491.2	--	--	NG/L	135.00		
1,4-Dioxane	01/26/2023	0.32	0.2	--	UG/L	135.00		
Perfluorobutanesulfonate (PFBS)	01/26/2023	9.1	1.6	--	NG/L	135.00		
Perfluorobutyric acid (PFBA)	01/26/2023	4.2	6.3	--	NG/L	135.00	J	
Perfluoroheptanesulfonate (PFHpS)	01/26/2023	4.1	1.6	--	NG/L	135.00		
Perfluoroheptanoic acid (PFHpA)	01/26/2023	4.2	1.6	--	NG/L	135.00		
Perfluorohexanesulfonate (PFHxS)	01/26/2023	110	1.6	--	NG/L	135.00		
Perfluorohexanoic acid (PFHxA)	01/26/2023	22	1.6	--	NG/L	135.00		
Perfluorononanoic acid (PFNA)	01/26/2023	1.8	1.6	--	NG/L	135.00		
Perfluorooctanesulfonate (PFOS)	01/26/2023	300	1.6	--	NG/L	135.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 102-31

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorooctanoic acid (PFOA)	01/26/2023	16	1.6	--	NG/L	135.00		
Perfluoropentanesulfonate (PFPeS)	01/26/2023	13	1.6	--	NG/L	135.00		
Perfluoropentanoic acid (PFPeA)	01/26/2023	6.8	3.2	--	NG/L	135.00		

Site ID : 102-36

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/06/2023	5.7	--	--	NG/L	75.00		
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	02/06/2023	1.1	16	--	NG/L	75.00	J	
Perfluorohexanesulfonate (PFHxS)	02/06/2023	2.1	1.6	--	NG/L	75.00		
Perfluorooctanesulfonate (PFOS)	02/06/2023	2.5	1.6	--	NG/L	75.00		

Site ID : 102-37

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/06/2023	1762.84	--	--	NG/L	70.00		
Perfluorobutanesulfonate (PFBS)	02/06/2023	5.8	1.4	--	NG/L	70.00		
Perfluorobutyric acid (PFBA)	02/06/2023	4.9	5.7	--	NG/L	70.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/06/2023	33	1.4	--	NG/L	70.00		
Perfluoroheptanoic acid (PFHpA)	02/06/2023	7.1	1.4	--	NG/L	70.00		
Perfluorohexanesulfonate (PFHxS)	02/06/2023	340	1.4	--	NG/L	70.00		
Perfluorohexanoic acid (PFHxA)	02/06/2023	25	1.4	--	NG/L	70.00		
Perfluorononanoic acid (PFNA)	02/06/2023	0.84	1.4	--	NG/L	70.00	J	
Perfluorooctanesulfonate (PFOS)	02/06/2023	1300	14	--	NG/L	70.00	D	
Perfluorooctanoic acid (PFOA)	02/06/2023	20	1.4	--	NG/L	70.00		
Perfluoropentanesulfonate (PFPeS)	02/06/2023	18	1.4	--	NG/L	70.00		
Perfluoropentanoic acid (PFPeA)	02/06/2023	8.2	2.8	--	NG/L	70.00		

Site ID : 102-38

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	03/31/2023	18.36	--	--	NG/L	75.00		
Perfluorobutanesulfonate (PFBS)	03/31/2023	0.88	1.5	--	NG/L	75.00	J	
Perfluorobutyric acid (PFBA)	03/31/2023	1.1	5.9	--	NG/L	75.00	J	
Perfluoroheptanoic acid (PFHpA)	03/31/2023	0.8	1.5	--	NG/L	75.00	J	
Perfluorohexanesulfonate (PFHxS)	03/31/2023	4.5	1.5	--	NG/L	75.00		
Perfluorohexanoic acid (PFHxA)	03/31/2023	1.4	1.5	--	NG/L	75.00	J	
Perfluorononanoic acid (PFNA)	03/31/2023	0.72	1.5	--	NG/L	75.00	J	
Perfluorooctanesulfonate (PFOS)	03/31/2023	5.7	1.5	--	NG/L	75.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 102-38

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorooctanoic acid (PFOA)	03/31/2023	2.4	1.5	--	NG/L	75.00		
Perfluoropentanoic acid (PFPeA)	03/31/2023	0.86	2.9	--	NG/L	75.00	J	
solids-tot	03/31/2023	20	4	--	MG/L	75.00		

Site ID : 102-39

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/26/2023	468.2	--	--	NG/L	75.00		
Perfluorobutanesulfonate (PFBS)	01/26/2023	8.1	1.5	--	NG/L	75.00		
Perfluorobutyric acid (PFBA)	01/26/2023	2.5	6	--	NG/L	75.00	J	
Perfluoroheptanesulfonate (PFHpS)	01/26/2023	5.3	1.5	--	NG/L	75.00		
Perfluoroheptanoic acid (PFHpA)	01/26/2023	1.8	1.5	--	NG/L	75.00		
Perfluorohexanesulfonate (PFHxS)	01/26/2023	190	1.5	--	NG/L	75.00		
Perfluorohexanoic acid (PFHxA)	01/26/2023	12	1.5	--	NG/L	75.00		
Perfluorooctanesulfonate (PFOS)	01/26/2023	220	1.5	--	NG/L	75.00		
Perfluorooctanoic acid (PFOA)	01/26/2023	4.8	1.5	--	NG/L	75.00		
Perfluoropentanesulfonate (PFPeS)	01/26/2023	20	1.5	--	NG/L	75.00		
Perfluoropentanoic acid (PFPeA)	01/26/2023	3.7	3	--	NG/L	75.00		

Site ID : 102-40

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/26/2023	537.3	--	--	NG/L	140.00		
1,4-Dioxane	01/26/2023	2	0.2	--	UG/L	150.00		
Perfluorobutanesulfonate (PFBS)	01/26/2023	12	3.2	--	NG/L	140.00		
Perfluorobutyric acid (PFBA)	01/26/2023	3	13	--	NG/L	140.00	J	
Perfluoroheptanesulfonate (PFHpS)	01/26/2023	6.4	3.2	--	NG/L	140.00		
Perfluoroheptanoic acid (PFHpA)	01/26/2023	3	3.2	--	NG/L	140.00	J	
Perfluorohexanesulfonate (PFHxS)	01/26/2023	160	3.2	--	NG/L	140.00		
Perfluorohexanoic acid (PFHxA)	01/26/2023	17	3.2	--	NG/L	140.00		
Perfluorooctanesulfonate (PFOS)	01/26/2023	300	3.2	--	NG/L	140.00		
Perfluorooctanoic acid (PFOA)	01/26/2023	12	3.2	--	NG/L	140.00		
Perfluoropentanesulfonate (PFPeS)	01/26/2023	18	3.2	--	NG/L	140.00		
Perfluoropentanoic acid (PFPeA)	01/26/2023	5.9	6.4	--	NG/L	140.00	J	

Site ID : 103-10

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	03/28/2023	1.06	--	--	NG/L	65.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 103-10

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorobutyric acid (PFBA)	03/28/2023	0.61	6.1	--	NG/L	65.00	J	
Perfluorohexanesulfonate (PFHxS)	03/28/2023	0.45	1.5	--	NG/L	65.00	J	
solids-tot	03/28/2023	70	4	--	MG/L	65.00		

Site ID : 103-30

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/25/2023	236.7	--	--	NG/L	95.00		
Perfluorobutanesulfonate (PFBS)	01/25/2023	3.3	1.4	--	NG/L	95.00		
Perfluorobutyric acid (PFBA)	01/25/2023	2.7	5.5	--	NG/L	95.00	J	
Perfluoroheptanesulfonate (PFHpS)	01/25/2023	2.1	1.4	--	NG/L	95.00		
Perfluoroheptanoic acid (PFHpA)	01/25/2023	1.9	1.4	--	NG/L	95.00		
Perfluorohexanesulfonate (PFHxS)	01/25/2023	43	1.4	--	NG/L	95.00		
Perfluorohexanoic acid (PFHxA)	01/25/2023	6.9	1.4	--	NG/L	95.00		
Perfluorononanoic acid (PFNA)	01/25/2023	69	1.4	--	NG/L	95.00		
Perfluorooctanesulfonate (PFOS)	01/25/2023	96	1.4	--	NG/L	95.00		
Perfluorooctanoic acid (PFOA)	01/25/2023	4.4	1.4	--	NG/L	95.00		
Perfluoropentanesulfonate (PFPeS)	01/25/2023	3.2	1.4	--	NG/L	95.00		
Perfluoropentanoic acid (PFPeA)	01/25/2023	4.2	2.8	--	NG/L	95.00		

Site ID : 103-31

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/25/2023	412.75	--	--	NG/L	115.00		
Perfluorobutanesulfonate (PFBS)	01/25/2023	9.3	1.4	--	NG/L	115.00		
Perfluorobutyric acid (PFBA)	01/25/2023	6	5.6	--	NG/L	115.00		
Perfluoroheptanesulfonate (PFHpS)	01/25/2023	3.6	1.4	--	NG/L	115.00		
Perfluoroheptanoic acid (PFHpA)	01/25/2023	4.3	1.4	--	NG/L	115.00		
Perfluorohexanesulfonate (PFHxS)	01/25/2023	110	1.4	--	NG/L	115.00		
Perfluorohexanoic acid (PFHxA)	01/25/2023	25	1.4	--	NG/L	115.00		
Perfluorononanoic acid (PFNA)	01/25/2023	21	1.4	--	NG/L	115.00		
Perfluorooctane sulfonamide (PFOSAm)	01/25/2023	0.35	1.4	--	NG/L	115.00	J	
Perfluorooctanesulfonate (PFOS)	01/25/2023	200	1.4	--	NG/L	115.00		
Perfluorooctanoic acid (PFOA)	01/25/2023	7.2	1.4	--	NG/L	115.00		
Perfluoropentanesulfonate (PFPeS)	01/25/2023	14	1.6	--	NG/L	115.00		
Perfluoropentanoic acid (PFPeA)	01/25/2023	12	2.8	--	NG/L	115.00		

Site ID : 103-32

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/25/2023	690	--	--	NG/L	135.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 103-32

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1,4-Dioxane	01/25/2023	0.28	0.21	--	UG/L	135.00		
Perfluorobutanesulfonate (PFBS)	01/25/2023	20	1.4	--	NG/L	135.00		
Perfluorobutyric acid (PFBA)	01/25/2023	9.7	5.7	--	NG/L	135.00		
Perfluoroheptanesulfonate (PFHpS)	01/25/2023	9.5	1.4	--	NG/L	135.00		
Perfluoroheptanoic acid (PFHpA)	01/25/2023	7.5	1.4	--	NG/L	135.00		
Perfluorohexanesulfonate (PFHxS)	01/25/2023	240	1.4	--	NG/L	135.00		
Perfluorohexanoic acid (PFHxA)	01/25/2023	39	1.4	--	NG/L	135.00		
Perfluorononanoic acid (PFNA)	01/25/2023	1.3	1.4	--	NG/L	135.00	J	
Perfluorooctanesulfonate (PFOS)	01/25/2023	300	1.4	--	NG/L	135.00		
Perfluorooctanoic acid (PFOA)	01/25/2023	14	1.4	--	NG/L	135.00		
Perfluoropentanesulfonate (PFPeS)	01/25/2023	29	1.5	--	NG/L	135.00		
Perfluoropentanoic acid (PFPeA)	01/25/2023	20	2.8	--	NG/L	135.00		

Site ID : 103-33

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/30/2023	239.53	--	--	NG/L	95.00		
Perfluorobutanesulfonate (PFBS)	01/30/2023	8.9	1.4	--	NG/L	95.00		
Perfluorobutyric acid (PFBA)	01/30/2023	5.3	5.7	--	NG/L	95.00	J	
Perfluoroheptanesulfonate (PFHpS)	01/30/2023	2.5	1.4	--	NG/L	95.00		
Perfluoroheptanoic acid (PFHpA)	01/30/2023	3.4	1.4	--	NG/L	95.00		
Perfluorohexanesulfonate (PFHxS)	01/30/2023	75	1.4	--	NG/L	95.00		
Perfluorohexanoic acid (PFHxA)	01/30/2023	8	1.4	--	NG/L	95.00		
Perfluorononanoic acid (PFNA)	01/30/2023	1.9	1.4	--	NG/L	95.00		
Perfluorooctane sulfonamide (PFOSAm)	01/30/2023	0.43	1.4	--	NG/L	95.00	J	
Perfluorooctanesulfonate (PFOS)	01/30/2023	100	1.4	--	NG/L	95.00		
Perfluorooctanoic acid (PFOA)	01/30/2023	17	1.4	--	NG/L	95.00		
Perfluoropentanesulfonate (PFPeS)	01/30/2023	11	1.4	--	NG/L	95.00		
Perfluoropentanoic acid (PFPeA)	01/30/2023	6.1	2.8	--	NG/L	95.00		

Site ID : 103-34

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	01/30/2023	92.5	--	--	NG/L	125.00		
1,4-Dioxane	01/30/2023	0.54	0.2	--	UG/L	125.00		
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/30/2023	12	6.4	--	NG/L	125.00		
Perfluorobutanesulfonate (PFBS)	01/30/2023	4	1.6	--	NG/L	125.00		

Table 21-3
Current Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 103-34

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorobutyric acid (PFBA)	01/30/2023	2.5	6.4	--	NG/L	125.00	J	
Perfluoroheptanoic acid (PFHpA)	01/30/2023	0.85	1.6	--	NG/L	125.00	J	
Perfluorohexanesulfonate (PFHxS)	01/30/2023	28	1.6	--	NG/L	125.00		
Perfluorohexanoic acid (PFHxA)	01/30/2023	3.9	1.6	--	NG/L	125.00		
Perfluorononanoic acid (PFNA)	01/30/2023	0.53	1.6	--	NG/L	125.00	J	
Perfluorooctane sulfonamide (PFOSAm)	01/30/2023	0.12	1.6	--	NG/L	125.00	J	
Perfluorooctanesulfonate (PFOS)	01/30/2023	32	1.6	--	NG/L	125.00		
Perfluorooctanoic acid (PFOA)	01/30/2023	3	1.6	--	NG/L	125.00		
Perfluoropentanesulfonate (PFPeS)	01/30/2023	4.5	1.5	--	NG/L	125.00		
Perfluoropentanoic acid (PFPeA)	01/30/2023	1.1	3.2	--	NG/L	125.00	J	

Table 21-4
Current Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 073-34 (CF-RW-A)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	01/11/2023	247.136	--	--	NG/L	0.00		
8260 TVOC	01/11/2023	1.9	--	--	UG/L	0.00		
Barium	01/11/2023	28.9	1	--	UG/L	0.00	B	
Calcium	01/11/2023	6380	50	--	UG/L	0.00		
Chloroform	01/11/2023	1.9	0.5	--	UG/L	0.00		
Copper	01/11/2023	7.63	3	--	UG/L	0.00	B	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	01/11/2023	1.2	3.43	--	NG/L	0.00	J	
Magnesium	01/11/2023	2100	110	--	UG/L	0.00	B	
Manganese	01/11/2023	4.76	2	--	UG/L	0.00	B	
Mercury	01/11/2023	0.068	0.067	--	UG/L	0.00	B	
Perfluorobutanesulfonate (PFBS)	01/11/2023	6.51	1.61	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	01/11/2023	2.83	3.61	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	01/11/2023	5.44	1.81	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	01/11/2023	1.41	1.72	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	01/11/2023	5.63	1.81	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	01/11/2023	57.2	1.64	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	01/11/2023	17.4	1.81	--	NG/L	0.00		
Perfluorooctane sulfonamide (PFOSAm)	01/11/2023	0.966	1.81	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	01/11/2023	119	1.81	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	01/11/2023	4.98	1.81	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/11/2023	7.67	1.7	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	01/11/2023	16.9	1.81	--	NG/L	0.00		
Potassium	01/11/2023	806	50	--	UG/L	0.00	B	
Sodium	01/11/2023	41200	100	--	UG/L	0.00		
Zinc	01/11/2023	87	3.3	--	UG/L	0.00		
537 TPFAS	02/16/2023	367.691	--	--	NG/L	0.00		
8260 TVOC	02/16/2023	1.6	--	--	UG/L	0.00		
Chloroform	02/16/2023	1.6	0.5	--	UG/L	0.00		
Fluorotelomer sulfonate 6:2 (6:2 FTS)	02/16/2023	1.27	3.38	--	NG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	02/16/2023	5.52	1.58	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/16/2023	2.83	3.56	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/16/2023	5.4	1.78	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/16/2023	1.9	1.69	--	NG/L	0.00		

Table 21-4
Current Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 073-34 (CF-RW-A)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluoroheptanoic acid (PFHpA)	02/16/2023	5.08	1.78	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/16/2023	81.6	1.62	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/16/2023	17.7	1.78	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/16/2023	0.99	1.78	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/16/2023	0.791	1.78	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	02/16/2023	217	8.89	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	02/16/2023	4.75	1.78	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/16/2023	9.06	1.67	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/16/2023	13.8	1.78	--	NG/L	0.00		
537 TPFAS	03/02/2023	290.899	--	--	NG/L	0.00		
8260 TVOC	03/02/2023	1.6	--	--	UG/L	0.00		
Chloroform	03/02/2023	1.6	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	03/02/2023	4.65	1.62	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/02/2023	2.41	3.63	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/02/2023	4.78	1.82	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/02/2023	1.46	1.72	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	03/02/2023	4.95	1.82	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/02/2023	45.8	1.65	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/02/2023	16	1.82	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/02/2023	0.819	1.82	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	03/02/2023	186	9.08	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	03/02/2023	5.1	1.82	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/02/2023	6.03	1.71	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/02/2023	12.9	1.82	--	NG/L	0.00		

Site ID : 073-35 (CF-RW-B)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	01/11/2023	140.39	--	--	NG/L	0.00		
8260 TVOC	01/11/2023	0.37	--	--	UG/L	0.00		
Barium	01/11/2023	22.4	1	--	UG/L	0.00	B	
Calcium	01/11/2023	3970	50	--	UG/L	0.00	B	
Chloroform	01/11/2023	0.37	0.5	--	UG/L	0.00	J	
Copper	01/11/2023	8.54	3	--	UG/L	0.00	B	
Magnesium	01/11/2023	1200	110	--	UG/L	0.00	B	

Table 21-4
Current Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 073-35 (CF-RW-B)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorobutyric acid (PFBA)	01/11/2023	0.739	1.8	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	01/11/2023	14.5	1.64	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	01/11/2023	1.56	1.8	--	NG/L	0.00	J	
Perfluorononanoic acid (PFNA)	01/11/2023	4.99	1.8	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	01/11/2023	115	1.8	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	01/11/2023	1.23	1.8	--	NG/L	0.00	J	
Perfluoropentanoic acid (PFPeA)	01/11/2023	0.648	1.8	--	NG/L	0.00	J	
Perfluorotridecanoic acid (PFTrDA)	01/11/2023	1.11	1.8	--	NG/L	0.00	J	
Perfluoroundecanoic acid (PFUdA)	01/11/2023	0.613	1.8	--	NG/L	0.00	J	
Potassium	01/11/2023	502	50	--	UG/L	0.00	B	
Sodium	01/11/2023	13100	100	--	UG/L	0.00		
Zinc	01/11/2023	124	3.3	--	UG/L	0.00		
537 TPFAS	02/16/2023	119.998	--	--	NG/L	0.00		
8260 TVOC	02/16/2023	0.28	--	--	UG/L	0.00		
Chloroform	02/16/2023	0.28	0.5	--	UG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/16/2023	0.737	1.74	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	02/16/2023	11.3	1.59	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/16/2023	1.35	1.74	--	NG/L	0.00	J	
Perfluorononanoic acid (PFNA)	02/16/2023	3.06	1.74	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/16/2023	101	1.74	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/16/2023	0.781	1.74	--	NG/L	0.00	J	
Perfluorotridecanoic acid (PFTrDA)	02/16/2023	1.77	1.74	--	NG/L	0.00		
537 TPFAS	03/02/2023	131.779	--	--	NG/L	0.00		
8260 TVOC	03/02/2023	0.32	--	--	UG/L	0.00		
Chloroform	03/02/2023	0.32	0.5	--	UG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/02/2023	0.891	1.83	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	03/02/2023	10.6	1.67	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/02/2023	1.52	1.83	--	NG/L	0.00	J	
Perfluorononanoic acid (PFNA)	03/02/2023	2.92	1.83	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/02/2023	113	1.83	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/02/2023	0.988	1.83	--	NG/L	0.00	J	
Perfluorotridecanoic acid (PFTrDA)	03/02/2023	1.2	1.83	--	NG/L	0.00	J	
Perfluoroundecanoic acid (PFUdA)	03/02/2023	0.66	1.83	--	NG/L	0.00	J	

Table 21-4
Current Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 083-45 (CF-RW-C)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	01/11/2023	2.469	--	--	NG/L	0.00		
8260 TVOC	01/11/2023	0.27	--	--	UG/L	0.00		
1,4-Dioxane	01/11/2023	0.47	0.2	--	UG/L	0.00		
Arsenic	01/11/2023	3.81	2	--	UG/L	0.00	B	
Barium	01/11/2023	30.9	1	--	UG/L	0.00	B	
Calcium	01/11/2023	3140	50	--	UG/L	0.00	B	
Chloroform	01/11/2023	0.27	0.5	--	UG/L	0.00	J	
Cobalt	01/11/2023	1.63	1	--	UG/L	0.00	B	
Copper	01/11/2023	12.8	3	--	UG/L	0.00	B	
Iron	01/11/2023	4090	30	--	UG/L	0.00		
Magnesium	01/11/2023	1720	110	--	UG/L	0.00	B	
Manganese	01/11/2023	64.3	2	--	UG/L	0.00		
Perfluorooctanesulfonate (PFOS)	01/11/2023	1.76	1.75	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	01/11/2023	0.709	1.75	--	NG/L	0.00	J	
Potassium	01/11/2023	566	50	--	UG/L	0.00	B	
Sodium	01/11/2023	16400	100	--	UG/L	0.00		
Vanadium	01/11/2023	2.01	1	--	UG/L	0.00	B	
Zinc	01/11/2023	239	3.3	--	UG/L	0.00		
537 TPFAS	02/16/2023	6.95	--	--	NG/L	0.00		
8260 TVOC	02/16/2023	1.37	--	--	UG/L	0.00		
1,1-Dichloroethane	02/16/2023	0.74	0.5	--	UG/L	0.00		
1,1-Dichloroethylene	02/16/2023	0.63	0.5	--	UG/L	0.00		
1,4-Dioxane	02/16/2023	0.37	0.2	--	UG/L	0.00		
Perfluorobutyric acid (PFBA)	02/16/2023	0.887	1.71	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	02/16/2023	0.578	1.56	--	NG/L	0.00	J	
Perfluorohexanoic acid (PFHxA)	02/16/2023	1.51	1.71	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	02/16/2023	1.82	1.71	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/16/2023	1.18	1.71	--	NG/L	0.00	J	
Perfluoropentanoic acid (PFPeA)	02/16/2023	0.975	1.71	--	NG/L	0.00	J	
537 TPFAS	03/02/2023	2.748	--	--	NG/L	0.00		
8260 TVOC	03/02/2023	0.18	--	--	UG/L	0.00		
1,4-Dioxane	03/02/2023	0.41	0.2	--	UG/L	0.00		
Chloroform	03/02/2023	0.18	0.5	--	UG/L	0.00	J	

Table 21-4
Current Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 083-45 (CF-RW-C)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorooctanesulfonate (PFOS)	03/02/2023	1.97	1.75	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/02/2023	0.778	1.75	--	NG/L	0.00	J	
1,4-Dioxane	03/10/2023	0.45	0.22	--	UG/L	0.00		
1,4-Dioxane	03/16/2023	0.48	0.2	--	UG/L	0.00		
1,4-Dioxane	03/22/2023	0.37	0.2	--	UG/L	0.00		
1,4-Dioxane	03/29/2023	0.39	0.2	--	UG/L	0.00		

Site ID : 083-46 (CF-RW-D)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	01/11/2023	338.138	--	--	NG/L	0.00		
8260 TVOC	01/11/2023	0.26	--	--	UG/L	0.00		
Barium	01/11/2023	39.6	1	--	UG/L	0.00	B	
Calcium	01/11/2023	9190	50	--	UG/L	0.00		
Chloroform	01/11/2023	0.26	0.5	--	UG/L	0.00	J	
Chromium	01/11/2023	1.23	1	--	UG/L	0.00	B	
Cobalt	01/11/2023	1	1	--	UG/L	0.00	B	
Copper	01/11/2023	6.61	3	--	UG/L	0.00	B	
Magnesium	01/11/2023	2910	110	--	UG/L	0.00	B	
Perfluorobutanesulfonate (PFBS)	01/11/2023	0.798	1.53	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	01/11/2023	1.47	1.72	--	NG/L	0.00	J	
Perfluoroheptanesulfonate (PFHpS)	01/11/2023	1.88	1.63	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	01/11/2023	1.17	1.72	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	01/11/2023	27.6	1.56	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	01/11/2023	3.87	1.72	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	01/11/2023	4.54	1.72	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	01/11/2023	291	8.59	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	01/11/2023	3.08	1.72	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/11/2023	1.11	1.61	--	NG/L	0.00	J	
Perfluoropentanoic acid (PFPeA)	01/11/2023	1.62	1.72	--	NG/L	0.00	J	
Potassium	01/11/2023	891	50	--	UG/L	0.00	B	
Sodium	01/11/2023	53900	100	--	UG/L	0.00		
Zinc	01/11/2023	186	3.3	--	UG/L	0.00		
537 TPFAS	02/16/2023	248.892	--	--	NG/L	0.00		
8260 TVOC	02/16/2023	0.27	--	--	UG/L	0.00		

Table 21-4
Current Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 083-46 (CF-RW-D)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Chloroform	02/16/2023	0.27	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	02/16/2023	0.822	1.55	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/16/2023	1.5	1.74	--	NG/L	0.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/16/2023	1.66	1.65	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/16/2023	1.06	1.74	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	02/16/2023	36.6	1.58	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/16/2023	3.82	1.74	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/16/2023	3.45	1.74	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/16/2023	195	8.71	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	02/16/2023	2.49	1.74	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/16/2023	1.12	1.64	--	NG/L	0.00	J	
Perfluoropentanoic acid (PFPeA)	02/16/2023	1.37	1.74	--	NG/L	0.00	J	
537 TPFAS	03/02/2023	253.687	--	--	NG/L	0.00		
8260 TVOC	03/02/2023	0.25	--	--	UG/L	0.00		
Chloroform	03/02/2023	0.25	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/02/2023	0.766	1.56	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/02/2023	1.4	1.76	--	NG/L	0.00	J	
Perfluoroheptanesulfonate (PFHpS)	03/02/2023	1.46	1.67	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	03/02/2023	1.4	1.76	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	03/02/2023	23.4	1.6	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/02/2023	3.08	1.76	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/02/2023	3.81	1.76	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/02/2023	213	8.78	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	03/02/2023	2.85	1.76	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/02/2023	0.961	1.65	--	NG/L	0.00	J	
Perfluoropentanoic acid (PFPeA)	03/02/2023	1.56	1.76	--	NG/L	0.00	J	

Site ID : 084-102 (CF-RW-E)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	01/11/2023	496.77	--	--	NG/L	0.00		
8260 TVOC	01/11/2023	1.3	--	--	UG/L	0.00		
1,4-Dioxane	01/11/2023	0.25	0.2	--	UG/L	0.00		
Barium	01/11/2023	66.5	1	--	UG/L	0.00	B	
Calcium	01/11/2023	9880	50	--	UG/L	0.00		

Table 21-4
Current Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 084-102 (CF-RW-E)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Chloroform	01/11/2023	1.3	0.5	--	UG/L	0.00		
Chromium	01/11/2023	1.16	1	--	UG/L	0.00	B	
Copper	01/11/2023	7.68	3	--	UG/L	0.00	B	
Iron	01/11/2023	126	30	--	UG/L	0.00		
Magnesium	01/11/2023	4510	110	--	UG/L	0.00	B	
Manganese	01/11/2023	63.4	2	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	01/11/2023	7.42	1.52	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	01/11/2023	5.45	3.43	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	01/11/2023	3.49	1.71	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	01/11/2023	4.98	1.63	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	01/11/2023	3.91	1.71	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	01/11/2023	110	1.56	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	01/11/2023	18.4	1.71	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	01/11/2023	76.7	1.71	--	NG/L	0.00		
Perfluorooctane sulfonamide (PFOSAm)	01/11/2023	1.31	1.71	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	01/11/2023	225	8.56	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	01/11/2023	20.9	1.71	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/11/2023	11.3	1.61	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	01/11/2023	7.91	1.71	--	NG/L	0.00		
Potassium	01/11/2023	1200	50	--	UG/L	0.00	B	
Sodium	01/11/2023	67700	100	--	UG/L	0.00		
Zinc	01/11/2023	218	3.3	--	UG/L	0.00		
537 TPFAS	02/16/2023	517.32	--	--	NG/L	0.00		
8260 TVOC	02/16/2023	1.1	--	--	UG/L	0.00		
1,4-Dioxane	02/16/2023	0.27	0.2	--	UG/L	0.00		
Chloroform	02/16/2023	1.1	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	02/16/2023	6.58	1.6	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/16/2023	5.63	3.58	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	02/16/2023	4.15	1.79	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/16/2023	4.89	1.7	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/16/2023	4.1	1.79	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/16/2023	134	1.63	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/16/2023	15.8	1.79	--	NG/L	0.00		

Table 21-4
Current Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 084-102 (CF-RW-E)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorononanoic acid (PFNA)	02/16/2023	60.3	1.79	--	NG/L	0.00		
Perfluorooctane sulfonamide (PFOSAm)	02/16/2023	1.32	1.79	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	02/16/2023	244	8.96	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	02/16/2023	17.6	1.79	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/16/2023	11.3	1.68	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/16/2023	7.65	1.79	--	NG/L	0.00		
537 TPFAS	03/02/2023	536.88	--	--	NG/L	0.00		
8260 TVOC	03/02/2023	1.1	--	--	UG/L	0.00		
1,4-Dioxane	03/02/2023	0.23	0.2	--	UG/L	0.00		
Chloroform	03/02/2023	1.1	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	03/02/2023	5.79	1.6	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/02/2023	6.49	3.59	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	03/02/2023	3.92	1.8	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/02/2023	5.22	1.71	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/02/2023	4.42	1.8	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/02/2023	117	1.63	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/02/2023	16.5	1.8	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/02/2023	63.3	1.8	--	NG/L	0.00		
Perfluorooctane sulfonamide (PFOSAm)	03/02/2023	1.23	1.8	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	03/02/2023	274	8.98	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	03/02/2023	20	1.8	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/02/2023	10.7	1.69	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/02/2023	8.31	1.8	--	NG/L	0.00		
1,4-Dioxane	03/10/2023	0.24	0.2	--	UG/L	0.00		
1,4-Dioxane	03/22/2023	0.23	0.2	--	UG/L	0.00		
1,4-Dioxane	03/29/2023	0.24	0.2	--	UG/L	0.00		

Site ID : 102-32 (CF-RW-F)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	01/11/2023	213.75	--	--	NG/L	0.00		
8260 TVOC	01/11/2023	0.4	--	--	UG/L	0.00		
Barium	01/11/2023	25.4	1	--	UG/L	0.00	B	
Calcium	01/11/2023	3810	50	--	UG/L	0.00	B	
Chloroform	01/11/2023	0.4	0.5	--	UG/L	0.00	J	

Table 21-4
Current Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 102-32 (CF-RW-F)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Cobalt	01/11/2023	1.38	1	--	UG/L	0.00	B	
Copper	01/11/2023	15.6	3	--	UG/L	0.00	B	
Iron	01/11/2023	66.4	30	--	UG/L	0.00	B	
Magnesium	01/11/2023	2090	110	--	UG/L	0.00	B	
Manganese	01/11/2023	113	2	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	01/11/2023	5.53	1.6	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	01/11/2023	6.29	3.6	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	01/11/2023	1.39	1.8	--	NG/L	0.00	J	
Perfluoroheptanesulfonate (PFHpS)	01/11/2023	1.96	1.71	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	01/11/2023	1.16	1.8	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	01/11/2023	69.3	1.64	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	01/11/2023	7.02	1.8	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	01/11/2023	106	1.8	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	01/11/2023	4.53	1.8	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/11/2023	8.47	1.69	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	01/11/2023	2.1	1.8	--	NG/L	0.00		
Potassium	01/11/2023	902	50	--	UG/L	0.00	B	
Sodium	01/11/2023	18400	100	--	UG/L	0.00		
Zinc	01/11/2023	258	3.3	--	UG/L	0.00		
537 TPFAS	02/16/2023	203.36	--	--	NG/L	0.00		
8260 TVOC	02/16/2023	0.27	--	--	UG/L	0.00		
Chloroform	02/16/2023	0.27	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	02/16/2023	4.6	1.61	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/16/2023	5.78	3.63	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	02/16/2023	1.32	1.81	--	NG/L	0.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/16/2023	1.71	1.72	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	02/16/2023	1.13	1.81	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	02/16/2023	76.7	1.65	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/16/2023	5.28	1.81	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/16/2023	92.2	1.81	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/16/2023	4.06	1.81	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/16/2023	8.65	1.71	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/16/2023	1.93	1.81	--	NG/L	0.00		

Table 21-4
Current Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 102-32 (CF-RW-F)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	03/02/2023	155.31	--	--	NG/L	0.00		
8260 TVOC	03/02/2023	0.21	--	--	UG/L	0.00		
Chloroform	03/02/2023	0.21	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/02/2023	3.17	1.64	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/02/2023	4.79	3.69	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	03/02/2023	1.1	1.85	--	NG/L	0.00	J	
Perfluoroheptanesulfonate (PFHpS)	03/02/2023	1.22	1.75	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	03/02/2023	0.71	1.85	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	03/02/2023	62.6	1.68	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/02/2023	4.48	1.85	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/02/2023	64.9	1.85	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/02/2023	3.08	1.85	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/02/2023	8.15	1.74	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/02/2023	1.11	1.85	--	NG/L	0.00	J	

Site ID : 102-33 (CF-RW-G)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	01/11/2023	16.377	--	--	NG/L	0.00		
8260 TVOC	01/11/2023	0.6	--	--	UG/L	0.00		
Barium	01/11/2023	19	1	--	UG/L	0.00	B	
Calcium	01/11/2023	5860	50	--	UG/L	0.00		
Chloroform	01/11/2023	0.6	0.5	--	UG/L	0.00		
Copper	01/11/2023	4.43	3	--	UG/L	0.00	B	
Magnesium	01/11/2023	1690	110	--	UG/L	0.00	B	
Manganese	01/11/2023	8.96	2	--	UG/L	0.00	B	
Perfluorobutanesulfonate (PFBS)	01/11/2023	4.42	1.57	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	01/11/2023	1.02	1.76	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	01/11/2023	1.82	1.6	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	01/11/2023	1.09	1.76	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	01/11/2023	5.83	1.76	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	01/11/2023	1.23	1.76	--	NG/L	0.00	J	
Perfluoropentanoic acid (PFPeA)	01/11/2023	0.967	1.76	--	NG/L	0.00	J	
Potassium	01/11/2023	1120	50	--	UG/L	0.00	B	
Sodium	01/11/2023	25400	100	--	UG/L	0.00		

Table 21-4
Current Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 102-33 (CF-RW-G)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Zinc	01/11/2023	204	3.3	--	UG/L	0.00		
537 TPFAS	02/16/2023	20.406	--	--	NG/L	0.00		
8260 TVOC	02/16/2023	0.39	--	--	UG/L	0.00		
Chloroform	02/16/2023	0.39	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	02/16/2023	3.18	1.61	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	02/16/2023	1.13	1.81	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	02/16/2023	3.27	1.65	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/16/2023	1.62	1.81	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	02/16/2023	8.99	1.81	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/16/2023	0.876	1.81	--	NG/L	0.00	J	
Perfluoropentanoic acid (PFPeA)	02/16/2023	1.34	1.81	--	NG/L	0.00	J	
537 TPFAS	03/02/2023	24.76	--	--	NG/L	0.00		
8260 TVOC	03/02/2023	0.51	--	--	UG/L	0.00		
Chloroform	03/02/2023	0.51	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	03/02/2023	3.53	1.62	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	03/02/2023	1.22	1.82	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	03/02/2023	3.98	1.66	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/02/2023	1.71	1.82	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	03/02/2023	11.2	1.82	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/02/2023	1.44	1.82	--	NG/L	0.00	J	
Perfluoropentanoic acid (PFPeA)	03/02/2023	1.68	1.82	--	NG/L	0.00	J	

Site ID : 102-34 (CF-RW-H)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	01/11/2023	120.052	--	--	NG/L	0.00		
8260 TVOC	01/11/2023	0.45	--	--	UG/L	0.00		
1,4-Dioxane	01/11/2023	0.69	0.2	--	UG/L	0.00		
Antimony	01/11/2023	5.19	3.5	--	UG/L	0.00	B	
Barium	01/11/2023	49.8	1	--	UG/L	0.00	B	
Calcium	01/11/2023	8270	50	--	UG/L	0.00		
Chloroform	01/11/2023	0.45	0.5	--	UG/L	0.00	J	
Chromium	01/11/2023	1.6	1	--	UG/L	0.00	B	
Cobalt	01/11/2023	1.88	1	--	UG/L	0.00	B	
Copper	01/11/2023	9.79	3	--	UG/L	0.00	B	

Table 21-4
Current Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 102-34 (CF-RW-H)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Iron	01/11/2023	953	30	--	UG/L	0.00		
Magnesium	01/11/2023	3120	110	--	UG/L	0.00	B	
Manganese	01/11/2023	161	2	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	01/11/2023	1.88	1.58	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	01/11/2023	1.2	3.55	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	01/11/2023	1.68	1.78	--	NG/L	0.00	J	
Perfluoroheptanesulfonate (PFHpS)	01/11/2023	1.07	1.69	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	01/11/2023	0.932	1.78	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	01/11/2023	17.5	1.62	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	01/11/2023	5.2	1.78	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	01/11/2023	3.69	1.78	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	01/11/2023	79.3	1.78	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	01/11/2023	2.97	1.78	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/11/2023	1.84	1.67	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	01/11/2023	2.79	1.78	--	NG/L	0.00		
Potassium	01/11/2023	1350	50	--	UG/L	0.00	B	
Sodium	01/11/2023	64700	100	--	UG/L	0.00		
Zinc	01/11/2023	108	3.3	--	UG/L	0.00		
537 TPFAS	02/16/2023	137.57	--	--	NG/L	0.00		
8260 TVOC	02/16/2023	0.53	--	--	UG/L	0.00		
1,4-Dioxane	02/16/2023	0.66	0.2	--	UG/L	0.00		
Chloroform	02/16/2023	0.53	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	02/16/2023	2.15	1.66	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/16/2023	1.3	3.73	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/16/2023	2.04	1.86	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/16/2023	1.03	1.77	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	02/16/2023	1.11	1.86	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	02/16/2023	27	1.7	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/16/2023	5.67	1.86	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/16/2023	3.68	1.86	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/16/2023	85.8	1.86	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/16/2023	3.08	1.86	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/16/2023	2.23	1.75	--	NG/L	0.00		

Table 21-4
Current Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 102-34 (CF-RW-H)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluoropentanoic acid (PFPeA)	02/16/2023	2.48	1.86	--	NG/L	0.00		
537 TPFAS	03/02/2023	128.829	--	--	NG/L	0.00		
8260 TVOC	03/02/2023	0.38	--	--	UG/L	0.00		
1,4-Dioxane	03/02/2023	0.71	0.2	--	UG/L	0.00		
Chloroform	03/02/2023	0.38	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/02/2023	2.22	1.59	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/02/2023	1.4	3.58	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/02/2023	1.71	1.79	--	NG/L	0.00	J	
Perfluoroheptanesulfonate (PFHpS)	03/02/2023	0.979	1.7	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	03/02/2023	1.39	1.79	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	03/02/2023	24	1.63	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/02/2023	5.44	1.79	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/02/2023	3.45	1.79	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/02/2023	80.8	1.79	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/02/2023	2.59	1.79	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/02/2023	2.6	1.68	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/02/2023	2.25	1.79	--	NG/L	0.00		
1,4-Dioxane	03/10/2023	0.71	0.2	--	UG/L	0.00		
1,4-Dioxane	03/16/2023	0.73	0.2	--	UG/L	0.00		
1,4-Dioxane	03/22/2023	0.7	0.2	--	UG/L	0.00		
1,4-Dioxane	03/29/2023	0.64	0.2	--	UG/L	0.00		

Site ID : 102-35 (CF-RW-I)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	01/11/2023	224.17	--	--	NG/L	0.00		
8260 TVOC	01/11/2023	0.39	--	--	UG/L	0.00		
Barium	01/11/2023	24.8	1	--	UG/L	0.00	B	
Calcium	01/11/2023	3700	50	--	UG/L	0.00	B	
Chloroform	01/11/2023	0.39	0.5	--	UG/L	0.00	J	
Cobalt	01/11/2023	1.04	1	--	UG/L	0.00	B	
Copper	01/11/2023	4.6	3	--	UG/L	0.00	B	
Iron	01/11/2023	133	30	--	UG/L	0.00		
Magnesium	01/11/2023	2040	110	--	UG/L	0.00	B	
Manganese	01/11/2023	108	2	--	UG/L	0.00		

Table 21-4
Current Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 102-35 (CF-RW-I)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorobutanesulfonate (PFBS)	01/11/2023	5.05	1.61	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	01/11/2023	6.55	3.61	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	01/11/2023	1.36	1.81	--	NG/L	0.00	J	
Perfluoroheptanesulfonate (PFHpS)	01/11/2023	2.36	1.72	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	01/11/2023	1.01	1.81	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	01/11/2023	78.9	1.64	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	01/11/2023	6.29	1.81	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	01/11/2023	106	1.81	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	01/11/2023	4.92	1.81	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/11/2023	9.74	1.7	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	01/11/2023	1.99	1.81	--	NG/L	0.00		
Potassium	01/11/2023	927	50	--	UG/L	0.00	B	
Sodium	01/11/2023	18300	100	--	UG/L	0.00		
Zinc	01/11/2023	54.7	3.3	--	UG/L	0.00		
537 TPFAS	02/16/2023	157.979	--	--	NG/L	0.00		
8260 TVOC	02/16/2023	0.35	--	--	UG/L	0.00		
Chloroform	02/16/2023	0.35	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	02/16/2023	3.23	1.54	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/16/2023	3.99	3.45	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	02/16/2023	1.3	1.73	--	NG/L	0.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/16/2023	1.67	1.64	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/16/2023	0.609	1.73	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	02/16/2023	58.2	1.57	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/16/2023	4.53	1.73	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/16/2023	72.8	1.73	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/16/2023	3.1	1.73	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/16/2023	6.98	1.62	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/16/2023	1.57	1.73	--	NG/L	0.00	J	
537 TPFAS	03/02/2023	165.23	--	--	NG/L	0.00		
8260 TVOC	03/02/2023	0.33	--	--	UG/L	0.00		
Chloroform	03/02/2023	0.33	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/02/2023	3.81	1.6	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/02/2023	3.99	3.59	--	NG/L	0.00		

Table 21-4
Current Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 102-35 (CF-RW-I)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorobutyric acid (PFBA)	03/02/2023	1.36	1.79	--	NG/L	0.00	J	
Perfluoroheptanesulfonate (PFHpS)	03/02/2023	1.52	1.7	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	03/02/2023	0.89	1.79	--	NG/L	0.00	J	
Perfluorohexanesulfonate (PFHxS)	03/02/2023	59.7	1.63	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/02/2023	4.69	1.79	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/02/2023	76.8	1.79	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/02/2023	3.57	1.79	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/02/2023	7.36	1.69	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/02/2023	1.54	1.79	--	NG/L	0.00	J	

Table 21-5
Current Firehouse PFAS Influent Data
'Hits Only' January through March 2023

Site ID : 084-99 (Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	01/04/2023	232.19	--	--	NG/L	0.00		
8260 TVOC	01/04/2023	0.82	--	--	UG/L	0.00		
Chloroform	01/04/2023	0.82	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	01/04/2023	3.16	1.58	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	01/04/2023	2.65	3.55	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	01/04/2023	2.2	1.77	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	01/04/2023	1.71	1.68	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	01/04/2023	1.95	1.77	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	01/04/2023	53.9	8.07	--	NG/L	0.00	D	
Perfluorohexanoic acid (PFHxA)	01/04/2023	7.81	1.77	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	01/04/2023	14.1	1.77	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	01/04/2023	127	1.77	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	01/04/2023	6.85	1.77	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/04/2023	5.52	8.34	--	NG/L	0.00	JD	
Perfluoropentanoic acid (PFPeA)	01/04/2023	5.34	1.77	--	NG/L	0.00		
537 TPFAS	01/11/2023	215.53	--	--	NG/L	0.00		
1,4-Dioxane	01/11/2023	0.19	0.2	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	01/11/2023	3.18	1.67	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	01/11/2023	2.95	3.76	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	01/11/2023	1.91	1.88	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	01/11/2023	1.81	1.79	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	01/11/2023	2	1.88	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	01/11/2023	42.3	1.71	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	01/11/2023	7.6	1.88	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	01/11/2023	11.7	1.88	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	01/11/2023	128	1.88	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	01/11/2023	5.45	1.88	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/11/2023	4.19	1.77	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	01/11/2023	4.44	1.88	--	NG/L	0.00		
537 TPFAS	01/19/2023	263.17	--	--	NG/L	0.00		
8260 TVOC	01/19/2023	0.79	--	--	UG/L	0.00		
1,4-Dioxane	01/19/2023	0.17	0.2	--	UG/L	0.00	J	
Chloroform	01/19/2023	0.79	0.5	--	UG/L	0.00		

Table 21-5
Current Firehouse PFAS Influent Data
'Hits Only' January through March 2023

Site ID : 084-99 (Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorobutanesulfonate (PFBS)	01/19/2023	4.42	1.65	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	01/19/2023	2.84	3.7	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	01/19/2023	2.25	1.85	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	01/19/2023	1.8	1.76	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	01/19/2023	2.15	1.85	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	01/19/2023	54.5	1.68	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	01/19/2023	9.34	1.85	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	01/19/2023	17.2	1.85	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	01/19/2023	152	1.85	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	01/19/2023	6.23	1.85	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/19/2023	5.37	1.74	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	01/19/2023	5.07	1.85	--	NG/L	0.00		
537 TPFAS	01/24/2023	256.92	--	--	NG/L	0.00		
1,4-Dioxane	01/24/2023	0.19	0.2	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	01/24/2023	3.85	1.59	--	NG/L	0.00	h	
Perfluorobutylsulfonamide (FBSA)	01/24/2023	3.17	3.58	--	NG/L	0.00	hJ	
Perfluorobutyric acid (PFBA)	01/24/2023	2.17	1.79	--	NG/L	0.00	h	
Perfluoroheptanesulfonate (PFHpS)	01/24/2023	1.97	1.7	--	NG/L	0.00	h	
Perfluoroheptanoic acid (PFHpA)	01/24/2023	2.23	1.79	--	NG/L	0.00	h	
Perfluorohexanesulfonate (PFHxS)	01/24/2023	52.2	1.63	--	NG/L	0.00	h	
Perfluorohexanoic acid (PFHxA)	01/24/2023	8.63	1.79	--	NG/L	0.00	h	
Perfluorononanoic acid (PFNA)	01/24/2023	15.1	1.79	--	NG/L	0.00	h	
Perfluorooctanesulfonate (PFOS)	01/24/2023	151	1.79	--	NG/L	0.00	h	
Perfluorooctanoic acid (PFOA)	01/24/2023	7.03	1.79	--	NG/L	0.00	h	
Perfluoropentanesulfonate (PFPeS)	01/24/2023	4.84	1.68	--	NG/L	0.00	h	
Perfluoropentanoic acid (PFPeA)	01/24/2023	4.73	1.79	--	NG/L	0.00	h	
537 TPFAS	02/02/2023	211.03	--	--	NG/L	0.00		
1,4-Dioxane	02/02/2023	0.14	0.2	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	02/02/2023	3.36	1.59	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/02/2023	2.47	3.58	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/02/2023	1.72	1.79	--	NG/L	0.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/02/2023	1.84	1.7	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/02/2023	1.57	1.79	--	NG/L	0.00	J	

Table 21-5
Current Firehouse PFAS Influent Data
'Hits Only' January through March 2023

Site ID : 084-99 (Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorohexanesulfonate (PFHxS)	02/02/2023	46.9	1.63	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/02/2023	6	1.79	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/02/2023	10.8	1.79	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/02/2023	124	1.79	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/02/2023	4.85	1.79	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/02/2023	4.31	1.68	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/02/2023	3.21	1.79	--	NG/L	0.00		
537 TPFAS	02/13/2023	243.45	--	--	NG/L	0.00		
8260 TVOC	02/13/2023	0.64	--	--	UG/L	0.00		
1,4-Dioxane	02/13/2023	0.15	0.2	--	UG/L	0.00	J	
Chloroform	02/13/2023	0.64	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	02/13/2023	3.34	1.44	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/13/2023	2.77	3.24	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/13/2023	2.48	1.62	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/13/2023	1.6	1.54	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/13/2023	1.89	1.62	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/13/2023	58.8	1.47	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/13/2023	6.14	1.62	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/13/2023	13	1.62	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/13/2023	138	1.62	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/13/2023	5.7	1.62	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/13/2023	5.76	1.52	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/13/2023	3.97	1.62	--	NG/L	0.00		
1,4-Dioxane	02/23/2023	0.13	0.22	--	UG/L	0.00	J	
537 TPFAS	02/24/2023	239.36	--	--	NG/L	0.00		
8260 TVOC	02/24/2023	0.63	--	--	UG/L	0.00		
Chloroform	02/24/2023	0.63	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	02/24/2023	4.06	1.63	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/24/2023	2.74	3.66	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/24/2023	2.1	1.83	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/24/2023	1.81	1.74	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/24/2023	2.22	1.83	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/24/2023	51.9	1.67	--	NG/L	0.00		

Table 21-5
Current Firehouse PFAS Influent Data
'Hits Only' January through March 2023

Site ID : 084-99 (Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorohexanoic acid (PFHxA)	02/24/2023	7.61	1.83	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/24/2023	12.5	1.83	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/24/2023	139	1.83	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/24/2023	6.44	1.83	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/24/2023	4.78	1.72	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/24/2023	4.2	1.83	--	NG/L	0.00		
537 TPFAS	03/02/2023	226.78	--	--	NG/L	0.00		
8260 TVOC	03/02/2023	0.56	--	--	UG/L	0.00		
1,4-Dioxane	03/02/2023	0.18	0.2	--	UG/L	0.00	J	
Chloroform	03/02/2023	0.56	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	03/02/2023	3.27	1.71	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/02/2023	2.73	3.85	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/02/2023	1.98	1.92	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/02/2023	2.11	1.83	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/02/2023	2.07	1.92	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/02/2023	53.4	1.75	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/02/2023	7.17	1.92	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/02/2023	10.6	1.92	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/02/2023	129	1.92	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/02/2023	4.91	1.92	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/02/2023	5.64	1.81	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/02/2023	3.9	1.92	--	NG/L	0.00		
537 TPFAS	03/10/2023	263.91	--	--	NG/L	0.00		
1,4-Dioxane	03/10/2023	0.14	0.2	--	UG/L	0.00	J	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	03/10/2023	1.77	3.34	--	NG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/10/2023	3.8	1.56	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/10/2023	3.08	3.52	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/10/2023	2.57	1.76	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/10/2023	2.62	1.67	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/10/2023	2.44	1.76	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/10/2023	65	1.6	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/10/2023	9.16	1.76	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/10/2023	10.7	1.76	--	NG/L	0.00		

Table 21-5
Current Firehouse PFAS Influent Data
'Hits Only' January through March 2023

Site ID : 084-99 (Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorooctanesulfonate (PFOS)	03/10/2023	144	8.79	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	03/10/2023	6.85	1.76	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/10/2023	6.86	1.65	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/10/2023	5.06	1.76	--	NG/L	0.00		
537 TPFAS	03/17/2023	268.75	--	--	NG/L	0.00		
8260 TVOC	03/17/2023	0	--	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	03/17/2023	3.41	1.56	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/17/2023	2.64	3.51	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/17/2023	2.04	1.75	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/17/2023	2.17	1.67	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/17/2023	1.88	1.75	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/17/2023	53.2	1.6	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/17/2023	8.45	1.75	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/17/2023	11.6	1.75	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/17/2023	167	1.75	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/17/2023	6.97	1.75	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/17/2023	4.99	1.65	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/17/2023	4.4	1.75	--	NG/L	0.00		
537 TPFAS	03/22/2023	207.11	--	--	NG/L	0.00		
1,4-Dioxane	03/22/2023	0.14	0.2	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/22/2023	2.91	1.61	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/22/2023	2.69	3.61	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/22/2023	2.18	1.8	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/22/2023	1.73	1.71	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/22/2023	2.05	1.8	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/22/2023	40	1.64	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/22/2023	6.78	1.8	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/22/2023	9.09	1.8	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/22/2023	126	1.8	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/22/2023	5.56	1.8	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/22/2023	4.38	1.7	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/22/2023	3.74	1.8	--	NG/L	0.00		
537 TPFAS	03/29/2023	216.08	--	--	NG/L	0.00		

Table 21-5
Current Firehouse PFAS Influent Data
'Hits Only' January through March 2023

Site ID : 084-99 (Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1,4-Dioxane	03/29/2023	0.15	0.2	--	UG/L	0.00	J	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	03/29/2023	1.71	3.23	--	NG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/29/2023	2.5	1.51	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/29/2023	1.91	3.4	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/29/2023	1.93	1.7	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/29/2023	1.61	1.62	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	03/29/2023	1.95	1.7	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/29/2023	44.9	1.55	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/29/2023	6.21	1.7	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/29/2023	9.37	1.7	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/29/2023	131	1.7	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/29/2023	4.9	1.7	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/29/2023	4.5	1.6	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/29/2023	3.59	1.7	--	NG/L	0.00		

Table 21-6
Current Firehouse PFAS Effluent Data
'Hits Only' January through March 2023

Site ID : 084-101 (Effluent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	01/04/2023	0	--	--	NG/L	0.00		
8260 TVOC	01/04/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	01/04/2023	0.133	0.2	--	UG/L	0.00	J	
537 TPFAS	01/11/2023	0	--	--	NG/L	0.00		
1,4-Dioxane	01/11/2023	0.16	0.2	--	UG/L	0.00	J	
537 TPFAS	01/19/2023	0	--	--	NG/L	0.00		
8260 TVOC	01/19/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	01/19/2023	0.16	0.21	--	UG/L	0.00	J	
537 TPFAS	01/24/2023	0	--	--	NG/L	0.00		
1,4-Dioxane	01/24/2023	0.24	0.2	--	UG/L	0.00		
537 TPFAS	02/02/2023	0	--	--	NG/L	0.00		
1,4-Dioxane	02/02/2023	0.15	0.2	--	UG/L	0.00	J	
537 TPFAS	02/13/2023	0	--	--	NG/L	0.00		
8260 TVOC	02/13/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	02/13/2023	0.17	0.2	--	UG/L	0.00	J	
1,4-Dioxane	02/23/2023	0.15	0.21	--	UG/L	0.00	J	
537 TPFAS	02/24/2023	0	--	--	NG/L	0.00		
8260 TVOC	02/24/2023	0	--	--	UG/L	0.00		
537 TPFAS	03/02/2023	0	--	--	NG/L	0.00		
8260 TVOC	03/02/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	03/02/2023	0.17	0.2	--	UG/L	0.00	J	
537 TPFAS	03/10/2023	0	--	--	NG/L	0.00		
1,4-Dioxane	03/10/2023	0.15	0.2	--	UG/L	0.00	J	
537 TPFAS	03/17/2023	0	--	--	NG/L	0.00		
8260 TVOC	03/17/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	03/17/2023	0.17	0.2	--	UG/L	0.00	J	
537 TPFAS	03/22/2023	0	--	--	NG/L	0.00		
1,4-Dioxane	03/22/2023	0.21	0.21	--	UG/L	0.00	U	
537 TPFAS	03/29/2023	1.27	--	--	NG/L	0.00		
1,4-Dioxane	03/29/2023	0.2	0.2	--	UG/L	0.00	U	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	03/29/2023	1.27	3.37	--	NG/L	0.00	J	

Qualifiers :
D = Compound was identified in an analysis at a secondary dilution factor.
E = Identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.
J = Estimated value.
N2 = Not usable based on the results that are not distinguishable from background. The value is less than or equal to the sum of the MDA and the uncertainty or RDL.
U = Compound not detected.

Organic Compounds :
B = Compound was found in both the sample And associated laboratory blank.

Inorganic Compounds :
B = Result Is between instrument detection limit And contract required reporting limit.

OU X Former Firehouse PFAS Pump & Treat System

Process: Groundwater extraction with liquid phase granular activated carbon (GAC) treatment for per- and polyfluoroalkyl substances (PFAS), with discharge to recharge basins.

Goal: Final cleanup goals will be determined following the completion of the forthcoming Remedial Investigation/Feasibility Study and documented in the future OU X Record of Decision (ROD).

Start Date: January 2023

Table 22-1
Pumping Rates (gpm)

Extraction Well	RW-A	RW-B	RW-C
Site Id #	085-414	096-132	105-79
Screen Interval (ft bls)	44-64	83-103	104-124
Desired Flow Rate (gpm)	**50**	**75**	**100**
January (Avg gpm)	16	15	20
February " "	76	71	94
March " "	78	73	96
Actual (Avg. over Qtr.)	**57**	**53**	**70**

OU X Former Firehouse PFAS Pump & Treat System

Figure 22-1
Cumulative Pounds of PFAS Removed

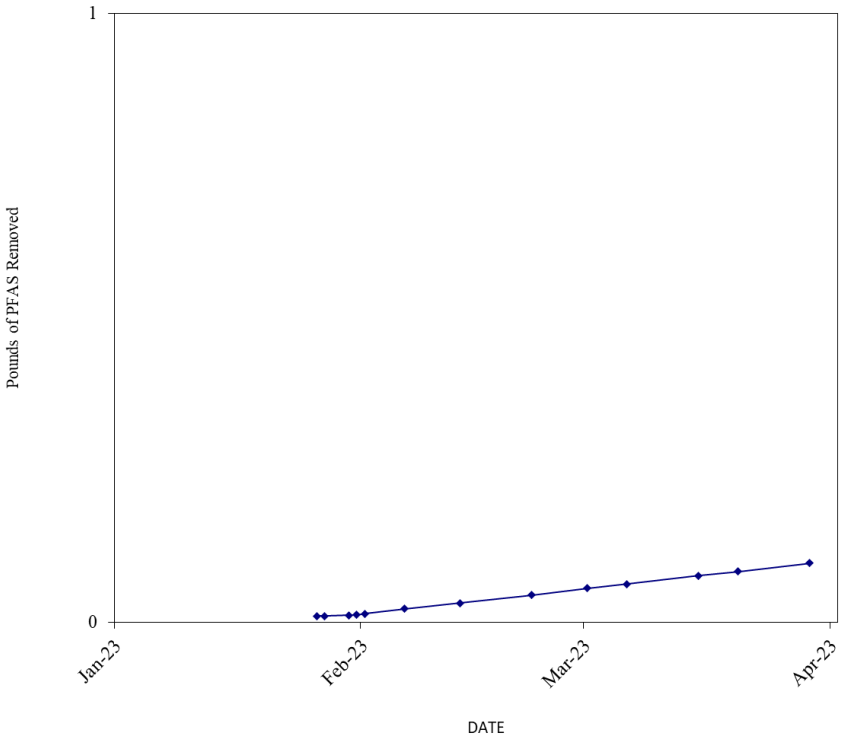
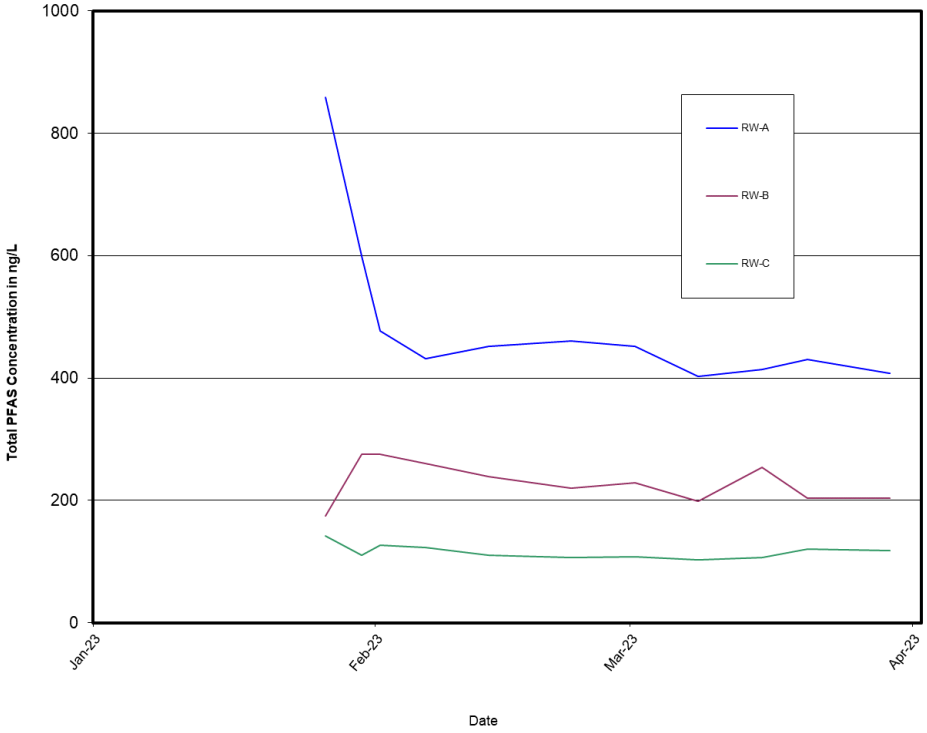


Figure 22-2
Extraction Well Total PFAS Concentration vs. Time



OU X Former Firehouse PFAS Pump & Treat System

Table 22-2
Effluent Water Quality
SPDES Equivalency Permit Concentrations January 1 through March 31, 2023

Parameter	Permit Limit	Max. Measured Value	Units	Frequency
Flow	**750**	**247**	**GPM**	**Continuous**
pH (range)	**5.0 – 8.5**	**5.8– 6.4***	**SU**	**Monthly**
Perfluoroocanesulfonic acid (PFOS)	**2.7**	**<1.73**	**ng/L**	**Monthly[1]**
Perfluorooctanoic acid (PFOA)	**6.7**	**<1.73**	**µg/L**	**Monthly[1]**
1,4-Dioxane	**0.35**	**0.21**	**µg/L**	**Monthly[1]**
Chloroform	**7.0**	**<0.5**	**µg/L**	**Monthly[1]**
Methylene Chloride	**5.0**	**<0.5**	**µg/L**	**Monthly[1]**

[1] The minimum measurement frequency shall be monthly following a period of 8 consecutive weekly sampling events showing no exceedances of the stated discharge limitations.
* Minimum to maximum value for pH during this operational period.

Monitoring Activities:

The Former Firehouse monitoring well data show the highest total PFAS concentration (7,461ng/L) in plume core monitoring well 085-411. The total PFAS concentration in monitoring wells 075-809, 075-810, and 075-811, immediately downgradient of the Former Firehouse training area were 1,492.8 ng/L, 4,252.8 ng/L, and 2,858.2 ng/L, respectively. The Former Firehouse monitoring well network is shown on **Figure 22-3**. The 'Hits Only' first quarter 2023 data are summarized in **Table 22-3**.

System Operations

January 2023:

The system ran intermittently this month following the completion of construction and start up testing. The system treated approximately 2.3 million gallons of water.

February 2023:

The system ran normally for the month. The system treated approximately 9.7 million gallons of water.

OU X Former Firehouse PFAS Pump & Treat System

March 2023:

The system ran normally for the month. The system treated approximately 11 million gallons of water.

The system treated approximately 23 million gallons of water during the first quarter of 2023.The treatment system 'Hits Only' data, including individual extraction wells, influent, and effluent is summarized in **Table 22-4** through **22-6**.

Planned Operational Changes

- Maintain full time operation of the treatment system.
- Discontinue monthly sampling of EPA Method 8260LL on extraction wells FF-RW-A through FF-RW-C.
- When the analytical laboratories can provide turnaround times that allow for compliance with required SPDES report submission dates, transition from EPA Method 537.1 to EPA Method 1633 for the PFAS analysis of treatment system influent and effluent samples.

LEGEND

- 410 — MONITORING WELL ID WITH DETECTED (PFAS), PFOS/PFOA CONCENTRATIONS (IN ng/L). JUNE 2022.
- 02 — EXISTING MONITORING WELL
- RTW-1 — EXISTING REMEDIATION WELL
- GENERAL GROUNDWATER FLOW DIRECTION
- SUSPECTED FOAM RELEASE AREA

Major Petroleum Facility
Training Area
Former Roadway
Former Fire House
Training Area
Former Water Supply Well 1
FF-RW-A
Storm Drainage Culvert
Former Building 96 Area
EW-18
RTW-1
RTW-2
RTW-3
RTW-4
Former Supply and Material Area
FF-RW-B
EW-16
EW-9
EW-10
EW-11
FF-RW-C
Building 526
HW
Brookhaven Avenue
Technology Street
Temple Street
Place
Bell Avenue
Rowland Street
Weaver Drive
East Princeton Avenue
Grove St.
S. Railroad Street

672 87 671 809 810 811 16 17 378 380 18 379 185 407 406 404 405 408 410 409 411 412 384 42 122 123 124 125 128 127 126 129 131 130 115 117 118 84 74 75 76 23 37 44 43 73 72 78 77

75 76 85 86 95 96 104 105

SCALE 0 200 400 FEET

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Brookhaven National Laboratory
ENVIRONMENTAL PROTECTION DIVISION

TITLE:
FORMER FIREHOUSE PERMANENT MONITORING WELLS

SITEWIDE REMEDIATION SYSTEMS
FIRST QUARTER 2023 OPERATIONS REPORT

DWN:	VT: HZ.:	DATE:	PROJECT NO.:
AJZ	–	05/19/23	–
CHKD:	APPD:	REV.:	NOTES:
LDS		07/07/23	–

FIGURE NO.: 3.5.2–1

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 075-809

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/13/2023	1492.8	--	--	NG/L	37.50		
Perfluorobutanesulfonate (PFBS)	02/13/2023	8.5	1.4	--	NG/L	37.50		
Perfluorobutyric acid (PFBA)	02/13/2023	22	5.8	--	NG/L	37.50		
Perfluoroheptanesulfonate (PFHpS)	02/13/2023	13	1.4	--	NG/L	37.50		
Perfluoroheptanoic acid (PFHpA)	02/13/2023	7.6	1.4	--	NG/L	37.50		
Perfluorohexanesulfonate (PFHxS)	02/13/2023	220	1.4	--	NG/L	37.50		
Perfluorohexanoic acid (PFHxA)	02/13/2023	25	1.7	--	NG/L	37.50		
Perfluorononanoic acid (PFNA)	02/13/2023	1.8	1.4	--	NG/L	37.50		
Perfluorooctane sulfonamide (PFOSAm)	02/13/2023	2.9	1.4	--	NG/L	37.50		
Perfluorooctanesulfonate (PFOS)	02/13/2023	1100	14	--	NG/L	37.50	D	
Perfluorooctanoic acid (PFOA)	02/13/2023	63	1.4	--	NG/L	37.50		
Perfluoropentanesulfonate (PFPeS)	02/13/2023	14	1.4	--	NG/L	37.50		
Perfluoropentanoic acid (PFPeA)	02/13/2023	15	2.9	--	NG/L	37.50		

Site ID : 075-810

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/13/2023	4252.8	--	--	NG/L	37.50		
Perfluorobutanesulfonate (PFBS)	02/13/2023	33	16	--	NG/L	37.50		
Perfluorobutyric acid (PFBA)	02/13/2023	33	64	--	NG/L	37.50	J	
Perfluoroheptanesulfonate (PFHpS)	02/13/2023	66	16	--	NG/L	37.50		
Perfluoroheptanoic acid (PFHpA)	02/13/2023	27	16	--	NG/L	37.50		
Perfluorohexanesulfonate (PFHxS)	02/13/2023	1900	16	--	NG/L	37.50		
Perfluorohexanoic acid (PFHxA)	02/13/2023	220	16	--	NG/L	37.50		
Perfluorononanoic acid (PFNA)	02/13/2023	5.6	16	--	NG/L	37.50	J	
Perfluorooctane sulfonamide (PFOSAm)	02/13/2023	3.2	16	--	NG/L	37.50	J	
Perfluorooctanesulfonate (PFOS)	02/13/2023	1700	16	--	NG/L	37.50		
Perfluorooctanoic acid (PFOA)	02/13/2023	160	16	--	NG/L	37.50		
Perfluoropentanesulfonate (PFPeS)	02/13/2023	57	16	--	NG/L	37.50		
Perfluoropentanoic acid (PFPeA)	02/13/2023	48	32	--	NG/L	37.50		

Site ID : 075-811

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/13/2023	2858.2	--	--	NG/L	37.50		
Perfluorobutanesulfonate (PFBS)	02/13/2023	7.3	16	--	NG/L	37.50	J	
Perfluorobutyric acid (PFBA)	02/13/2023	14	64	--	NG/L	37.50	J	

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 075-811

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluoroheptanesulfonate (PFHpS)	02/13/2023	20	16	--	NG/L	37.50		
Perfluoroheptanoic acid (PFHpA)	02/13/2023	11	16	--	NG/L	37.50	J	
Perfluorohexanesulfonate (PFHxS)	02/13/2023	360	16	--	NG/L	37.50		
Perfluorohexanoic acid (PFHxA)	02/13/2023	40	16	--	NG/L	37.50		
Perfluorononanoic acid (PFNA)	02/13/2023	5.2	16	--	NG/L	37.50	J	
Perfluorooctane sulfonamide (PFOSAm)	02/13/2023	130	16	--	NG/L	37.50		
Perfluorooctanesulfonate (PFOS)	02/13/2023	2200	16	--	NG/L	37.50		
Perfluorooctanoic acid (PFOA)	02/13/2023	58	16	--	NG/L	37.50		
Perfluoropentanesulfonate (PFPeS)	02/13/2023	4.7	16	--	NG/L	37.50	J	
Perfluoropentanoic acid (PFPeA)	02/13/2023	8	32	--	NG/L	37.50	J	
solids-tot	02/13/2023	30	4	--	MG/L	37.50		

Site ID : 075-87

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/15/2023	28.27	--	--	NG/L	107.50		
Perfluorobutanesulfonate (PFBS)	02/15/2023	1.6	1.5	--	NG/L	107.50		
Perfluorobutyric acid (PFBA)	02/15/2023	3.6	6.1	--	NG/L	107.50	J	
Perfluorodecanoic acid (PFDA)	02/15/2023	0.87	1.5	--	NG/L	107.50	J	
Perfluoroheptanoic acid (PFHpA)	02/15/2023	0.63	1.5	--	NG/L	107.50	J	
Perfluorohexanesulfonate (PFHxS)	02/15/2023	2.5	1.5	--	NG/L	107.50		
Perfluorohexanoic acid (PFHxA)	02/15/2023	1.4	1.5	--	NG/L	107.50	J	
Perfluorononanoic acid (PFNA)	02/15/2023	3.4	1.5	--	NG/L	107.50		
Perfluorooctanesulfonate (PFOS)	02/15/2023	9	1.5	--	NG/L	107.50		
Perfluorooctanoic acid (PFOA)	02/15/2023	1.8	1.5	--	NG/L	107.50		
Perfluoropentanesulfonate (PFPeS)	02/15/2023	0.27	1.5	--	NG/L	107.50	J	
Perfluoropentanoic acid (PFPeA)	02/15/2023	1.2	3	--	NG/L	107.50	J	
Perfluoroundecanoic acid (PFUdA)	02/15/2023	2	1.5	--	NG/L	107.50		
solids-tot	02/15/2023	20	4	--	MG/L	107.50		

Site ID : 085-350

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/16/2023	34.3	--	--	NG/L	34.50		
8260 TVOC	02/16/2023	3	--	--	UG/L	34.50		
Perfluorobutanesulfonate (PFBS)	02/16/2023	3.4	1.4	--	NG/L	34.50		
Perfluorobutyric acid (PFBA)	02/16/2023	10	5.6	--	NG/L	34.50		

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 085-350

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluoroheptanoic acid (PFHpA)	02/16/2023	1.5	1.4	--	NG/L	34.50		
Perfluorohexanesulfonate (PFHxS)	02/16/2023	1.9	1.4	--	NG/L	34.50		
Perfluorohexanoic acid (PFHxA)	02/16/2023	2.3	1.5	--	NG/L	34.50		H
Perfluorooctanesulfonate (PFOS)	02/16/2023	11	1.4	--	NG/L	34.50		
Perfluorooctanoic acid (PFOA)	02/16/2023	4.4	1.4	--	NG/L	34.50		
Perfluoropentanoic acid (PFPeA)	02/16/2023	2.1	2.8	--	NG/L	34.50	J	
solids-tot	02/16/2023	30	4	--	MG/L	34.50		
Tetrachloroethylene	02/16/2023	3	0.5	--	UG/L	34.50		

Site ID : 085-384

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/15/2023	111.15	--	--	NG/L	37.50		
Perfluorobutanesulfonate (PFBS)	02/15/2023	6.5	3.2	--	NG/L	37.50		
Perfluorobutyric acid (PFBA)	02/15/2023	7.5	13	--	NG/L	37.50	J	
Perfluorodecanoic acid (PFDA)	02/15/2023	0.95	3.2	--	NG/L	37.50	J	
Perfluoroheptanoic acid (PFHpA)	02/15/2023	3.7	3.2	--	NG/L	37.50		
Perfluorohexanesulfonate (PFHxS)	02/15/2023	15	3.2	--	NG/L	37.50		
Perfluorohexanoic acid (PFHxA)	02/15/2023	3.9	1.5	--	NG/L	37.50		
Perfluorononanoic acid (PFNA)	02/15/2023	2.3	3.2	--	NG/L	37.50	J	
Perfluorooctanesulfonate (PFOS)	02/15/2023	56	3.2	--	NG/L	37.50		
Perfluorooctanoic acid (PFOA)	02/15/2023	10	3.2	--	NG/L	37.50		
Perfluoropentanoic acid (PFPeA)	02/15/2023	5.3	6.4	--	NG/L	37.50	J	
solids-tot	02/15/2023	110	4	--	MG/L	37.50		

Site ID : 085-404

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/13/2023	124.31	--	--	NG/L	37.50		
Perfluorobutanesulfonate (PFBS)	02/13/2023	4.1	1.5	--	NG/L	37.50		
Perfluorobutyric acid (PFBA)	02/13/2023	10	6.2	--	NG/L	37.50		
Perfluorodecanoic acid (PFDA)	02/13/2023	0.21	1.5	--	NG/L	37.50	J	
Perfluoroheptanesulfonate (PFHpS)	02/13/2023	2.2	1.5	--	NG/L	37.50		
Perfluoroheptanoic acid (PFHpA)	02/13/2023	3.6	1.5	--	NG/L	37.50		
Perfluorohexanesulfonate (PFHxS)	02/13/2023	41	1.5	--	NG/L	37.50		
Perfluorohexanoic acid (PFHxA)	02/13/2023	5.9	1.6	--	NG/L	37.50		
Perfluorononanoic acid (PFNA)	02/13/2023	2.2	1.5	--	NG/L	37.50		

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 085-404

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorooctanesulfonate (PFOS)	02/13/2023	33	1.5	--	NG/L	37.50		
Perfluorooctanoic acid (PFOA)	02/13/2023	13	1.5	--	NG/L	37.50		
Perfluoropentanesulfonate (PFPeS)	02/13/2023	2	1.5	--	NG/L	37.50		
Perfluoropentanoic acid (PFPeA)	02/13/2023	7.1	3.1	--	NG/L	37.50		
solids-tot	02/13/2023	10	4	--	MG/L	37.50		

Site ID : 085-405

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/13/2023	70	--	--	NG/L	55.00		
Perfluorobutanesulfonate (PFBS)	02/13/2023	4.6	1.4	--	NG/L	55.00		
Perfluorobutyric acid (PFBA)	02/13/2023	11	5.6	--	NG/L	55.00		
Perfluoroheptanoic acid (PFHpA)	02/13/2023	3.2	1.4	--	NG/L	55.00		
Perfluorohexanesulfonate (PFHxS)	02/13/2023	12	1.4	--	NG/L	55.00		
Perfluorohexanoic acid (PFHxA)	02/13/2023	3.5	1.4	--	NG/L	55.00		
Perfluorononanoic acid (PFNA)	02/13/2023	1.1	1.4	--	NG/L	55.00	J	
Perfluorooctanesulfonate (PFOS)	02/13/2023	20	1.4	--	NG/L	55.00		
Perfluorooctanoic acid (PFOA)	02/13/2023	8.9	1.4	--	NG/L	55.00		
Perfluoropentanesulfonate (PFPeS)	02/13/2023	1.7	1.4	--	NG/L	55.00		
Perfluoropentanoic acid (PFPeA)	02/13/2023	4	2.8	--	NG/L	55.00		
solids-tot	02/13/2023	20	4	--	MG/L	55.00		

Site ID : 085-406

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/13/2023	688.55	--	--	NG/L	37.50		
Perfluorobutanesulfonate (PFBS)	02/13/2023	2.2	1.5	--	NG/L	37.50		
Perfluorobutyric acid (PFBA)	02/13/2023	8.3	5.9	--	NG/L	37.50		
Perfluoroheptanesulfonate (PFHpS)	02/13/2023	11	1.5	--	NG/L	37.50		
Perfluoroheptanoic acid (PFHpA)	02/13/2023	3.6	1.5	--	NG/L	37.50		
Perfluorohexanesulfonate (PFHxS)	02/13/2023	200	1.5	--	NG/L	37.50		
Perfluorohexanoic acid (PFHxA)	02/13/2023	13	1.5	--	NG/L	37.50		
Perfluorononanoic acid (PFNA)	02/13/2023	0.75	1.5	--	NG/L	37.50	J	
Perfluorooctane sulfonamide (PFOSAm)	02/13/2023	1	1.5	--	NG/L	37.50	J	
Perfluorooctanesulfonate (PFOS)	02/13/2023	420	1.5	--	NG/L	37.50		
Perfluorooctanoic acid (PFOA)	02/13/2023	23	1.5	--	NG/L	37.50		
Perfluoropentanesulfonate (PFPeS)	02/13/2023	2.4	1.5	--	NG/L	37.50		

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 085-406

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluoropentanoic acid (PFPeA)	02/13/2023	3.3	2.9	--	NG/L	37.50		
solids-tot	02/13/2023	60	4	--	MG/L	37.50		

Site ID : 085-407

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/13/2023	1358	--	--	NG/L	55.00		
Perfluorobutanesulfonate (PFBS)	02/13/2023	6.5	16	--	NG/L	55.00	J	
Perfluorobutyric acid (PFBA)	02/13/2023	15	65	--	NG/L	55.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/13/2023	7.6	16	--	NG/L	55.00	J	
Perfluoroheptanoic acid (PFHpA)	02/13/2023	10	16	--	NG/L	55.00	J	
Perfluorohexanesulfonate (PFHxS)	02/13/2023	540	16	--	NG/L	55.00		
Perfluorohexanoic acid (PFHxA)	02/13/2023	69	16	--	NG/L	55.00		
Perfluorononanoic acid (PFNA)	02/13/2023	4.1	16	--	NG/L	55.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/13/2023	4.5	16	--	NG/L	55.00	J	
Perfluorooctanesulfonate (PFOS)	02/13/2023	650	16	--	NG/L	55.00		
Perfluorooctanoic acid (PFOA)	02/13/2023	25	16	--	NG/L	55.00		
Perfluoropentanesulfonate (PFPeS)	02/13/2023	6.3	16	--	NG/L	55.00	J	
Perfluoropentanoic acid (PFPeA)	02/13/2023	20	33	--	NG/L	55.00	J	
solids-tot	02/13/2023	30	4	--	MG/L	55.00		

Site ID : 085-408

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/13/2023	135.79	--	--	NG/L	65.00		
Perfluorobutanesulfonate (PFBS)	02/13/2023	1.1	1.6	--	NG/L	65.00	J	
Perfluorobutyric acid (PFBA)	02/13/2023	4.9	6.5	--	NG/L	65.00	J	
Perfluoroheptanoic acid (PFHpA)	02/13/2023	2.5	1.6	--	NG/L	65.00		
Perfluorohexanesulfonate (PFHxS)	02/13/2023	52	1.6	--	NG/L	65.00		
Perfluorohexanoic acid (PFHxA)	02/13/2023	11	1.6	--	NG/L	65.00		
Perfluorononanoic acid (PFNA)	02/13/2023	1.1	1.6	--	NG/L	65.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/13/2023	9.5	1.6	--	NG/L	65.00		
Perfluorooctanesulfonate (PFOS)	02/13/2023	36	1.6	--	NG/L	65.00		
Perfluorooctanoic acid (PFOA)	02/13/2023	15	1.6	--	NG/L	65.00		
Perfluoropentanesulfonate (PFPeS)	02/13/2023	0.49	1.6	--	NG/L	65.00	J	
Perfluoropentanoic acid (PFPeA)	02/13/2023	2.2	3.2	--	NG/L	65.00	J	
solids-tot	02/13/2023	30	4	--	MG/L	65.00		

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 085-409

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/13/2023	100.76	--	--	NG/L	37.50		
Perfluorobutanesulfonate (PFBS)	02/13/2023	2.9	1.4	--	NG/L	37.50		
Perfluorobutyric acid (PFBA)	02/13/2023	7.8	5.7	--	NG/L	37.50		
Perfluoroheptanoic acid (PFHpA)	02/13/2023	3.3	1.4	--	NG/L	37.50		
Perfluorohexanesulfonate (PFHxS)	02/13/2023	60	1.4	--	NG/L	37.50		
Perfluorohexanoic acid (PFHxA)	02/13/2023	7.1	1.4	--	NG/L	37.50		
Perfluorononanoic acid (PFNA)	02/13/2023	0.66	1.4	--	NG/L	37.50	J	
Perfluorooctanesulfonate (PFOS)	02/13/2023	6.7	1.4	--	NG/L	37.50		
Perfluorooctanoic acid (PFOA)	02/13/2023	8.2	1.4	--	NG/L	37.50		
Perfluoropentanesulfonate (PFPeS)	02/13/2023	2	1.4	--	NG/L	37.50		
Perfluoropentanoic acid (PFPeA)	02/13/2023	2.1	2.9	--	NG/L	37.50	J	
solids-tot	02/13/2023	30	4	--	MG/L	37.50		

Site ID : 085-410

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/13/2023	61.2	--	--	NG/L	55.00		
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	02/13/2023	2	5.6	--	NG/L	55.00	J	
N-Ethylperfluorooctane sulfonamido ethanol (NEtFOSE)	02/13/2023	3.2	14	--	NG/L	55.00	J	
N-Methylperfluorooctane sulfonamido ethanol (NMeFOSE)	02/13/2023	3	14	--	NG/L	55.00	J	
Perfluorobutanesulfonate (PFBS)	02/13/2023	2.3	1.4	--	NG/L	55.00		
Perfluorobutyric acid (PFBA)	02/13/2023	4.8	5.6	--	NG/L	55.00	J	
Perfluorododecanoic acid (PFDoA)	02/13/2023	0.48	1.4	--	NG/L	55.00	J	
Perfluoroheptanoic acid (PFHpA)	02/13/2023	2.1	1.4	--	NG/L	55.00		
Perfluorohexanesulfonate (PFHxS)	02/13/2023	19	1.4	--	NG/L	55.00		
Perfluorohexanoic acid (PFHxA)	02/13/2023	4.8	1.4	--	NG/L	55.00		
Perfluorononanoic acid (PFNA)	02/13/2023	0.81	1.4	--	NG/L	55.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/13/2023	0.34	1.4	--	NG/L	55.00	J	
Perfluorooctanesulfonate (PFOS)	02/13/2023	8.9	1.4	--	NG/L	55.00		
Perfluorooctanoic acid (PFOA)	02/13/2023	5.9	1.4	--	NG/L	55.00		
Perfluoropentanesulfonate (PFPeS)	02/13/2023	0.58	1.4	--	NG/L	55.00	J	
Perfluoropentanoic acid (PFPeA)	02/13/2023	1.6	2.8	--	NG/L	55.00	J	
Perfluorotetradecanoic acid (PFTeDA)	02/13/2023	0.68	1.4	--	NG/L	55.00	J	
Perfluorotridecanoic acid (PFTrDA)	02/13/2023	0.71	1.4	--	NG/L	55.00	J	
solids-tot	02/13/2023	20	4	--	MG/L	55.00		

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 085-411

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/15/2023	7461	--	--	NG/L	55.00		
Perfluorobutanesulfonate (PFBS)	02/15/2023	23	16	--	NG/L	55.00		
Perfluorobutyric acid (PFBA)	02/15/2023	35	64	--	NG/L	55.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/15/2023	34	16	--	NG/L	55.00		
Perfluoroheptanoic acid (PFHpA)	02/15/2023	140	16	--	NG/L	55.00		
Perfluorohexanesulfonate (PFHxS)	02/15/2023	3400	16	--	NG/L	55.00		
Perfluorohexanoic acid (PFHxA)	02/15/2023	730	15	--	NG/L	55.00	D	
Perfluorooctane sulfonamide (PFOSAm)	02/15/2023	180	16	--	NG/L	55.00		
Perfluorooctanesulfonate (PFOS)	02/15/2023	1300	16	--	NG/L	55.00		
Perfluorooctanoic acid (PFOA)	02/15/2023	1500	16	--	NG/L	55.00		
Perfluoropentanesulfonate (PFPeS)	02/15/2023	29	16	--	NG/L	55.00		
Perfluoropentanoic acid (PFPeA)	02/15/2023	90	32	--	NG/L	55.00		
solids-tot	02/15/2023	10	4	--	MG/L	55.00		

Site ID : 085-412

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/15/2023	145.31	--	--	NG/L	95.00		
Perfluorobutanesulfonate (PFBS)	02/15/2023	3.6	1.4	--	NG/L	95.00		
Perfluorobutyric acid (PFBA)	02/15/2023	5.3	5.7	--	NG/L	95.00	J	
Perfluoroheptanoic acid (PFHpA)	02/15/2023	2.6	1.4	--	NG/L	95.00		
Perfluorohexanesulfonate (PFHxS)	02/15/2023	87	1.4	--	NG/L	95.00		
Perfluorohexanoic acid (PFHxA)	02/15/2023	8.7	1.4	--	NG/L	95.00		
Perfluorononanoic acid (PFNA)	02/15/2023	0.7	1.4	--	NG/L	95.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/15/2023	0.11	1.4	--	NG/L	95.00	J	
Perfluorooctanesulfonate (PFOS)	02/15/2023	18	1.4	--	NG/L	95.00		
Perfluorooctanoic acid (PFOA)	02/15/2023	13	1.4	--	NG/L	95.00		
Perfluoropentanesulfonate (PFPeS)	02/15/2023	3.1	1.4	--	NG/L	95.00		
Perfluoropentanoic acid (PFPeA)	02/15/2023	3.2	2.9	--	NG/L	95.00		
solids-tot	02/15/2023	40	4	--	MG/L	95.00		

Site ID : 085-43

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/15/2023	64.44	--	--	NG/L	26.00		
Perfluorobutanesulfonate (PFBS)	02/15/2023	3.8	1.5	--	NG/L	26.00		
Perfluorobutyric acid (PFBA)	02/15/2023	15	5.9	--	NG/L	26.00		

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 085-43

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorodecanoic acid (PFDA)	02/15/2023	0.64	1.5	--	NG/L	26.00	J	
Perfluoroheptanoic acid (PFHpA)	02/15/2023	3.4	1.5	--	NG/L	26.00		
Perfluorohexanesulfonate (PFHxS)	02/15/2023	2.9	1.5	--	NG/L	26.00		
Perfluorohexanoic acid (PFHxA)	02/15/2023	5.2	1.4	--	NG/L	26.00		
Perfluorononanoic acid (PFNA)	02/15/2023	1.2	1.5	--	NG/L	26.00	J	
Perfluorooctanesulfonate (PFOS)	02/15/2023	22	1.5	--	NG/L	26.00		
Perfluorooctanoic acid (PFOA)	02/15/2023	5.9	1.5	--	NG/L	26.00		
Perfluoropentanoic acid (PFPeA)	02/15/2023	4.4	2.9	--	NG/L	26.00		
solids-tot	02/15/2023	10	4	--	MG/L	26.00		

Site ID : 086-123

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/16/2023	22.1	--	--	NG/L	34.50		
Perfluorobutanesulfonate (PFBS)	02/16/2023	1.8	1.5	--	NG/L	34.50		
Perfluorobutyric acid (PFBA)	02/16/2023	6.9	5.9	--	NG/L	34.50		
Perfluoroheptanoic acid (PFHpA)	02/16/2023	3.4	1.5	--	NG/L	34.50		
Perfluorohexanesulfonate (PFHxS)	02/16/2023	2.8	1.5	--	NG/L	34.50		
Perfluorohexanoic acid (PFHxA)	02/16/2023	2.7	1.4	--	NG/L	34.50		H
Perfluorooctanoic acid (PFOA)	02/16/2023	4.8	1.5	--	NG/L	34.50		
Perfluoropentanoic acid (PFPeA)	02/16/2023	2.4	3	--	NG/L	34.50	J	
solids-tot	02/16/2023	10	4	--	MG/L	34.50		

Site ID : 095-170

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/16/2023	28.89	--	--	NG/L	50.00		
8260 TVOC	02/16/2023	0.83	--	--	UG/L	50.00		
Chloroform	02/16/2023	0.83	0.5	--	UG/L	50.00		
Perfluorobutanesulfonate (PFBS)	02/16/2023	0.9	1.4	--	NG/L	50.00	J	
Perfluorobutyric acid (PFBA)	02/16/2023	9.3	5.7	--	NG/L	50.00		
Perfluoroheptanoic acid (PFHpA)	02/16/2023	2.5	1.4	--	NG/L	50.00		
Perfluorohexanesulfonate (PFHxS)	02/16/2023	2.5	1.4	--	NG/L	50.00		
Perfluorohexanoic acid (PFHxA)	02/16/2023	3.3	1.4	--	NG/L	50.00		H
Perfluorononanoic acid (PFNA)	02/16/2023	0.79	1.4	--	NG/L	50.00	J	
Perfluorooctanesulfonate (PFOS)	02/16/2023	6.7	1.4	--	NG/L	50.00		
Perfluorooctanoic acid (PFOA)	02/16/2023	3.5	1.4	--	NG/L	50.00		

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 095-170

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluoropentanoic acid (PFPeA)	02/16/2023	2.7	2.8	--	NG/L	50.00	J	
solids-tot	02/16/2023	40	4	--	MG/L	50.00		

Site ID : 095-171

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/16/2023	37.4	--	--	NG/L	50.00		
Perfluorobutanesulfonate (PFBS)	02/16/2023	1.7	1.5	--	NG/L	50.00		
Perfluorobutyric acid (PFBA)	02/16/2023	12	5.9	--	NG/L	50.00		
Perfluorodecanoic acid (PFDA)	02/16/2023	0.5	1.5	--	NG/L	50.00	J	
Perfluoroheptanoic acid (PFHpA)	02/16/2023	1.9	1.5	--	NG/L	50.00		
Perfluorohexanesulfonate (PFHxS)	02/16/2023	3.9	1.5	--	NG/L	50.00		
Perfluorohexanoic acid (PFHxA)	02/16/2023	2.4	1.6	--	NG/L	50.00		H
Perfluorononanoic acid (PFNA)	02/16/2023	1.2	1.5	--	NG/L	50.00	J	
Perfluorooctanesulfonate (PFOS)	02/16/2023	9.1	1.5	--	NG/L	50.00		
Perfluorooctanoic acid (PFOA)	02/16/2023	4.3	1.5	--	NG/L	50.00		
Perfluoropentanoic acid (PFPeA)	02/16/2023	2.8	2.9	--	NG/L	50.00	J	
solids-tot	02/16/2023	30	4	--	MG/L	50.00		

Site ID : 096-115

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/10/2023	60.29	--	--	NG/L	90.00		
1,4-Dioxane	02/10/2023	0.13	0.2	--	UG/L	90.00	J	
Perfluorobutanesulfonate (PFBS)	02/10/2023	2.7	1.5	--	NG/L	90.00		
Perfluorobutyric acid (PFBA)	02/10/2023	11	6	--	NG/L	90.00		
Perfluorodecanoic acid (PFDA)	02/10/2023	0.6	1.5	--	NG/L	90.00	J	
Perfluoroheptanoic acid (PFHpA)	02/10/2023	3.3	1.5	--	NG/L	90.00		
Perfluorohexanesulfonate (PFHxS)	02/10/2023	10	1.5	--	NG/L	90.00		
Perfluorohexanoic acid (PFHxA)	02/10/2023	7.2	1.5	--	NG/L	90.00		
Perfluorononanoic acid (PFNA)	02/10/2023	2.3	1.5	--	NG/L	90.00		
Perfluorooctanesulfonate (PFOS)	02/10/2023	11	1.5	--	NG/L	90.00		
Perfluorooctanoic acid (PFOA)	02/10/2023	5	1.5	--	NG/L	90.00		
Perfluoropentanesulfonate (PFPeS)	02/10/2023	0.99	1.5	--	NG/L	90.00	J	
Perfluoropentanoic acid (PFPeA)	02/10/2023	6.2	3	--	NG/L	90.00		

Site ID : 096-117

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/10/2023	77.87	--	--	NG/L	90.00		

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 096-117

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1,4-Dioxane	02/10/2023	0.33	0.2	--	UG/L	90.00		
Perfluorobutanesulfonate (PFBS)	02/10/2023	1.7	1.6	--	NG/L	90.00		
Perfluorobutyric acid (PFBA)	02/10/2023	6.8	6.3	--	NG/L	90.00		
Perfluorodecanoic acid (PFDA)	02/10/2023	0.82	1.6	--	NG/L	90.00	J	
Perfluoroheptanoic acid (PFHpA)	02/10/2023	1.8	1.6	--	NG/L	90.00		
Perfluorohexanesulfonate (PFHxS)	02/10/2023	13	1.6	--	NG/L	90.00		
Perfluorohexanoic acid (PFHxA)	02/10/2023	2.8	1.6	--	NG/L	90.00		
Perfluorononanoic acid (PFNA)	02/10/2023	6.1	1.6	--	NG/L	90.00		
Perfluorooctane sulfonamide (PFOSAm)	02/10/2023	0.12	1.6	--	NG/L	90.00	J	
Perfluorooctanesulfonate (PFOS)	02/10/2023	36	1.6	--	NG/L	90.00		
Perfluorooctanoic acid (PFOA)	02/10/2023	4.6	1.6	--	NG/L	90.00		
Perfluoropentanesulfonate (PFPeS)	02/10/2023	0.93	1.6	--	NG/L	90.00	J	
Perfluoropentanoic acid (PFPeA)	02/10/2023	3.2	3.2	--	NG/L	90.00		
solids-tot	02/10/2023	60	4	--	MG/L	90.00		

Site ID : 096-118

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/08/2023	628.83	--	--	NG/L	89.00		
Perfluoro-3-methoxypropanoic acid (PFMPA)	02/08/2023	0.51	2.8	--	NG/L	89.00	J	
Perfluorobutanesulfonate (PFBS)	02/08/2023	4.8	1.4	--	NG/L	89.00		
Perfluorobutyric acid (PFBA)	02/08/2023	11	5.6	--	NG/L	89.00		
Perfluorodecanoic acid (PFDA)	02/08/2023	0.22	1.4	--	NG/L	89.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/08/2023	15	1.4	--	NG/L	89.00		
Perfluoroheptanoic acid (PFHpA)	02/08/2023	6.9	1.4	--	NG/L	89.00		
Perfluorohexanesulfonate (PFHxS)	02/08/2023	230	1.4	--	NG/L	89.00		
Perfluorohexanoic acid (PFHxA)	02/08/2023	30	1.4	--	NG/L	89.00		
Perfluorononanoic acid (PFNA)	02/08/2023	2.6	1.4	--	NG/L	89.00		
Perfluorooctane sulfonamide (PFOSAm)	02/08/2023	2	1.4	--	NG/L	89.00		
Perfluorooctanesulfonate (PFOS)	02/08/2023	270	1.4	--	NG/L	89.00		
Perfluorooctanoic acid (PFOA)	02/08/2023	35	1.4	--	NG/L	89.00		
Perfluoropentanesulfonate (PFPeS)	02/08/2023	6.8	1.4	--	NG/L	89.00		
Perfluoropentanoic acid (PFPeA)	02/08/2023	14	2.8	--	NG/L	89.00		

Site ID : 096-122

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/14/2023	150.85	--	--	NG/L	65.00		

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 096-122

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorobutanesulfonate (PFBS)	02/14/2023	2.9	1.4	--	NG/L	65.00		
Perfluorobutyric acid (PFBA)	02/14/2023	5.2	5.5	--	NG/L	65.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/14/2023	0.82	1.4	--	NG/L	65.00	J	
Perfluoroheptanoic acid (PFHpA)	02/14/2023	2.5	1.4	--	NG/L	65.00		
Perfluorohexanesulfonate (PFHxS)	02/14/2023	67	1.4	--	NG/L	65.00		
Perfluorohexanoic acid (PFHxA)	02/14/2023	12	1.4	--	NG/L	65.00		
Perfluorononanoic acid (PFNA)	02/14/2023	0.63	1.4	--	NG/L	65.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/14/2023	6.8	1.4	--	NG/L	65.00		
Perfluorooctanesulfonate (PFOS)	02/14/2023	34	1.4	--	NG/L	65.00		
Perfluorooctanoic acid (PFOA)	02/14/2023	14	1.4	--	NG/L	65.00		
Perfluoropentanesulfonate (PFPeS)	02/14/2023	1.5	1.4	--	NG/L	65.00		
Perfluoropentanoic acid (PFPeA)	02/14/2023	3.5	2.8	--	NG/L	65.00		
solids-tot	02/14/2023	20	4	--	MG/L	65.00		

Site ID : 096-123

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/14/2023	156.8	--	--	NG/L	125.00		
Perfluorobutanesulfonate (PFBS)	02/14/2023	4.8	1.4	--	NG/L	125.00		
Perfluorobutyric acid (PFBA)	02/14/2023	6.4	5.6	--	NG/L	125.00		
Perfluoroheptanesulfonate (PFHpS)	02/14/2023	2.7	1.4	--	NG/L	125.00		
Perfluoroheptanoic acid (PFHpA)	02/14/2023	2.6	1.4	--	NG/L	125.00		
Perfluorohexanesulfonate (PFHxS)	02/14/2023	49	1.4	--	NG/L	125.00		
Perfluorohexanoic acid (PFHxA)	02/14/2023	4.5	1.5	--	NG/L	125.00		
Perfluorononanoic acid (PFNA)	02/14/2023	1.9	1.4	--	NG/L	125.00		
Perfluorooctanesulfonate (PFOS)	02/14/2023	70	1.4	--	NG/L	125.00		
Perfluorooctanoic acid (PFOA)	02/14/2023	10	1.4	--	NG/L	125.00		
Perfluoropentanesulfonate (PFPeS)	02/14/2023	2.6	1.4	--	NG/L	125.00		
Perfluoropentanoic acid (PFPeA)	02/14/2023	2.3	2.8	--	NG/L	125.00	J	
solids-tot	02/14/2023	30	4	--	MG/L	125.00		

Site ID : 096-124

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/14/2023	66.35	--	--	NG/L	75.00		
Perfluorobutanesulfonate (PFBS)	02/14/2023	1.8	1.5	--	NG/L	75.00		
Perfluorobutyric acid (PFBA)	02/14/2023	5.1	5.9	--	NG/L	75.00	J	

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 096-124

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluoroheptanesulfonate (PFHpS)	02/14/2023	1.2	1.5	--	NG/L	75.00	J	
Perfluoroheptanoic acid (PFHpA)	02/14/2023	1.8	1.5	--	NG/L	75.00		
Perfluorohexanesulfonate (PFHxS)	02/14/2023	15	1.5	--	NG/L	75.00		
Perfluorohexanoic acid (PFHxA)	02/14/2023	3.3	1.5	--	NG/L	75.00		
Perfluorononanoic acid (PFNA)	02/14/2023	0.79	1.5	--	NG/L	75.00	J	
Perfluorooctanesulfonate (PFOS)	02/14/2023	27	1.5	--	NG/L	75.00		
Perfluorooctanoic acid (PFOA)	02/14/2023	7.4	1.5	--	NG/L	75.00		
Perfluoropentanesulfonate (PFPeS)	02/14/2023	0.86	1.5	--	NG/L	75.00	J	
Perfluoropentanoic acid (PFPeA)	02/14/2023	2.1	3	--	NG/L	75.00	J	
solids-tot	02/14/2023	20	4	--	MG/L	75.00		

Site ID : 096-125

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/14/2023	60.58	--	--	NG/L	125.00		
Perfluorobutanesulfonate (PFBS)	02/14/2023	1.7	1.4	--	NG/L	125.00		
Perfluorobutyric acid (PFBA)	02/14/2023	4.6	5.6	--	NG/L	125.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/14/2023	1.2	1.4	--	NG/L	125.00	J	
Perfluoroheptanoic acid (PFHpA)	02/14/2023	1.5	1.4	--	NG/L	125.00		
Perfluorohexanesulfonate (PFHxS)	02/14/2023	23	1.4	--	NG/L	125.00		
Perfluorohexanoic acid (PFHxA)	02/14/2023	2.1	1.4	--	NG/L	125.00		
Perfluorononanoic acid (PFNA)	02/14/2023	0.73	1.4	--	NG/L	125.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/14/2023	0.15	1.4	--	NG/L	125.00	J	
Perfluorooctanesulfonate (PFOS)	02/14/2023	16	1.4	--	NG/L	125.00		
Perfluorooctanoic acid (PFOA)	02/14/2023	7	1.4	--	NG/L	125.00		
Perfluoropentanesulfonate (PFPeS)	02/14/2023	1.2	1.4	--	NG/L	125.00	J	
Perfluoropentanoic acid (PFPeA)	02/14/2023	1.4	2.8	--	NG/L	125.00	J	
solids-tot	02/14/2023	20	4	--	MG/L	125.00		

Site ID : 096-126

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/09/2023	246.7	--	--	NG/L	60.00		
Perfluorobutanesulfonate (PFBS)	02/09/2023	4.3	1.6	--	NG/L	60.00		
Perfluorobutyric acid (PFBA)	02/09/2023	7.5	6.3	--	NG/L	60.00		
Perfluoroheptanesulfonate (PFHpS)	02/09/2023	4.3	1.6	--	NG/L	60.00		
Perfluoroheptanoic acid (PFHpA)	02/09/2023	3.4	1.6	--	NG/L	60.00		

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 096-126

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorohexanesulfonate (PFHxS)	02/09/2023	83	1.6	--	NG/L	60.00		
Perfluorohexanoic acid (PFHxA)	02/09/2023	13	1.6	--	NG/L	60.00		
Perfluorononanoic acid (PFNA)	02/09/2023	1.8	1.6	--	NG/L	60.00		
Perfluorooctane sulfonamide (PFOSAm)	02/09/2023	5.8	1.6	--	NG/L	60.00		
Perfluorooctanesulfonate (PFOS)	02/09/2023	100	1.6	--	NG/L	60.00		
Perfluorooctanoic acid (PFOA)	02/09/2023	15	1.6	--	NG/L	60.00		
Perfluoropentanesulfonate (PFPeS)	02/09/2023	3.3	1.6	--	NG/L	60.00		
Perfluoropentanoic acid (PFPeA)	02/09/2023	5.3	3.1	--	NG/L	60.00		
solids-tot	02/09/2023	60	4	--	MG/L	60.00		

Site ID : 096-127

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/09/2023	549	--	--	NG/L	115.00		
1,4-Dioxane	02/09/2023	0.49	0.2	--	UG/L	115.00		
Perfluorobutanesulfonate (PFBS)	02/09/2023	4.3	1.5	--	NG/L	115.00		
Perfluorobutyric acid (PFBA)	02/09/2023	5.6	5.9	--	NG/L	115.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/09/2023	3.1	1.5	--	NG/L	115.00		
Perfluoroheptanoic acid (PFHpA)	02/09/2023	9.4	1.5	--	NG/L	115.00		
Perfluorohexanesulfonate (PFHxS)	02/09/2023	230	1.5	--	NG/L	115.00		
Perfluorohexanoic acid (PFHxA)	02/09/2023	63	1.5	--	NG/L	115.00		
Perfluorononanoic acid (PFNA)	02/09/2023	1.2	1.5	--	NG/L	115.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/09/2023	8.7	1.5	--	NG/L	115.00		
Perfluorooctanesulfonate (PFOS)	02/09/2023	130	1.5	--	NG/L	115.00		
Perfluorooctanoic acid (PFOA)	02/09/2023	81	1.5	--	NG/L	115.00		
Perfluoropentanesulfonate (PFPeS)	02/09/2023	3.5	1.5	--	NG/L	115.00		
Perfluoropentanoic acid (PFPeA)	02/09/2023	9.2	2.9	--	NG/L	115.00		
solids-tot	02/09/2023	20	4	--	MG/L	115.00		

Site ID : 096-128

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/09/2023	694.1	--	--	NG/L	60.00		
Perfluorobutanesulfonate (PFBS)	02/09/2023	5.5	1.6	--	NG/L	60.00		
Perfluorobutyric acid (PFBA)	02/09/2023	9.5	6.3	--	NG/L	60.00		
Perfluoroheptanesulfonate (PFHpS)	02/09/2023	6.8	1.6	--	NG/L	60.00		
Perfluoroheptanoic acid (PFHpA)	02/09/2023	7.7	1.6	--	NG/L	60.00		

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 096-128

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorohexanesulfonate (PFHxS)	02/09/2023	340	1.6	--	NG/L	60.00		
Perfluorohexanoic acid (PFHxA)	02/09/2023	50	1.6	--	NG/L	60.00		
Perfluorononanoic acid (PFNA)	02/09/2023	1.6	1.6	--	NG/L	60.00		
Perfluorooctane sulfonamide (PFOSAm)	02/09/2023	15	1.6	--	NG/L	60.00		
Perfluorooctanesulfonate (PFOS)	02/09/2023	200	1.6	--	NG/L	60.00		
Perfluorooctanoic acid (PFOA)	02/09/2023	41	1.6	--	NG/L	60.00		
Perfluoropentanesulfonate (PFPeS)	02/09/2023	5	1.6	--	NG/L	60.00		
Perfluoropentanoic acid (PFPeA)	02/09/2023	12	3.2	--	NG/L	60.00		
solids-tot	02/09/2023	20	4	--	MG/L	60.00		

Site ID : 096-129

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/09/2023	175.9	--	--	NG/L	115.00		
1,4-Dioxane	02/09/2023	1.2	0.2	--	UG/L	115.00		
Perfluorobutanesulfonate (PFBS)	02/09/2023	3.9	1.6	--	NG/L	115.00		
Perfluorobutyric acid (PFBA)	02/09/2023	5.3	6.5	--	NG/L	115.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/09/2023	3	1.6	--	NG/L	115.00		
Perfluoroheptanoic acid (PFHpA)	02/09/2023	2.1	1.6	--	NG/L	115.00		
Perfluorohexanesulfonate (PFHxS)	02/09/2023	61	1.6	--	NG/L	115.00		
Perfluorohexanoic acid (PFHxA)	02/09/2023	6	1.6	--	NG/L	115.00		
Perfluorononanoic acid (PFNA)	02/09/2023	1.1	1.6	--	NG/L	115.00	J	
Perfluorooctanesulfonate (PFOS)	02/09/2023	79	1.6	--	NG/L	115.00		
Perfluorooctanoic acid (PFOA)	02/09/2023	9.5	1.6	--	NG/L	115.00		
Perfluoropentanesulfonate (PFPeS)	02/09/2023	2.7	1.6	--	NG/L	115.00		
Perfluoropentanoic acid (PFPeA)	02/09/2023	2.3	3.3	--	NG/L	115.00	J	
solids-tot	02/09/2023	70	4	--	MG/L	115.00		

Site ID : 096-130

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/09/2023	38.76	--	--	NG/L	60.00		
Perfluorobutanesulfonate (PFBS)	02/09/2023	0.93	1.4	--	NG/L	60.00	J	
Perfluorobutyric acid (PFBA)	02/09/2023	3.3	5.7	--	NG/L	60.00	J	
Perfluoroheptanoic acid (PFHpA)	02/09/2023	1.3	1.4	--	NG/L	60.00	J	
Perfluorohexanesulfonate (PFHxS)	02/09/2023	3.8	1.4	--	NG/L	60.00		
Perfluorohexanoic acid (PFHxA)	02/09/2023	1.2	1.4	--	NG/L	60.00	J	

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 096-130

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorononanoic acid (PFNA)	02/09/2023	13	1.4	--	NG/L	60.00		
Perfluorooctanesulfonate (PFOS)	02/09/2023	6.3	1.4	--	NG/L	60.00		
Perfluorooctanoic acid (PFOA)	02/09/2023	7.7	1.4	--	NG/L	60.00		
Perfluoropentanesulfonate (PFPeS)	02/09/2023	0.32	1.4	--	NG/L	60.00	J	
Perfluoropentanoic acid (PFPeA)	02/09/2023	0.91	2.8	--	NG/L	60.00	J	
solids-tot	02/09/2023	20	4	--	MG/L	60.00		

Site ID : 096-131

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/09/2023	38.47	--	--	NG/L	115.00		
1,4-Dioxane	02/09/2023	0.44	0.2	--	UG/L	115.00		
Perfluorobutanesulfonate (PFBS)	02/09/2023	2.1	1.6	--	NG/L	115.00		
Perfluorobutyric acid (PFBA)	02/09/2023	7.1	6.4	--	NG/L	115.00		
Perfluoroheptanoic acid (PFHpA)	02/09/2023	1.8	1.6	--	NG/L	115.00		
Perfluorohexanesulfonate (PFHxS)	02/09/2023	5.8	1.6	--	NG/L	115.00		
Perfluorohexanoic acid (PFHxA)	02/09/2023	3.1	1.6	--	NG/L	115.00		
Perfluorononanoic acid (PFNA)	02/09/2023	1.6	1.6	--	NG/L	115.00		
Perfluorooctanesulfonate (PFOS)	02/09/2023	7.3	1.6	--	NG/L	115.00		
Perfluorooctanoic acid (PFOA)	02/09/2023	5.8	1.6	--	NG/L	115.00		
Perfluoropentanesulfonate (PFPeS)	02/09/2023	0.67	1.6	--	NG/L	115.00	J	
Perfluoropentanoic acid (PFPeA)	02/09/2023	3.2	3.2	--	NG/L	115.00		
solids-tot	02/09/2023	20	4	--	MG/L	115.00		

Site ID : 096-84

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/15/2023	119.72	--	--	NG/L	133.50		
Perfluorobutanesulfonate (PFBS)	02/15/2023	3	1.6	--	NG/L	133.50		
Perfluorobutyric acid (PFBA)	02/15/2023	15	6.2	--	NG/L	133.50		
Perfluorodecanoic acid (PFDA)	02/15/2023	0.42	1.6	--	NG/L	133.50	J	
Perfluoroheptanoic acid (PFHpA)	02/15/2023	14	1.6	--	NG/L	133.50		
Perfluorohexanesulfonate (PFHxS)	02/15/2023	10	1.6	--	NG/L	133.50		
Perfluorohexanoic acid (PFHxA)	02/15/2023	23	1.6	--	NG/L	133.50		
Perfluorononanoic acid (PFNA)	02/15/2023	3.2	1.6	--	NG/L	133.50		
Perfluorooctanesulfonate (PFOS)	02/15/2023	15	1.6	--	NG/L	133.50		
Perfluorooctanoic acid (PFOA)	02/15/2023	16	1.6	--	NG/L	133.50		

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 096-84

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluoropentanesulfonate (PFPeS)	02/15/2023	1.1	1.6	--	NG/L	133.50	J	
Perfluoropentanoic acid (PFPeA)	02/15/2023	19	3.1	--	NG/L	133.50		
solids-tot	02/15/2023	30	4	--	MG/L	133.50		

Site ID : 105-43

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/08/2023	87.84	--	--	NG/L	147.50		
1,4-Dioxane	02/08/2023	1.2	0.21	--	UG/L	147.50		
Perfluorobutanesulfonate (PFBS)	02/08/2023	1.6	1.5	--	NG/L	147.50		
Perfluorobutyric acid (PFBA)	02/08/2023	5.8	5.8	--	NG/L	147.50		
Perfluorodecanoic acid (PFDA)	02/08/2023	0.74	1.5	--	NG/L	147.50	J	
Perfluoroheptanoic acid (PFHpA)	02/08/2023	5.1	1.5	--	NG/L	147.50		
Perfluorohexanesulfonate (PFHxS)	02/08/2023	26	1.5	--	NG/L	147.50		
Perfluorohexanoic acid (PFHxA)	02/08/2023	3.6	1.5	--	NG/L	147.50		
Perfluorononanoic acid (PFNA)	02/08/2023	16	1.5	--	NG/L	147.50		
Perfluorooctanesulfonate (PFOS)	02/08/2023	14	1.5	--	NG/L	147.50		
Perfluorooctanoic acid (PFOA)	02/08/2023	10	1.5	--	NG/L	147.50		
Perfluoropentanesulfonate (PFPeS)	02/08/2023	1.2	1.5	--	NG/L	147.50	J	
Perfluoropentanoic acid (PFPeA)	02/08/2023	2.8	2.9	--	NG/L	147.50	J	
Perfluoroundecanoic acid (PFUdA)	02/08/2023	1	1.5	--	NG/L	147.50	J	

Site ID : 105-44

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/14/2023	106.8	--	--	NG/L	152.50		
Perfluorobutanesulfonate (PFBS)	02/14/2023	2.9	1.4	--	NG/L	152.50		
Perfluorobutyric acid (PFBA)	02/14/2023	14	5.7	--	NG/L	152.50		
Perfluoroheptanoic acid (PFHpA)	02/14/2023	6.6	1.4	--	NG/L	152.50		
Perfluorohexanesulfonate (PFHxS)	02/14/2023	20	1.4	--	NG/L	152.50		
Perfluorohexanoic acid (PFHxA)	02/14/2023	18	1.6	--	NG/L	152.50		
Perfluorooctanesulfonate (PFOS)	02/14/2023	10	1.4	--	NG/L	152.50		
Perfluorooctanoic acid (PFOA)	02/14/2023	9.2	1.4	--	NG/L	152.50		
Perfluoropentanesulfonate (PFPeS)	02/14/2023	2.1	1.4	--	NG/L	152.50		
Perfluoropentanoic acid (PFPeA)	02/14/2023	24	2.9	--	NG/L	152.50		
solids-tot	02/14/2023	50	4	--	MG/L	152.50		

Site ID : 105-72

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/08/2023	58.5	--	--	NG/L	105.00		

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 105-72

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1,4-Dioxane	02/08/2023	0.15	0.2	--	UG/L	105.00	J	
Perfluorobutanesulfonate (PFBS)	02/08/2023	1.5	1.5	--	NG/L	105.00		
Perfluorobutyric acid (PFBA)	02/08/2023	6.7	5.8	--	NG/L	105.00		
Perfluoroheptanoic acid (PFHpA)	02/08/2023	2.4	1.5	--	NG/L	105.00		
Perfluorohexanesulfonate (PFHxS)	02/08/2023	16	1.5	--	NG/L	105.00		
Perfluorohexanoic acid (PFHxA)	02/08/2023	4.7	1.5	--	NG/L	105.00		
Perfluorononanoic acid (PFNA)	02/08/2023	2.1	1.5	--	NG/L	105.00		
Perfluorooctane sulfonamide (PFOSAm)	02/08/2023	1.4	1.5	--	NG/L	105.00	J	
Perfluorooctanesulfonate (PFOS)	02/08/2023	12	1.5	--	NG/L	105.00		
Perfluorooctanoic acid (PFOA)	02/08/2023	6.4	1.5	--	NG/L	105.00		
Perfluoropentanesulfonate (PFPeS)	02/08/2023	1.1	1.5	--	NG/L	105.00	J	
Perfluoropentanoic acid (PFPeA)	02/08/2023	4.2	2.9	--	NG/L	105.00		

Site ID : 105-73

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/08/2023	322.5	--	--	NG/L	125.00		
1,4-Dioxane	02/08/2023	0.23	0.2	--	UG/L	125.00		
Perfluorobutanesulfonate (PFBS)	02/08/2023	2.8	1.4	--	NG/L	125.00		
Perfluorobutyric acid (PFBA)	02/08/2023	7.2	5.5	--	NG/L	125.00		
Perfluoroheptanesulfonate (PFHpS)	02/08/2023	5.4	1.4	--	NG/L	125.00		
Perfluoroheptanoic acid (PFHpA)	02/08/2023	4.3	1.4	--	NG/L	125.00		
Perfluorohexanesulfonate (PFHxS)	02/08/2023	140	1.4	--	NG/L	125.00		
Perfluorohexanoic acid (PFHxA)	02/08/2023	14	1.4	--	NG/L	125.00		
Perfluorononanoic acid (PFNA)	02/08/2023	3.9	1.4	--	NG/L	125.00		
Perfluorooctane sulfonamide (PFOSAm)	02/08/2023	2.1	1.4	--	NG/L	125.00		
Perfluorooctanesulfonate (PFOS)	02/08/2023	110	1.4	--	NG/L	125.00		
Perfluorooctanoic acid (PFOA)	02/08/2023	25	1.4	--	NG/L	125.00		
Perfluoropentanesulfonate (PFPeS)	02/08/2023	3.2	1.4	--	NG/L	125.00		
Perfluoropentanoic acid (PFPeA)	02/08/2023	4.6	2.8	--	NG/L	125.00		

Site ID : 105-74

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/14/2023	77	--	--	NG/L	95.00		
Perfluorobutanesulfonate (PFBS)	02/14/2023	1.7	1.6	--	NG/L	95.00		
Perfluorobutyric acid (PFBA)	02/14/2023	4.4	6.3	--	NG/L	95.00	J	

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 105-74

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluoroheptanoic acid (PFHpA)	02/14/2023	2.3	1.6	--	NG/L	95.00		
Perfluorohexanesulfonate (PFHxS)	02/14/2023	23	1.6	--	NG/L	95.00		
Perfluorohexanoic acid (PFHxA)	02/14/2023	4.1	1.6	--	NG/L	95.00		
Perfluorononanoic acid (PFNA)	02/14/2023	1.9	1.6	--	NG/L	95.00		
Perfluorooctane sulfonamide (PFOSAm)	02/14/2023	1.3	1.6	--	NG/L	95.00	J	
Perfluorooctanesulfonate (PFOS)	02/14/2023	24	1.6	--	NG/L	95.00		
Perfluorooctanoic acid (PFOA)	02/14/2023	9.7	1.6	--	NG/L	95.00		
Perfluoropentanesulfonate (PFPeS)	02/14/2023	1.2	1.6	--	NG/L	95.00	J	
Perfluoropentanoic acid (PFPeA)	02/14/2023	3.4	3.1	--	NG/L	95.00		
solids-tot	02/14/2023	20	4	--	MG/L	95.00		

Site ID : 105-75

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/14/2023	335.3	--	--	NG/L	115.00		
Perfluorobutanesulfonate (PFBS)	02/14/2023	3	1.5	--	NG/L	115.00		
Perfluorobutyric acid (PFBA)	02/14/2023	6.8	5.8	--	NG/L	115.00		
Perfluoroheptanesulfonate (PFHpS)	02/14/2023	5.9	1.5	--	NG/L	115.00		
Perfluoroheptanoic acid (PFHpA)	02/14/2023	4.9	1.5	--	NG/L	115.00		
Perfluorohexanesulfonate (PFHxS)	02/14/2023	150	1.5	--	NG/L	115.00		
Perfluorohexanoic acid (PFHxA)	02/14/2023	16	1.5	--	NG/L	115.00		
Perfluorononanoic acid (PFNA)	02/14/2023	2	1.5	--	NG/L	115.00		
Perfluorooctane sulfonamide (PFOSAm)	02/14/2023	2.1	1.5	--	NG/L	115.00		
Perfluorooctanesulfonate (PFOS)	02/14/2023	98	1.5	--	NG/L	115.00		
Perfluorooctanoic acid (PFOA)	02/14/2023	39	1.5	--	NG/L	115.00		
Perfluoropentanesulfonate (PFPeS)	02/14/2023	3.4	1.5	--	NG/L	115.00		
Perfluoropentanoic acid (PFPeA)	02/14/2023	4.2	2.9	--	NG/L	115.00		
solids-tot	02/14/2023	20	4	--	MG/L	115.00		

Site ID : 105-76

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/10/2023	194.8	--	--	NG/L	135.00		
1,4-Dioxane	02/10/2023	0.49	0.2	--	UG/L	135.00		
Perfluorobutanesulfonate (PFBS)	02/10/2023	2.4	1.4	--	NG/L	135.00		
Perfluorobutyric acid (PFBA)	02/10/2023	5.5	5.7	--	NG/L	135.00	J	
Perfluoroheptanesulfonate (PFHpS)	02/10/2023	3.6	1.4	--	NG/L	135.00		

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 105-76

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluoroheptanoic acid (PFHpA)	02/10/2023	3.1	1.4	--	NG/L	135.00		
Perfluorohexanesulfonate (PFHxS)	02/10/2023	100	1.4	--	NG/L	135.00		
Perfluorohexanoic acid (PFHxA)	02/10/2023	8.1	1.4	--	NG/L	135.00		
Perfluorononanoic acid (PFNA)	02/10/2023	2.6	1.4	--	NG/L	135.00		
Perfluorooctanesulfonate (PFOS)	02/10/2023	50	1.4	--	NG/L	135.00		
Perfluorooctanoic acid (PFOA)	02/10/2023	13	1.4	--	NG/L	135.00		
Perfluoropentanesulfonate (PFPeS)	02/10/2023	4	1.4	--	NG/L	135.00		
Perfluoropentanoic acid (PFPeA)	02/10/2023	2.5	2.9	--	NG/L	135.00	J	
solids-tot	02/10/2023	80	4	--	MG/L	135.00		

Site ID : 105-77

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/08/2023	132	--	--	NG/L	105.00		
1,4-Dioxane	02/08/2023	0.15	0.2	--	UG/L	105.00	J	
Perfluorobutanesulfonate (PFBS)	02/08/2023	2.4	1.4	--	NG/L	105.00		
Perfluorobutyric acid (PFBA)	02/08/2023	6.6	5.6	--	NG/L	105.00		
Perfluoroheptanesulfonate (PFHpS)	02/08/2023	2.1	1.4	--	NG/L	105.00		
Perfluoroheptanoic acid (PFHpA)	02/08/2023	2.3	1.4	--	NG/L	105.00		
Perfluorohexanesulfonate (PFHxS)	02/08/2023	38	1.4	--	NG/L	105.00		
Perfluorohexanoic acid (PFHxA)	02/08/2023	7.8	1.4	--	NG/L	105.00		
Perfluorononanoic acid (PFNA)	02/08/2023	5.5	1.4	--	NG/L	105.00		
Perfluorooctane sulfonamide (PFOSAm)	02/08/2023	2	1.4	--	NG/L	105.00		
Perfluorooctanesulfonate (PFOS)	02/08/2023	51	1.4	--	NG/L	105.00		
Perfluorooctanoic acid (PFOA)	02/08/2023	8.7	1.4	--	NG/L	105.00		
Perfluoropentanesulfonate (PFPeS)	02/08/2023	1.6	1.4	--	NG/L	105.00		
Perfluoropentanoic acid (PFPeA)	02/08/2023	4	2.8	--	NG/L	105.00		

Site ID : 105-78

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1633 TPFAS	02/08/2023	699.37	--	--	NG/L	125.00		
1,4-Dioxane	02/08/2023	0.25	0.2	--	UG/L	125.00		
Perfluorobutanesulfonate (PFBS)	02/08/2023	5	1.4	--	NG/L	125.00		
Perfluorobutyric acid (PFBA)	02/08/2023	7.9	5.7	--	NG/L	125.00		
Perfluoroheptanesulfonate (PFHpS)	02/08/2023	9.8	1.4	--	NG/L	125.00		
Perfluoroheptanoic acid (PFHpA)	02/08/2023	8.6	1.4	--	NG/L	125.00		

Table 22-3
Former Firehouse PFAS Monitoring Well Data
'Hits Only' January through March 2023

Site ID : 105-78

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorohexanesulfonate (PFHxS)	02/08/2023	370	1.4	--	NG/L	125.00		
Perfluorohexanoic acid (PFHxA)	02/08/2023	57	1.4	--	NG/L	125.00		
Perfluorononanoic acid (PFNA)	02/08/2023	3.5	1.4	--	NG/L	125.00		
Perfluorooctane sulfonamide (PFOSAm)	02/08/2023	0.87	1.4	--	NG/L	125.00	J	
Perfluorooctanesulfonate (PFOS)	02/08/2023	160	1.4	--	NG/L	125.00		
Perfluorooctanoic acid (PFOA)	02/08/2023	60	1.4	--	NG/L	125.00		
Perfluoropentanesulfonate (PFPeS)	02/08/2023	9	1.4	--	NG/L	125.00		
Perfluoropentanoic acid (PFPeA)	02/08/2023	7.7	2.8	--	NG/L	125.00		

Table 22-4
Former Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 085-414 (FF-RW-A)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	01/26/2023	858.18	--	--	NG/L	0.00		
8260 TVOC	01/26/2023	0.4	--	--	UG/L	0.00		
1,4-Dioxane	01/26/2023	0.16	0.2	--	UG/L	0.00	J	
Chloroform	01/26/2023	0.18	0.5	--	UG/L	0.00	J	
Methyl tert-butyl ether	01/26/2023	0.22	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	01/26/2023	14.4	1.46	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	01/26/2023	4.09	3.28	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	01/26/2023	15.2	1.64	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	01/26/2023	6.46	1.56	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	01/26/2023	6.08	1.64	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	01/26/2023	269	7.47	--	NG/L	0.00	D	
Perfluorohexanoic acid (PFHxA)	01/26/2023	59.3	1.64	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	01/26/2023	2.85	1.64	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	01/26/2023	417	8.21	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	01/26/2023	25.2	1.64	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/26/2023	23.7	1.54	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	01/26/2023	14.9	1.64	--	NG/L	0.00		
537 TPFAS	01/30/2023	599.38	--	--	NG/L	0.00		
8260 TVOC	01/30/2023	0.17	--	--	UG/L	0.00		
1,4-Dioxane	01/30/2023	0.11	0.2	--	UG/L	0.00	J	
Chloroform	01/30/2023	0.17	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	01/30/2023	6.31	1.58	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	01/30/2023	2.02	3.56	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	01/30/2023	13.5	1.78	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	01/30/2023	4.51	1.69	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	01/30/2023	4.63	1.78	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	01/30/2023	203	8.09	--	NG/L	0.00	D	
Perfluorohexanoic acid (PFHxA)	01/30/2023	29	1.78	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	01/30/2023	2.38	1.78	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	01/30/2023	298	8.89	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	01/30/2023	18.5	1.78	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/30/2023	8.45	1.67	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	01/30/2023	9.08	1.78	--	NG/L	0.00		

Table 22-4
Former Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 085-414 (FF-RW-A)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	02/01/2023	477.003	--	--	NG/L	0.00		
Perfluorobutanesulfonate (PFBS)	02/01/2023	5.74	1.56	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/01/2023	1.76	3.51	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/01/2023	12.9	1.76	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/01/2023	5.08	1.67	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/01/2023	5.29	1.76	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/01/2023	140	1.6	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/01/2023	24.6	1.76	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/01/2023	2.47	1.76	--	NG/L	0.00		
Perfluorooctane sulfonamide (PFOSAm)	02/01/2023	0.843	1.76	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	02/01/2023	245	8.78	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	02/01/2023	18.6	1.76	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/01/2023	6.2	1.65	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/01/2023	8.52	1.76	--	NG/L	0.00		
537 TPFAS	02/06/2023	431.79	--	--	NG/L	0.00		
Perfluorobutanesulfonate (PFBS)	02/06/2023	4.7	1.55	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/06/2023	1.72	3.49	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/06/2023	11.7	1.75	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/06/2023	5.49	1.66	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/06/2023	4.81	1.75	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/06/2023	131	1.59	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/06/2023	23.1	1.75	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/06/2023	1.9	1.75	--	NG/L	0.00		
Perfluorooctane sulfonamide (PFOSAm)	02/06/2023	3.71	1.75	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/06/2023	211	8.73	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	02/06/2023	21.8	1.75	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/06/2023	4.67	1.64	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/06/2023	6.19	1.75	--	NG/L	0.00		
537 TPFAS	02/13/2023	452.92	--	--	NG/L	0.00		
Perfluorobutanesulfonate (PFBS)	02/13/2023	4.36	1.57	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/13/2023	2.21	3.53	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/13/2023	12.6	1.77	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/13/2023	4.81	1.68	--	NG/L	0.00		

Table 22-4
Former Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 085-414 (FF-RW-A)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluoroheptanoic acid (PFHpA)	02/13/2023	4.59	1.77	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/13/2023	143	1.61	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/13/2023	26.2	1.77	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/13/2023	1.69	1.77	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/13/2023	8.21	1.77	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/13/2023	206	8.83	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	02/13/2023	28.1	1.77	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/13/2023	4.51	1.66	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/13/2023	6.64	1.77	--	NG/L	0.00		
537 TPFAS	02/22/2023	460.95	--	--	NG/L	0.00		
1,4-Dioxane	02/22/2023	0.26	0.2	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	02/22/2023	5	1.47	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/22/2023	2.08	3.31	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/22/2023	10.5	1.66	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/22/2023	5.15	1.57	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/22/2023	5.01	1.66	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/22/2023	139	7.53	--	NG/L	0.00	D	
Perfluorohexanoic acid (PFHxA)	02/22/2023	31.4	1.66	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/22/2023	1.98	1.66	--	NG/L	0.00		
Perfluorooctane sulfonamide (PFOSAm)	02/22/2023	10.3	1.66	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/22/2023	206	8.28	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	02/22/2023	33	1.66	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/22/2023	4.23	1.56	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/22/2023	7.3	1.66	--	NG/L	0.00		
537 TPFAS	03/01/2023	451.6	--	--	NG/L	0.00		
8260 TVOC	03/01/2023	0.18	--	--	UG/L	0.00		
1,4-Dioxane	03/01/2023	0.13	0.2	--	UG/L	0.00	J	
Chloroform	03/01/2023	0.18	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/01/2023	3.88	1.59	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/01/2023	3.07	3.57	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/01/2023	12.3	1.78	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/01/2023	4.88	1.69	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/01/2023	6.13	1.78	--	NG/L	0.00		

Table 22-4
Former Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 085-414 (FF-RW-A)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorohexanesulfonate (PFHxS)	03/01/2023	149	1.62	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/01/2023	32.4	1.78	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/01/2023	1.71	1.78	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	03/01/2023	12.3	1.78	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/01/2023	179	8.92	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	03/01/2023	35.8	1.78	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/01/2023	3.61	1.68	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/01/2023	7.52	1.78	--	NG/L	0.00		
537 TPFAS	03/08/2023	403.26	--	--	NG/L	0.00		
1,4-Dioxane	03/08/2023	0.12	0.21	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/08/2023	4.19	1.74	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/08/2023	2.38	3.9	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/08/2023	11.1	1.95	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/08/2023	4.03	1.85	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/08/2023	4.92	1.95	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/08/2023	131	1.77	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/08/2023	30.1	1.95	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/08/2023	1.48	1.95	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	03/08/2023	9.1	1.95	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/08/2023	169	1.95	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/08/2023	27.7	1.95	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/08/2023	2.76	1.83	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/08/2023	5.5	1.95	--	NG/L	0.00		
537 TPFAS	03/15/2023	414.26	--	--	NG/L	0.00		
Perfluorobutanesulfonate (PFBS)	03/15/2023	3.99	1.59	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/15/2023	2.75	3.58	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/15/2023	12.4	1.79	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/15/2023	4.17	1.7	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/15/2023	4.32	1.79	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/15/2023	151	8.14	--	NG/L	0.00	D	
Perfluorohexanoic acid (PFHxA)	03/15/2023	29.9	1.79	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/15/2023	1.59	1.79	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	03/15/2023	12.1	1.79	--	NG/L	0.00		

Table 22-4
Former Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 085-414 (FF-RW-A)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorooctanesulfonate (PFOS)	03/15/2023	154	8.94	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	03/15/2023	28.2	1.79	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/15/2023	3.23	1.68	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/15/2023	6.61	1.79	--	NG/L	0.00		
Strontium-90	03/15/2023	1.7	0.989	0.631	PCI/L	0.00		
537 TPFAS	03/20/2023	430.4	--	--	NG/L	0.00		
Perfluorobutanesulfonate (PFBS)	03/20/2023	3.72	1.59	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/20/2023	2.66	3.56	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/20/2023	12.1	1.78	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/20/2023	4.27	1.69	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/20/2023	4.73	1.78	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/20/2023	157	1.62	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/20/2023	33.4	1.78	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/20/2023	1.51	1.78	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	03/20/2023	10.9	1.78	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/20/2023	161	8.91	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	03/20/2023	29.6	1.78	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/20/2023	2.7	1.68	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/20/2023	6.81	1.78	--	NG/L	0.00		
537 TPFAS	03/29/2023	407.8	--	--	NG/L	0.00		
Perfluorobutanesulfonate (PFBS)	03/29/2023	4.19	1.56	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/29/2023	2.28	3.51	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/29/2023	10.3	1.76	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/29/2023	3.79	1.67	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/29/2023	5.69	1.76	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/29/2023	134	7.99	--	NG/L	0.00	D	
Perfluorohexanoic acid (PFHxA)	03/29/2023	31.5	1.76	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/29/2023	2.09	1.76	--	NG/L	0.00		
Perfluorooctane sulfonamide (PFOSAm)	03/29/2023	10.9	1.76	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/29/2023	164	8.78	--	NG/L	0.00	D	
Perfluorooctanoic acid (PFOA)	03/29/2023	28.1	1.76	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/29/2023	3.6	1.65	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/29/2023	7.36	1.76	--	NG/L	0.00		

Table 22-4
Former Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 085-414 (FF-RW-A)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Strontium-90	03/29/2023	1.07	0.774	0.485	PCI/L	0.00		N2

Site ID : 096-132 (FF-RW-B)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	01/26/2023	174.944	--	--	NG/L	0.00		
8260 TVOC	01/26/2023	0.89	--	--	UG/L	0.00		
Chloroform	01/26/2023	0.89	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	01/26/2023	3.85	1.5	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	01/26/2023	1.48	3.37	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	01/26/2023	6.64	1.69	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	01/26/2023	2.08	1.6	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	01/26/2023	3.42	1.69	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	01/26/2023	62.2	1.53	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	01/26/2023	12.8	1.69	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	01/26/2023	0.634	1.69	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	01/26/2023	60.2	1.69	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	01/26/2023	16	1.69	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/26/2023	2.06	1.59	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	01/26/2023	3.58	1.69	--	NG/L	0.00		
537 TPFAS	01/30/2023	274.634	--	--	NG/L	0.00		
8260 TVOC	01/30/2023	0.92	--	--	UG/L	0.00		
Chloroform	01/30/2023	0.92	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	01/30/2023	3.62	1.7	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	01/30/2023	2.14	3.83	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	01/30/2023	7.12	1.91	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	01/30/2023	2.66	1.82	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	01/30/2023	4.42	1.91	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	01/30/2023	122	1.74	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	01/30/2023	23.2	1.91	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	01/30/2023	0.714	1.91	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	01/30/2023	81.7	1.91	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	01/30/2023	19.1	1.91	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/30/2023	2.9	1.8	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	01/30/2023	5.06	1.91	--	NG/L	0.00		

Table 22-4
Former Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 096-132 (FF-RW-B)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	02/01/2023	275.72	--	--	NG/L	0.00		
8260 TVOC	02/01/2023	0.73	--	--	UG/L	0.00		
Chloroform	02/01/2023	0.73	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	02/01/2023	3.65	1.61	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/01/2023	2.44	3.62	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/01/2023	6.66	1.81	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/01/2023	2.71	1.72	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/01/2023	3.68	1.81	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/01/2023	120	1.65	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/01/2023	18.4	1.81	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/01/2023	89.5	1.81	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/01/2023	21.6	1.81	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/01/2023	2.75	1.7	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/01/2023	4.33	1.81	--	NG/L	0.00		
537 TPFAS	02/06/2023	260.49	--	--	NG/L	0.00		
8260 TVOC	02/06/2023	0.75	--	--	UG/L	0.00		
Chloroform	02/06/2023	0.75	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	02/06/2023	3.6	1.49	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/06/2023	2.03	3.36	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/06/2023	6.94	1.68	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/06/2023	3.01	1.59	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/06/2023	3.3	1.68	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/06/2023	96	1.53	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/06/2023	18.3	1.68	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/06/2023	0.78	1.68	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/06/2023	1.57	1.68	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	02/06/2023	97.1	1.68	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/06/2023	21.1	1.68	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/06/2023	2.2	1.58	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/06/2023	4.56	1.68	--	NG/L	0.00		
537 TPFAS	02/13/2023	239.407	--	--	NG/L	0.00		
8260 TVOC	02/13/2023	0.65	--	--	UG/L	0.00		
Chloroform	02/13/2023	0.65	0.5	--	UG/L	0.00		

Table 22-4
Former Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 096-132 (FF-RW-B)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorobutanesulfonate (PFBS)	02/13/2023	3.19	1.56	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/13/2023	2.22	3.5	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/13/2023	7.62	1.75	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/13/2023	2.89	1.66	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/13/2023	3.03	1.75	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/13/2023	90.5	1.59	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/13/2023	16.5	1.75	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/13/2023	0.607	1.75	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/13/2023	1.55	1.75	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	02/13/2023	88.6	1.75	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/13/2023	16.3	1.75	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/13/2023	2.22	1.64	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/13/2023	4.18	1.75	--	NG/L	0.00		
537 TPFAS	02/22/2023	220.043	--	--	NG/L	0.00		
8260 TVOC	02/22/2023	0.6	--	--	UG/L	0.00		
Chloroform	02/22/2023	0.6	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	02/22/2023	3.61	1.51	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/22/2023	1.46	3.4	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/22/2023	6.62	1.7	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/22/2023	2.71	1.62	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/22/2023	3.7	1.7	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/22/2023	83.7	1.55	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/22/2023	16.5	1.7	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/22/2023	0.723	1.7	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/22/2023	1.55	1.7	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	02/22/2023	77.2	1.7	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/22/2023	16	1.7	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/22/2023	2.3	1.6	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/22/2023	3.97	1.7	--	NG/L	0.00		
537 TPFAS	03/01/2023	229.278	--	--	NG/L	0.00		
8260 TVOC	03/01/2023	0.55	--	--	UG/L	0.00		
Chloroform	03/01/2023	0.55	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	03/01/2023	3.38	1.6	--	NG/L	0.00		

Table 22-4
Former Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 096-132 (FF-RW-B)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorobutylsulfonamide (FBSA)	03/01/2023	1.98	3.6	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/01/2023	7.74	1.8	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/01/2023	3.13	1.71	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/01/2023	3	1.8	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/01/2023	88.2	1.64	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/01/2023	13.8	1.8	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/01/2023	0.688	1.8	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	03/01/2023	1.71	1.8	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	03/01/2023	82.8	1.8	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/01/2023	15.8	1.8	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/01/2023	2.66	1.69	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/01/2023	4.39	1.8	--	NG/L	0.00		
537 TPFAS	03/08/2023	197.811	--	--	NG/L	0.00		
8260 TVOC	03/08/2023	0.58	--	--	UG/L	0.00		
1,4-Dioxane	03/08/2023	0.14	0.2	--	UG/L	0.00	J	
Chloroform	03/08/2023	0.58	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	03/08/2023	3.1	1.68	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/08/2023	1.57	3.77	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/08/2023	6.99	1.89	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/08/2023	2.46	1.79	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/08/2023	2.73	1.89	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/08/2023	70.7	1.72	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/08/2023	15.1	1.89	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/08/2023	0.731	1.89	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	03/08/2023	1.37	1.89	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	03/08/2023	71.3	1.89	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/08/2023	15.3	1.89	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/08/2023	2.44	1.77	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/08/2023	4.02	1.89	--	NG/L	0.00		
8260 TVOC	03/13/2023	0.53	--	--	UG/L	0.00		
Chloroform	03/13/2023	0.53	0.5	--	UG/L	0.00		
537 TPFAS	03/15/2023	254.297	--	--	NG/L	0.00		
Fluorotelomer sulfonate 6:2 (6:2 FTS)	03/15/2023	1.47	3.32	--	NG/L	0.00	J	

Table 22-4
Former Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 096-132 (FF-RW-B)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorobutanesulfonate (PFBS)	03/15/2023	4.04	1.55	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/15/2023	1.68	3.49	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/15/2023	8.44	1.75	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/15/2023	3.54	1.66	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/15/2023	3.54	1.75	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/15/2023	94.3	1.59	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/15/2023	16.1	1.75	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/15/2023	0.717	1.75	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	03/15/2023	1.89	1.75	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/15/2023	94.3	1.75	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/15/2023	17	1.75	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/15/2023	2.96	1.64	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/15/2023	4.32	1.75	--	NG/L	0.00		
537 TPFAS	03/20/2023	202.69	--	--	NG/L	0.00		
8260 TVOC	03/20/2023	0.51	--	--	UG/L	0.00		
Chloroform	03/20/2023	0.51	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	03/20/2023	2.8	1.58	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/20/2023	1.57	3.55	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/20/2023	7.74	1.77	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/20/2023	2.48	1.69	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/20/2023	3.12	1.77	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/20/2023	71.5	1.61	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/20/2023	14.1	1.77	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/20/2023	0.72	1.77	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	03/20/2023	1.61	1.77	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	03/20/2023	75.6	1.77	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/20/2023	15	1.77	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/20/2023	2.57	1.67	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/20/2023	3.88	1.77	--	NG/L	0.00		
537 TPFAS	03/29/2023	202.771	--	--	NG/L	0.00		
8260 TVOC	03/29/2023	0.48	--	--	UG/L	0.00		
1,4-Dioxane	03/29/2023	0.19	0.2	--	UG/L	0.00	J	
Chloroform	03/29/2023	0.48	0.5	--	UG/L	0.00	J	

Table 22-4
Former Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 096-132 (FF-RW-B)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorobutanesulfonate (PFBS)	03/29/2023	3.11	1.53	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/29/2023	1.49	3.44	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/29/2023	6.6	1.72	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/29/2023	2.58	1.63	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/29/2023	2.96	1.72	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/29/2023	67.8	1.57	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/29/2023	13.6	1.72	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/29/2023	0.881	1.72	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	03/29/2023	1.92	1.72	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/29/2023	80.4	1.72	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/29/2023	15.3	1.72	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/29/2023	2.14	1.62	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/29/2023	3.99	1.72	--	NG/L	0.00		

Site ID : 105-79 (FF-RW-C)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	01/26/2023	142.34	--	--	NG/L	0.00		
8260 TVOC	01/26/2023	0.83	--	--	UG/L	0.00		
1,1,1-Trichloroethane	01/26/2023	0.18	0.5	--	UG/L	0.00	J	
1,1-Dichloroethane	01/26/2023	0.25	0.5	--	UG/L	0.00	J	
1,4-Dioxane	01/26/2023	0.26	0.2	--	UG/L	0.00		
Chloroform	01/26/2023	0.4	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	01/26/2023	1.88	1.51	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	01/26/2023	5.65	1.7	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	01/26/2023	2.13	1.62	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	01/26/2023	2.49	1.7	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	01/26/2023	54.6	1.55	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	01/26/2023	9.8	1.7	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	01/26/2023	2.47	1.7	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	01/26/2023	41.4	1.7	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	01/26/2023	16.4	1.7	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/26/2023	2.19	1.6	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	01/26/2023	3.33	1.7	--	NG/L	0.00		
537 TPFAS	01/30/2023	111.46	--	--	NG/L	0.00		

Table 22-4
Former Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 105-79 (FF-RW-C)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/30/2023	0.83	--	--	UG/L	0.00		
1,1-Dichloroethane	01/30/2023	0.23	0.5	--	UG/L	0.00	J	
1,1-Dichloroethylene	01/30/2023	0.17	0.5	--	UG/L	0.00	J	
1,4-Dioxane	01/30/2023	0.22	0.22	--	UG/L	0.00		
Chloroform	01/30/2023	0.43	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	01/30/2023	1.67	1.63	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	01/30/2023	5.59	1.83	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	01/30/2023	1.59	1.74	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	01/30/2023	2.27	1.83	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	01/30/2023	44.1	1.67	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	01/30/2023	6.17	1.83	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	01/30/2023	2.61	1.83	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	01/30/2023	32.3	1.83	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	01/30/2023	10.6	1.83	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/30/2023	1.92	1.72	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	01/30/2023	2.64	1.83	--	NG/L	0.00		
537 TPFAS	02/01/2023	127.18	--	--	NG/L	0.00		
8260 TVOC	02/01/2023	0.38	--	--	UG/L	0.00		
1,4-Dioxane	02/01/2023	0.21	0.2	--	UG/L	0.00		
Chloroform	02/01/2023	0.38	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	02/01/2023	1.84	1.63	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	02/01/2023	6.28	1.83	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/01/2023	2.3	1.74	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/01/2023	2.24	1.83	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/01/2023	47.5	1.67	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/01/2023	5.86	1.83	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/01/2023	3.23	1.83	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/01/2023	41.6	1.83	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/01/2023	12.2	1.83	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/01/2023	1.75	1.72	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/01/2023	2.38	1.83	--	NG/L	0.00		
537 TPFAS	02/06/2023	122.84	--	--	NG/L	0.00		
8260 TVOC	02/06/2023	0.41	--	--	UG/L	0.00		

Table 22-4
Former Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 105-79 (FF-RW-C)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1,4-Dioxane	02/06/2023	0.22	0.23	--	UG/L	0.00	J	
Chloroform	02/06/2023	0.41	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	02/06/2023	1.89	1.67	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	02/06/2023	5.7	1.88	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/06/2023	1.82	1.78	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/06/2023	1.98	1.88	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/06/2023	48.7	1.71	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/06/2023	6.01	1.88	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/06/2023	2.71	1.88	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/06/2023	39.1	1.88	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/06/2023	13.3	1.88	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/06/2023	1.63	1.77	--	NG/L	0.00	J	
537 TPFAS	02/13/2023	110.14	--	--	NG/L	0.00		
8260 TVOC	02/13/2023	0.39	--	--	UG/L	0.00		
1,4-Dioxane	02/13/2023	0.19	0.2	--	UG/L	0.00	J	
Chloroform	02/13/2023	0.39	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	02/13/2023	1.68	1.58	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	02/13/2023	6.53	1.77	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/13/2023	1.72	1.68	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/13/2023	2.41	1.77	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/13/2023	41.8	1.61	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/13/2023	6.02	1.77	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/13/2023	2.47	1.77	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/13/2023	33.1	1.77	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/13/2023	9.62	1.77	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/13/2023	1.67	1.66	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/13/2023	3.12	1.77	--	NG/L	0.00		
537 TPFAS	02/22/2023	106.43	--	--	NG/L	0.00		
8260 TVOC	02/22/2023	0.39	--	--	UG/L	0.00		
1,4-Dioxane	02/22/2023	0.3	0.2	--	UG/L	0.00		
Chloroform	02/22/2023	0.39	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	02/22/2023	2.31	1.71	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	02/22/2023	6.04	1.92	--	NG/L	0.00		

Table 22-4
Former Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 105-79 (FF-RW-C)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluoroheptanesulfonate (PFHpS)	02/22/2023	1.24	1.82	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	02/22/2023	2.19	1.92	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/22/2023	39.4	1.74	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/22/2023	6.29	1.92	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/22/2023	2.14	1.92	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/22/2023	30.7	1.92	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/22/2023	11	1.92	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/22/2023	1.49	1.8	--	NG/L	0.00	J	
Perfluoropentanoic acid (PFPeA)	02/22/2023	3.63	1.92	--	NG/L	0.00		
537 TPFAS	03/01/2023	108.03	--	--	NG/L	0.00		
8260 TVOC	03/01/2023	0.44	--	--	UG/L	0.00		
1,4-Dioxane	03/01/2023	0.23	0.2	--	UG/L	0.00		
Chloroform	03/01/2023	0.44	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/01/2023	1.76	1.62	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	03/01/2023	7.2	1.82	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/01/2023	1.63	1.73	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	03/01/2023	2.37	1.82	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/01/2023	38.5	1.65	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/01/2023	6.63	1.82	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/01/2023	2.64	1.82	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/01/2023	31.5	1.82	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/01/2023	10.7	1.82	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/01/2023	1.78	1.71	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/01/2023	3.32	1.82	--	NG/L	0.00		
537 TPFAS	03/08/2023	103.15	--	--	NG/L	0.00		
8260 TVOC	03/08/2023	0.48	--	--	UG/L	0.00		
1,4-Dioxane	03/08/2023	0.2	0.22	--	UG/L	0.00	J	
Chloroform	03/08/2023	0.48	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/08/2023	1.7	1.66	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	03/08/2023	6.77	1.87	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/08/2023	1.43	1.78	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	03/08/2023	2.05	1.87	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/08/2023	39.4	1.7	--	NG/L	0.00		

Table 22-4
Former Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 105-79 (FF-RW-C)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorohexanoic acid (PFHxA)	03/08/2023	6.54	1.87	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/08/2023	2.07	1.87	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/08/2023	28.5	1.87	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/08/2023	9.94	1.87	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/08/2023	1.73	1.76	--	NG/L	0.00	J	
Perfluoropentanoic acid (PFPeA)	03/08/2023	3.02	1.87	--	NG/L	0.00		
1,4-Dioxane	03/11/2023	0.19	0.22	--	UG/L	0.00	J	
8260 TVOC	03/13/2023	0.47	--	--	UG/L	0.00		
Chloroform	03/13/2023	0.47	0.5	--	UG/L	0.00	J	
537 TPFAS	03/15/2023	107.24	--	--	NG/L	0.00		
Perfluorobutanesulfonate (PFBS)	03/15/2023	1.88	1.57	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	03/15/2023	7.42	1.76	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/15/2023	1.43	1.67	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	03/15/2023	2.33	1.76	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/15/2023	42.5	1.6	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/15/2023	5.62	1.76	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/15/2023	2.05	1.76	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/15/2023	30.4	1.76	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/15/2023	8.49	1.76	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/15/2023	1.94	1.65	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/15/2023	3.18	1.76	--	NG/L	0.00		
537 TPFAS	03/20/2023	119.95	--	--	NG/L	0.00		
8260 TVOC	03/20/2023	0.41	--	--	UG/L	0.00		
1,4-Dioxane	03/20/2023	0.18	0.2	--	UG/L	0.00	J	
Chloroform	03/20/2023	0.41	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/20/2023	1.76	1.6	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	03/20/2023	7.52	1.79	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/20/2023	1.51	1.7	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	03/20/2023	2.14	1.79	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/20/2023	44.3	1.63	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/20/2023	6.59	1.79	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/20/2023	2.07	1.79	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/20/2023	39.1	1.79	--	NG/L	0.00		

Table 22-4
Former Firehouse PFAS Extraction Well Data
'Hits Only' January through March 2023

Site ID : 105-79 (FF-RW-C)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluorooctanoic acid (PFOA)	03/20/2023	10	1.79	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/20/2023	1.92	1.69	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/20/2023	3.04	1.79	--	NG/L	0.00		
537 TPFAS	03/29/2023	117.7	--	--	NG/L	0.00		
8260 TVOC	03/29/2023	0.41	--	--	UG/L	0.00		
Chloroform	03/29/2023	0.41	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/29/2023	2.08	1.61	--	NG/L	0.00		
Perfluorobutyric acid (PFBA)	03/29/2023	5.94	1.81	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/29/2023	1.38	1.72	--	NG/L	0.00	J	
Perfluoroheptanoic acid (PFHpA)	03/29/2023	2.18	1.81	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/29/2023	44.8	1.65	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/29/2023	6.6	1.81	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/29/2023	1.89	1.81	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/29/2023	37.4	1.81	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/29/2023	9.98	1.81	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/29/2023	2.14	1.7	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/29/2023	3.31	1.81	--	NG/L	0.00		

Table 22-5
Former Firehouse PFAS Influent Data
'Hits Only' January through March 2023

Site ID : 076-422 (Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	01/26/2023	337.35	--	--	NG/L	0.00		
8260 TVOC	01/26/2023	0.53	--	--	UG/L	0.00		
1,4-Dioxane	01/26/2023	0.16	0.2	--	UG/L	0.00	J	
Chloroform	01/26/2023	0.53	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	01/26/2023	5.83	1.55	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	01/26/2023	2.07	3.49	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	01/26/2023	8.4	1.74	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	01/26/2023	3.23	1.66	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	01/26/2023	3.83	1.74	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	01/26/2023	98.7	1.59	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	01/26/2023	27.1	1.74	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	01/26/2023	1.95	1.74	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	01/26/2023	153	1.74	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	01/26/2023	18.7	1.74	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/26/2023	7.62	1.64	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	01/26/2023	6.92	1.74	--	NG/L	0.00		
537 TPFAS	01/27/2023	333.1	--	--	NG/L	0.00		
8260 TVOC	01/27/2023	0.54	--	--	UG/L	0.00		
1,4-Dioxane	01/27/2023	0.16	0.2	--	UG/L	0.00	J	
Chloroform	01/27/2023	0.54	0.5	--	UG/L	0.00		
Perfluorobutanesulfonate (PFBS)	01/27/2023	5.68	1.52	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	01/27/2023	2.03	3.42	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	01/27/2023	8.15	1.71	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	01/27/2023	3.12	1.62	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	01/27/2023	4.55	1.71	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	01/27/2023	113	1.56	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	01/27/2023	23.8	1.71	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	01/27/2023	2.25	1.71	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	01/27/2023	139	1.71	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	01/27/2023	18.2	1.71	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/27/2023	6.59	1.61	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	01/27/2023	6.73	1.71	--	NG/L	0.00		
537 TPFAS	01/30/2023	319.44	--	--	NG/L	0.00		

Table 22-5
Former Firehouse PFAS Influent Data
'Hits Only' January through March 2023

Site ID : 076-422 (Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	01/30/2023	0.48	--	--	UG/L	0.00		
1,4-Dioxane	01/30/2023	0.12	0.2	--	UG/L	0.00	J	
Chloroform	01/30/2023	0.48	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	01/30/2023	3.64	1.53	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	01/30/2023	1.48	3.44	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	01/30/2023	9.31	1.72	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	01/30/2023	3.67	1.63	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	01/30/2023	3.59	1.72	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	01/30/2023	99.8	1.57	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	01/30/2023	18.6	1.72	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	01/30/2023	2.28	1.72	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	01/30/2023	152	1.72	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	01/30/2023	16	1.72	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	01/30/2023	3.86	1.62	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	01/30/2023	5.21	1.72	--	NG/L	0.00		
537 TPFAS	01/31/2023	0	--	--	NG/L	0.00		
537 TPFAS	01/31/2023	280.1	--	--	NG/L	0.00		
8260 TVOC	01/31/2023	0.49	--	--	UG/L	0.00		
1,4-Dioxane	01/31/2023	0.14	0.2	--	UG/L	0.00	J	
Chloroform	01/31/2023	0.49	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	01/31/2023	3.48	1.58	--	NG/L	0.00	h	
Perfluorobutylsulfonamide (FBSA)	01/31/2023	1.69	3.56	--	NG/L	0.00	Jh	
Perfluorobutyric acid (PFBA)	01/31/2023	8.01	1.78	--	NG/L	0.00	h	
Perfluoroheptanesulfonate (PFHpS)	01/31/2023	3.13	1.69	--	NG/L	0.00	h	
Perfluoroheptanoic acid (PFHpA)	01/31/2023	3.22	1.78	--	NG/L	0.00	h	
Perfluorohexanesulfonate (PFHxS)	01/31/2023	106	1.62	--	NG/L	0.00	h	
Perfluorohexanoic acid (PFHxA)	01/31/2023	17.5	1.78	--	NG/L	0.00	h	
Perfluorononanoic acid (PFNA)	01/31/2023	1.95	1.78	--	NG/L	0.00	h	
Perfluorooctanesulfonate (PFOS)	01/31/2023	111	1.78	--	NG/L	0.00	h	
Perfluorooctanoic acid (PFOA)	01/31/2023	15.7	1.78	--	NG/L	0.00	h	
Perfluoropentanesulfonate (PFPeS)	01/31/2023	4.13	1.67	--	NG/L	0.00	h	
Perfluoropentanoic acid (PFPeA)	01/31/2023	4.29	1.78	--	NG/L	0.00	h	
537 TPFAS	02/01/2023	302.788	--	--	NG/L	0.00		

Table 22-5
Former Firehouse PFAS Influent Data
'Hits Only' January through March 2023

Site ID : 076-422 (Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/01/2023	0.17	--	--	UG/L	0.00		
1,4-Dioxane	02/01/2023	0.13	0.2	--	UG/L	0.00	J	
Chloroform	02/01/2023	0.17	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	02/01/2023	3.82	1.64	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/01/2023	1.62	3.68	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/01/2023	8.13	1.84	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/01/2023	3.57	1.75	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/01/2023	3.51	1.84	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/01/2023	108	1.67	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/01/2023	15.5	1.84	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/01/2023	2.17	1.84	--	NG/L	0.00		
Perfluorooctane sulfonamide (PFOSAm)	02/01/2023	0.758	1.84	--	NG/L	0.00	J	
Perfluorooctanesulfonate (PFOS)	02/01/2023	130	1.84	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/01/2023	17.6	1.84	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/01/2023	3.9	1.73	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/01/2023	4.21	1.84	--	NG/L	0.00		
537 TPFAS	02/06/2023	298.11	--	--	NG/L	0.00		
8260 TVOC	02/06/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	02/06/2023	0.13	0.2	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	02/06/2023	3.12	1.55	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/06/2023	2.8	3.48	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/06/2023	8.31	1.74	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/06/2023	3.67	1.65	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/06/2023	3.48	1.74	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/06/2023	93.1	1.58	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/06/2023	15.9	1.74	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/06/2023	1.97	1.74	--	NG/L	0.00		
Perfluorooctane sulfonamide (PFOSAm)	02/06/2023	1.83	1.74	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/06/2023	123	1.74	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/06/2023	33.5	1.74	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/06/2023	3.13	1.63	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/06/2023	4.3	1.74	--	NG/L	0.00		
537 TPFAS	02/13/2023	230.44	--	--	NG/L	0.00		

Table 22-5
Former Firehouse PFAS Influent Data
'Hits Only' January through March 2023

Site ID : 076-422 (Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	02/13/2023	0.38	--	--	UG/L	0.00		
Chloroform	02/13/2023	0.38	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	02/13/2023	2.64	1.47	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/13/2023	1.54	3.3	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/13/2023	7.95	1.65	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/13/2023	2.8	1.57	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/13/2023	3.39	1.65	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/13/2023	74.4	1.5	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/13/2023	14.3	1.65	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/13/2023	1.59	1.65	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	02/13/2023	2.92	1.65	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/13/2023	97	1.65	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/13/2023	15.8	1.65	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/13/2023	2.38	1.55	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/13/2023	3.73	1.65	--	NG/L	0.00		
537 TPFAS	02/22/2023	252.23	--	--	NG/L	0.00		
8260 TVOC	02/22/2023	0.38	--	--	UG/L	0.00		
1,4-Dioxane	02/22/2023	0.25	0.2	--	UG/L	0.00		
Chloroform	02/22/2023	0.38	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	02/22/2023	2.88	1.5	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	02/22/2023	1.46	3.38	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	02/22/2023	7.54	1.69	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	02/22/2023	3.17	1.6	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	02/22/2023	3.89	1.69	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	02/22/2023	76.6	1.54	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	02/22/2023	18.3	1.69	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	02/22/2023	1.95	1.69	--	NG/L	0.00		
Perfluorooctane sulfonamide (PFOSAm)	02/22/2023	4.25	1.69	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	02/22/2023	106	1.69	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	02/22/2023	19.2	1.69	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	02/22/2023	2.21	1.59	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	02/22/2023	4.78	1.69	--	NG/L	0.00		
537 TPFAS	03/01/2023	248.38	--	--	NG/L	0.00		

Table 22-5
Former Firehouse PFAS Influent Data
'Hits Only' January through March 2023

Site ID : 076-422 (Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
8260 TVOC	03/01/2023	0.41	--	--	UG/L	0.00		
1,4-Dioxane	03/01/2023	0.16	0.2	--	UG/L	0.00	J	
Chloroform	03/01/2023	0.41	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/01/2023	2.9	1.52	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/01/2023	1.55	3.41	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/01/2023	8.8	1.7	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/01/2023	3.01	1.62	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/01/2023	3.76	1.7	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/01/2023	71.5	1.55	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/01/2023	17.5	1.7	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/01/2023	1.5	1.7	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	03/01/2023	3.73	1.7	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/01/2023	109	1.7	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/01/2023	18.4	1.7	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/01/2023	2.01	1.6	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/01/2023	4.72	1.7	--	NG/L	0.00		
537 TPFAS	03/06/2023	222.93	--	--	NG/L	0.00		
8260 TVOC	03/06/2023	0.39	--	--	UG/L	0.00		
1,4-Dioxane	03/06/2023	0.17	0.2	--	UG/L	0.00	J	
Chloroform	03/06/2023	0.39	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/06/2023	2.75	1.48	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/06/2023	1.57	3.34	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/06/2023	8.38	1.67	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/06/2023	2.34	1.58	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/06/2023	3.36	1.67	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/06/2023	71	1.52	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/06/2023	16.1	1.67	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/06/2023	1.48	1.67	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	03/06/2023	4.09	1.67	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/06/2023	86.3	1.67	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/06/2023	19	1.67	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/06/2023	2.02	1.57	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/06/2023	4.54	1.67	--	NG/L	0.00		

Table 22-5
Former Firehouse PFAS Influent Data
'Hits Only' January through March 2023

Site ID : 076-422 (Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	03/15/2023	256.62	--	--	NG/L	0.00		
8260 TVOC	03/15/2023	0.41	--	--	UG/L	0.00		
1,4-Dioxane	03/15/2023	0.13	0.2	--	UG/L	0.00	J	
Chloroform	03/15/2023	0.41	0.5	--	UG/L	0.00	J	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	03/15/2023	1.65	3.56	--	NG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/15/2023	3.26	1.67	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/15/2023	1.59	3.74	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/15/2023	9.85	1.87	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/15/2023	3.24	1.78	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/15/2023	4	1.87	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/15/2023	89.1	1.7	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/15/2023	17.4	1.87	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/15/2023	1.37	1.87	--	NG/L	0.00	J	
Perfluorooctane sulfonamide (PFOSAm)	03/15/2023	4.51	1.87	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/15/2023	97.3	1.87	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/15/2023	16.6	1.87	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/15/2023	2.17	1.76	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/15/2023	4.58	1.87	--	NG/L	0.00		
537 TPFAS	03/20/2023	242.93	--	--	NG/L	0.00		
8260 TVOC	03/20/2023	0.38	--	--	UG/L	0.00		
Chloroform	03/20/2023	0.38	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/20/2023	3.02	1.57	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/20/2023	1.81	3.52	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/20/2023	8.46	1.76	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/20/2023	2.36	1.67	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/20/2023	3.62	1.76	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/20/2023	82	1.6	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/20/2023	17.4	1.76	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/20/2023	1.98	1.76	--	NG/L	0.00		
Perfluorooctane sulfonamide (PFOSAm)	03/20/2023	3.87	1.76	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/20/2023	92.3	1.76	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/20/2023	19	1.76	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/20/2023	2.25	1.66	--	NG/L	0.00		

Table 22-5
Former Firehouse PFAS Influent Data
'Hits Only' January through March 2023

Site ID : 076-422 (Influent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
Perfluoropentanoic acid (PFPeA)	03/20/2023	4.86	1.76	--	NG/L	0.00		
537 TPFAS	03/29/2023	258.42	--	--	NG/L	0.00		
8260 TVOC	03/29/2023	0.38	--	--	UG/L	0.00		
1,4-Dioxane	03/29/2023	0.14	0.2	--	UG/L	0.00	J	
Chloroform	03/29/2023	0.38	0.5	--	UG/L	0.00	J	
Perfluorobutanesulfonate (PFBS)	03/29/2023	2.91	1.52	--	NG/L	0.00		
Perfluorobutylsulfonamide (FBSA)	03/29/2023	1.47	3.41	--	NG/L	0.00	J	
Perfluorobutyric acid (PFBA)	03/29/2023	9.1	1.71	--	NG/L	0.00		
Perfluoroheptanesulfonate (PFHpS)	03/29/2023	2.9	1.62	--	NG/L	0.00		
Perfluoroheptanoic acid (PFHpA)	03/29/2023	3.02	1.71	--	NG/L	0.00		
Perfluorohexanesulfonate (PFHxS)	03/29/2023	96.5	1.55	--	NG/L	0.00		
Perfluorohexanoic acid (PFHxA)	03/29/2023	16.2	1.71	--	NG/L	0.00		
Perfluorononanoic acid (PFNA)	03/29/2023	1.75	1.71	--	NG/L	0.00		
Perfluorooctane sulfonamide (PFOSAm)	03/29/2023	3.49	1.71	--	NG/L	0.00		
Perfluorooctanesulfonate (PFOS)	03/29/2023	96.8	1.71	--	NG/L	0.00		
Perfluorooctanoic acid (PFOA)	03/29/2023	17.1	1.71	--	NG/L	0.00		
Perfluoropentanesulfonate (PFPeS)	03/29/2023	2.49	1.6	--	NG/L	0.00		
Perfluoropentanoic acid (PFPeA)	03/29/2023	4.69	1.71	--	NG/L	0.00		

Table 22-6
Former Firehouse PFAS Effluent Data
'Hits Only' January through March 2023

Site ID : 076-424 (Effluent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
537 TPFAS	01/26/2023	0	--	--	NG/L	0.00		
8260 TVOC	01/26/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	01/26/2023	0.2	0.2	--	UG/L	0.00	U	
Strontium-90	01/26/2023	0.397	0.361	0.243	PCI/L	0.00	J	N2
537 TPFAS	01/27/2023	0	--	--	NG/L	0.00		
8260 TVOC	01/27/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	01/27/2023	0.2	0.2	--	UG/L	0.00	U	
537 TPFAS	01/30/2023	0	--	--	NG/L	0.00		
8260 TVOC	01/30/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	01/30/2023	0.2	0.2	--	UG/L	0.00	U	
537 TPFAS	01/31/2023	0	--	--	NG/L	0.00		
8260 TVOC	01/31/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	01/31/2023	0.2	0.2	--	UG/L	0.00	U	
537 TPFAS	02/01/2023	0	--	--	NG/L	0.00		
8260 TVOC	02/01/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	02/01/2023	0.21	0.21	--	UG/L	0.00	U	
537 TPFAS	02/06/2023	0	--	--	NG/L	0.00		
8260 TVOC	02/06/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	02/06/2023	0.2	0.2	--	UG/L	0.00	U	
537 TPFAS	02/13/2023	0	--	--	NG/L	0.00		
8260 TVOC	02/13/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	02/13/2023	0.2	0.2	--	UG/L	0.00	U	
537 TPFAS	02/22/2023	0	--	--	NG/L	0.00		
8260 TVOC	02/22/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	02/22/2023	0.21	0.2	--	UG/L	0.00		
537 TPFAS	03/01/2023	0	--	--	NG/L	0.00		
8260 TVOC	03/01/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	03/01/2023	0.18	0.2	--	UG/L	0.00	J	
537 TPFAS	03/06/2023	0	--	--	NG/L	0.00		
8260 TVOC	03/06/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	03/06/2023	0.16	0.21	--	UG/L	0.00	J	
537 TPFAS	03/15/2023	0	--	--	NG/L	0.00		
8260 TVOC	03/15/2023	0	--	--	UG/L	0.00		

Table 22-6
Former Firehouse PFAS Effluent Data
'Hits Only' January through March 2023

Site ID : 076-424 (Effluent)

Chemical	Sample Date	Value	Det. Limit	Error	Units	Depth	Lab Qual	Review Qual
1,4-Dioxane	03/15/2023	0.14	0.2	--	UG/L	0.00	J	
537 TPFAS	03/20/2023	0	--	--	NG/L	0.00		
8260 TVOC	03/20/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	03/20/2023	0.2	0.2	--	UG/L	0.00	U	
537 TPFAS	03/29/2023	1.69	--	--	NG/L	0.00		
8260 TVOC	03/29/2023	0	--	--	UG/L	0.00		
1,4-Dioxane	03/29/2023	0.15	0.2	--	UG/L	0.00	J	
Fluorotelomer sulfonate 6:2 (6:2 FTS)	03/29/2023	1.69	3.29	--	NG/L	0.00	J	

Qualifiers :
D = Compound was identified in an analysis at a secondary dilution factor.
E = Identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.
J = Estimated value.
N2 = Not usable based on the results that are not distinguishable from background. The value is less than or equal to the sum of the MDA and the uncertainty or RDL.
U = Compound not detected.

Organic Compounds :
B = Compound was found in both the sample And associated laboratory blank.

Inorganic Compounds :
B = Result Is between instrument detection limit And contract required reporting limit.