

# Memo



**SUBJECT**  
Town of New Windsor - Butterhill Filtration Plant  
Temporary Granular Activated Carbon Treatment Project  
WA #D007618-48, Site #336089

**TO**  
David Chiusano, NYSDEC

## O&M Quarterly Report – Second Quarter 2023

**DATE**  
July 26, 2023

**PROJECT NUMBER**  
30053845

**COPIES TO**  
file

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The Town of New Windsor (Town) owns and operates the Butterhill Filtration Plant (Plant) located at 181 Forge Hill Road in New Windsor, New York. The Plant is supplied by three production wells with a combined well field capacity of 6.45 million gallons per day (mgd). To address detections of per- and polyfluoroalkyl substances (PFAS), including perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), in the wells, the New York State Department of Environmental Conservation (NYSDEC) installed a temporary granular activated carbon (GAC) treatment system (System). The System can treat a portion of the well water (up to 1,500 gallons per minute (gpm) or 2.16 mgd), while remaining Town demands are met by the Town's Kroll Well and Riley Road Treatment Plant treating Catskill Aqueduct water. During Catskill Aqueduct maintenance shutdowns, the Riley Road output is replaced by water purchased through interconnections with the Town and City of Newburgh.

NYSDEC has engaged LaBella Associates to operate and maintain the System and Arcadis of New York, Inc. (Arcadis) to collect samples and provide NYSDEC and LaBella with engineering support as needed. Operations, maintenance, and monitoring (OM&M) activities are accomplished in accordance with the System OM&M Plan revised in December 2020.

GAC media was replaced in all contactors in November 2020, and media was replaced in the three north contactors in October 2022, at which time the south contactors were switched to the lead position in their respective train.

## APRIL THROUGH JUNE 2023 OPERATION AND MAINTENANCE ACTIVITIES

1. The System continued treating up to 1,500 gpm routinely throughout the quarter.
2. Quarterly sampling was completed by Arcadis on June 1, 2023. Analysis results are attached. At the time of sampling, Well 3 was active and supplying the System.
3. In the June 1<sup>st</sup> samples, PFOS and PFOA were detected in the port between lead and lag vessels (Midpoint) of all three trains.
4. In accordance with NYSDOH requirements, all samples were analyzed using an approved PFAS methodology (EPA 533) at an approved laboratory.
5. Wells 1, 2, and 3 were fully operational and were run to the plant, instead of to waste, while well samples were collected.
6. Arcadis is not aware of any other operation or maintenance issues with the GAC system that occurred since the last quarterly report.

## ATTACHMENTS

David Chiusano  
NYSDEC  
July 26, 2023

- Summary of June 1, 2023 sampling event (Table 1)
- Summary of PFAS detections since December 2019 (Table 2)
- Laboratory reports for June 1, 2023 sampling event

## **ATTACHMENTS**

**June 1, 2023 Sample Event Summary**

**(Table 1)**

Table 1 - Summary of Per- and Polyfluoroalkyl Substances Analysis in Temporary Treatment System Samples - June 1st, 2023

Parameter List EPA Method 533	Units	Well #1	Well #2	Well #3	Pre-GAC	Post-GAC	Post-GAC (dup)
<b>Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water</b>							
11CI-PF3OUDs	ng/L	<1.9	<1.9	<1.8	<1.9	<1.9	<1.8
9CI-PF3ONS	ng/L	<1.9	<1.9	<1.8	<1.9	<1.9	<1.8
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ng/L	<1.9	<1.9	<1.8	<1.9	<1.9	<1.8
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ng/L	<1.9	<1.9	<1.8	<1.9	<1.9	<1.8
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ng/L	<1.9	<1.9	<1.8	<1.9	<1.9	<1.8
Perfluorobutanoic acid (PFBA)	ng/L	<b>9.9</b>	<b>7.6</b>	<b>5.8</b>	<b>5.2</b>	<b>5.3</b>	<b>5.7</b>
Perfluorobutanesulfonic acid (PFBS)	ng/L	<b>5.9</b>	<b>2.7</b>	<b>2.7</b>	<b>2.4</b>	<1.9	<1.8
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ng/L	<1.9	<1.9	<1.8	<1.9	<1.9	<1.8
Perfluorodecanoic acid (PFDA)	ng/L	<1.9	<1.9	<1.8	<1.9	<1.9	<1.8
Perfluorododecanoic acid (PFDoA)	ng/L	<1.9	<1.9	<1.8	<1.9	<1.9	<1.8
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ng/L	<1.9	<1.9	<1.8	<1.9	<1.9	<1.8
Perfluoroheptanesulfonic Acid (PFHpS)	ng/L	<1.9	<1.9	<1.8	<1.9	<1.9	<1.8
Perfluoroheptanoic acid (PFHpA)	ng/L	<1.9	<1.9	<b>2.0</b>	<b>1.9</b>	<1.9	<1.8
4:2 FTS	ng/L	<1.9	<1.9	<1.8	<1.9	<1.9	<1.8
Perfluorohexanesulfonic acid (PFHxS)	ng/L	<b>5.4</b>	<b>5.6</b>	<b>5.9</b>	<b>5.2</b>	<1.9	<1.8
Perfluorohexanoic acid (PFHxA)	ng/L	<1.9	<b>2.8</b>	<b>3.9</b>	<b>3.4</b>	<1.9	<1.8
Perfluoro-3-methoxypropanoic acid (PFMPA)	ng/L	<1.9	<1.9	<1.8	<1.9	<1.9	<1.8
Perfluoro-4-methoxybutanoic acid (PFMBA)	ng/L	<1.9	<1.9	<1.8	<1.9	<1.9	<1.8
Perfluorononanoic acid (PFNA)	ng/L	<1.9	<1.9	<1.8	<1.9	<1.9	<1.8
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ng/L	<1.9	<1.9	<1.8	<1.9	<1.9	<1.8
Perfluorooctanesulfonic acid (PFOS)	ng/L	<b>5.7</b>	<b>5.3</b>	<b>6.8</b>	<b>6.3</b>	<1.9	<1.8
Perfluorooctanoic acid (PFOA)	ng/L	<b>4.1</b>	<b>4.2</b>	<b>4.3</b>	<b>3.4</b>	<1.9	<1.8
Perfluoropentanoic acid (PFPeA)	ng/L	<1.9	<b>6.5</b>	<b>7.6</b>	<b>5.2</b>	<b>2.8</b>	<b>2.8</b>
Perfluoropentanesulfonic acid (PFPeS)	ng/L	<1.9	<1.9	<1.8	<1.9	<1.9	<1.8
Perfluoroundecanoic acid (PFUnA)	ng/L	<1.9	<1.9	<1.8	<1.9	<1.9	<1.8

Parameter List EPA Method 533	Units	Train 1 Lead (South) 25%	Train 1 Lead (South) 50%	Train 1 Lead (South) 75%	Train 1 Mid	Train 1 Lag (North) 25%	Train 1 Lag (North) 50%	Train 1 Lag (North) 75%	Train 1 Post	Train 2 Lead (South) 25%	Train 2 Lead (South) 50%	Train 2 Lead (South) 75%	Train 2 Mid	Train 2 Lag (North) 25%	Train 2 Lag (North) 50%	Train 2 Lag (North) 75%	Train 2 Post	Train 3 Lead (South) 25%	Train 3 Lead (South) 50%	Train 3 Lead (South) 75%	Train 3 Mid	Train 3 Lag (North) 25%	Train 3 Lag (North) 50%	Train 3 Lag (North) 75%	Train 3 Post
<b>Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water</b>																									
11CI-PF3OUDs	ng/L	<1.8	<1.9	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.9	<1.8	<1.7	<1.8	<1.9	<1.8	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.8	<1.8	<1.9
9CI-PF3ONS	ng/L	<1.8	<1.9	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.9	<1.8	<1.7	<1.8	<1.9	<1.8	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.8	<1.8	<1.9
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ng/L	<1.8	<1.9	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.9	<1.8	<1.7	<1.8	<1.9	<1.8	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.8	<1.8	<1.9
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ng/L	<1.8	<1.9	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.9	<1.8	<1.7	<1.8	<1.9	<1.8	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.8	<1.8	<1.9
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ng/L	<1.8	<1.9	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.9	<1.8	<1.7	<1.8	<1.9	<1.8	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.8	<1.8	<1.9
Perfluorobutanoic acid (PFBA)	ng/L	<b>5.2</b>	<b>6.1</b>	<b>5.3</b>	<b>5.6</b>	<b>5.7</b>	<b>6.3</b>	<b>6.7</b>	<b>5.0</b>	<b>5.0</b>	<b>6.1</b>	<b>5.6</b>	<b>5.5</b>	<b>5.2</b>	<b>5.4</b>	<b>6.7</b>	<b>5.8</b>	<b>7.0</b>	<b>5.6</b>	<b>5.1</b>	<b>5.3</b>	<b>5.6</b>	<b>5.4</b>	<b>7.0</b>	<b>4.8</b>
Perfluorobutanesulfonic acid (PFBS)	ng/L	<b>2.5</b>	<b>2.3</b>	<b>1.9</b>	<b>2.0</b>	<1.8	<1.8	<1.8	<b>2.6</b>	<b>2.2</b>	<1.8	<1.7	<1.8	<1.9	<1.8	<b>2.9</b>	<b>2.7</b>	<b>2.4</b>	<b>2.2</b>	<1.8	<1.8	<1.9	<1.8	<1.9	<1.9
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ng/L	<1.8	<1.9	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.9	<1.8	<1.7	<1.8	<1.9	<1.8	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.8	<1.8	<1.9
Perfluorodecanoic acid (PFDA)	ng/L	<1.8	<1.9	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.9	<1.8	<1.7	<1.8	<1.9	<1.8	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.8	<1.8	<1.9
Perfluorododecanoic acid (PFDoA)	ng/L	<1.8	<1.9	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.9	<1.8	<1.7	<1.8	<1.9	<1.8	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.8	<1.8	<1.9
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ng/L	<1.8	<1.9	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.9	<1.8	<1.7	<1.8	<1.9	<1.8	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.8	<1.8	<1.9
Perfluoroheptanesulfonic Acid (PFHpS)	ng/L	<1.8	<1.9	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.9	<1.8	<1.7	<1.8	<1.9	<1.8	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.8	<1.8	<1.9
Perfluoroheptanoic acid (PFHpA)	ng/L	<b>1.8</b>	<b>1.9</b>	<1.8	<1.8	<1.8	<1.8	<1.																	

## **PFAS Detections Summary**

**(Table 2)**

Table 2 - Summary of Detected Per- and Polyfluoroalkyl Substances in Temporary Treatment System Samples

		Compound (ng/L)												
Sample Location	Date	PFOS	PFOA	PFBA	PFBS	PFHxS	PFPeA	PFHxA	PFHpA	PFDoA	PFTriA	PFTeA	FOSA	6:2 FTS
Well #1	12/05/19	3.7	2.6	5.6	2.6	3.0								
	01/09/20	3.3	2.4	6.0	2.7	2.9								
	02/14/20	3.6	3.1	5.3	2.4	3.1	2.5	1.9						
	03/06/20	3.6	2.5	5.5	2.1	2.6	2.7	2.3						
	04/01/20	3.4	3.0	4.8	2.4	2.7	3.2	3.1						
	05/06/20	3.8	3.3	5.8	3.0	2.7	3.4	3.7						
	08/04/20	3.2	2.5	4.9	2.8	2.2	2.8	2.3						
	11/03/20													*Not sampled, Well #1 offline for repairs
	12/15/20													*Not sampled, Well #1 offline for repairs
	03/17/21													*Not sampled, Well #1 offline for repairs
	06/04/21													*Not sampled, Well #1 offline for repairs
	09/14/21	2.1		5.2		2.2								
	12/07/21													*Not sampled, Well #1 offline
	03/02/22	2.9	2.7	6.9	2.7	2.8								
	06/02/22	3.4	3.3	7.2	2.7	2.6	2.4							
	09/08/22	4.3	3.8	6.5	3.2	3.1								
	12/08/22	3.4	3.2	6.1	3.9	3.9								
	03/17/23	5.6	4.3	8.6	5.2	4.9	2.0							
	06/01/23	5.7	4.1	9.9	5.9	5.4								
Well #2	12/05/19	2.4	3.5	4.6		3.2	4.3	3.4	2.0					
	01/09/20	2.2	3.5	5.2		3.4	5.1	3.4	2.2					
	02/14/20	2.7	3.9	3.9		3.5	5.9	3.6	2.2					
	03/06/20	2.8	2.9	4.2		3.3	6.1	3.5	2.2					
	04/01/20	2.2	3.1	4.1		3.4	5.8	3.8	2.0					
	05/06/20													*Not sampled, Well #2 offline for repairs
	08/04/20	2.2	2.7	4.2		2.7	4.3	2.3						
	11/03/20	2.2	2.4			2.9	6.6	4.2						2.1
	12/15/20	2.5	3.2	5.3		3.3	7.6	4.9	2.6					
	03/17/21													*Not sampled, Well #2 offline for repairs
	06/04/21													*Not sampled, Well #2 offline for repairs
	09/14/21													*Not sampled, Well #2 offline for repairs
	12/07/21													*Not sampled, Well #2 offline for repairs
	03/02/22	3.3	3.5	5.0	2.3	3.4	4.5	2.8						
	06/02/22	3.0	2.9	3.6	1.8	2.8	2.7	1.9						
	09/08/22	3.7	3.3	4.1	1.8	3.3	3.5	2.4						
	12/08/22	4.3	4.2	5.9	2.8	5.1	6.2	3.8	2.2					
	03/17/23	5.0	4.3	6.6	3.2	5.3	4.6	3.2	2.2					
	06/01/23	5.3	4.2	7.6	2.7	5.6	6.5	2.8						
Well #3	12/05/19	8.9	5.0	6.7	2.2	6.5	11.0	8.4	4.3					
	01/09/20	7.7	3.9	4.9		4.6	7.8	5.6	2.8					
	02/14/20	6.0	3.6	2.7		3.8	5.3	3.7	1.9					
	03/06/20	5.4	2.9	2.8		3.3	4.6	3.0	1.8					
	04/01/20	4.5	2.8	2.9		3.4	4.5	3.0	1.8					
	05/06/20	5.9	3.7	4.9		3.9	4.3	3.2	2.0					
	08/04/20	8.1	4.3	5.1	1.9	3.9	7.5	5.5	3.1					
	11/03/20	7.7	4.1	5.7	2.6	5.5	9.1	6.3	3.6					2.7
	12/15/20	8.5	4.5	5.6	3.1	6.2	8.5	6.5	3.6					
	03/17/21	5.3	2.9			3.5	5.3	3.9	2.1	2.6	2.9	2.4		
	06/04/21	5.3	3.1		1.7	3.0	3.7	3.4	1.9					
	09/14/21	5.5	3.1	4.6		3.1	5.4	3.6						
	12/07/21	7.8	4.1	4.9	2.2	4.1	5.3	3.5	2.5					
	03/02/22	4.2	3.6	4.6		3.2	6.2	4.6	2.4					
	06/02/22	4.3	2.7	3.6		2.9	4.5	3.2						
	09/08/22	11.0	5.3	6.1	3.1	8.6	10.0	6.8	3.8					
	12/08/22	9.9	5.2	5.8	4.0	7.1	11.0	7.9	4.1					
	03/17/23	5.8	3.8	4.0	2.4	5.2	5.6	4.6	2.6					
	06/01/23	6.8	4.3	5.8	2.7	5.9	7.6	3.9	2.0					

Table 2 - Summary of Detected Per- and Polyfluoroalkyl Substances in Temporary Treatment System Samples

		Compound (ng/L)												
		PFOS	PFOA	PFBA	PFBS	PFHxS	PFPeA	PFHxA	PFHpA	PFDoA	PFTriA	PFTeA	FOSA	6:2 FTS
Pre-GAC	12/05/19	3.1/2.9	2.5/2.4	5.7	2.6/2.6	3/2.7								
	01/09/20	2.5/2.3	3.3/3.6	5.0		3.2/3.3	5.0	3.5	2.2/2.2					
	02/14/20	2.8	3.3/3.0	4.0		3.4/2.8	6.1	3.7	2.2					
	03/06/20	3.3/2.9	2.5/2.7	5.6	2.3/2.1	2.7/2.4	2.7	2.2						
	04/01/20	3.0	2.8	4.2	2.3	2.3	3.4	3.0						
	05/06/20	5.0	3.1	4.1		3.7	3.9	3.1	1.8					
	08/04/20	8.5	4.4	5.0	2.0	4.9	8.2	5.8	3.2					
	11/03/20	9.8	4.7	5.7	3.2	7.2	9.5	7.3	3.7					
	12/15/20	8.5/7.5	4.8/4.4	5.6	3/3.2	6.2/5.7	8.2	6.7	3.6/3.4					
	03/17/21	4.9/5.0	3/3.1			3.6/3.9	5.1	3.7	2/2.4					
	06/04/21	5.3/3.8	2.9/2.6			3.1/3.1	3.7	3.2	1.7					
	09/14/21	2.9	2.3	6.0	2.7	3.1	2.1							
	12/07/21	6.6	3.8	4.9	2.1	3.8	5.1	3.4	2.3					
	03/02/22	2.9	3.2	4.7	2.2	3.1	4.5	2.7	1.9					
	06/02/22	4.0	2.6	3.6		2.8	2.9							
	09/08/22	12.0	6.1	6.8	3.9	9.6	11.0	8.5	4.7					
	12/08/22	4.5	3.6	5.5	2.5	4.7	6.3	3.5	2.3					
	03/17/23	5.7	4.0	7.6	3.0	5.0	5.4	3.0	2.0					
	06/01/23	6.3	3.4	5.2	2.4	5.2	5.2	3.4	1.9					
Train 1-Lead 25%	01/09/20			5.3			4.7							
	02/14/20			4.4		1.9	5.3	2.9						
	03/06/20			5.6			3.3	2.1						
	04/01/20			4.5			3.6	2.6						
	05/06/20	2.9	2.3	4.2		2.5	4.1	2.9						
	08/04/20	6.1	4.1	5.5	2.0	3.4	7.7	5.3	2.2					
	11/03/20	7.5	4.5	5.9	3.4	6.2	10.0	7.3	3.9					
	12/15/20						2.1							
	03/17/21	12.0	5.6		1.9	6.2	5.5	4.6	3.3					
	06/04/21	3.5	2.4			2.5	4.0	3.1						
	09/14/21	2.7	2.1	6.3	2.5	2.5	2.3							
	12/07/21	5.8	3.7	5.8	2.1	4	5.5	3.4	2.3					
	03/02/22	2.7	2.9	4.6	2.1	2.8	4.5	2.5						
	06/02/22	3.6	2.6	3.6		2.5	2.9	2.1						
	09/08/22	10.0	5.7	6.4	3.6	8.4	11.0	8.2	4.3					
	12/08/22	2.2	2.8	5.8	2.2	2.9	6.6	3.6						
	03/17/23	9.0	3.5	7.3	2.8	4.7	6.0	3.2	2.0					
	06/01/23	5.2	3.1	5.2	2.5	4.7	5.4	3.4	1.8					
Train 1-Lead 50%	01/09/20			4.7			3.3							
	02/14/20			4.6			4.4	1.8						
	03/06/20			5.4			3.0							
	04/01/20			4.7			3.5	1.9						
	05/06/20			4.7			4.0	2.6						
	08/04/20	3.0	2.8	5.5	1.7	2.6	7.4	4.7	2.2					
	11/03/20	4.5	3.3	5.8	2.9	4.6	9.2	6.9	3.3					
	12/15/20													
	03/17/21						4.3	2.5						
	06/04/21	2.2	1.9				4.1	2.9						
	09/14/21			6.0	2.1		3.1							
	12/07/21	3.7	3.1	6.1	1.9	2.8	5.9	3.3	2.0					
	03/02/22	2.1	2.7	4.6	1.9	2.5	4.4	2.6						
	06/02/22	2.3	2.3	3.7		2.4	3.1	1.9						
	09/08/22	7.3	4.7	6.6	3.3	7.3	11.0	7.7	3.6					
	12/08/22			5.6			6.0	3.0						
	03/17/23	2.6	2.8	7.5	2.5	2.9	5.8	3.3						
	06/01/23	4.2	3.3	6.1	2.3	3.8	6.0	3.5	1.9					

Table 2 - Summary of Detected Per- and Polyfluoroalkyl Substances in Temporary Treatment System Samples

		Compound (ng/L)												
		PFOS	PFOA	PFBA	PFBS	PFHxS	PFPeA	PFHxA	PFHpA	PFDoA	PFTriA	PFTeA	FOSA	6:2 FTS
Train 1-Lead 75%	01/09/20			3.7									2.3	
	02/14/20			4.3				2.3						
	03/06/20			5.1				2.2						
	04/01/20			4.6				2.7						
	05/06/20			5.0				3.7						
	08/04/20			5.4				6.9	3.9					
	11/03/20	2.0	2.1	5.9	2.1	2.8	9.9	6.0	2.7					
	12/15/20													
	03/17/21							3.0						
	06/04/21							3.3	2.2					
	09/14/21			5.5				3.4	1.8					
	12/07/21	2.3	2.4	5.4				5.4	3.1					
	03/02/22		2.2	4.9			2.1	4.5	2.5					
	06/02/22	2.1	2.1	3.9				3.3	2.0					
	09/08/22	5.5	4.5	6.6	3.0	5.9	10.0	6.9	3.5					
	12/08/22			3.5				4.9	2.0					
	03/17/23			7.9			2.1	5.8	2.7					
	06/01/23	2.9	2.3	5.3	1.9	2.7	6.0	3.0						
Train 1-MID	04/01/20			4.0				2.2						
	05/06/20			4.8				2.9						
	08/04/20			6.5				4.1	2.9					
	11/03/20			6.4	2.0	2.1	8.8	5.2	2.2					
	12/15/20													
	03/17/21													
	06/04/21													
	09/14/21			5.6				4.4						
	12/07/21			5.5				5.2	2.7					
	03/02/22			3.6				4.1	2.3				2.1	
	06/02/22			3.4				3.2	1.9					
	09/08/22	3.9	3.7	6.5	2.7	4.8	10.0	6.3	2.9				40.0	
	12/08/22			4.9				4.6	2.0					
	03/17/23			7.5			2.0	5.8	2.7					
	06/01/23	2.2	2.0	5.6	2.0	2.3	5.7	3.3						
Train 1-Lag 25%	02/14/20			3.0										
	03/06/20			3.2										
	04/01/20			4.4										
	05/06/20			5.0				2.3						
	08/04/20			7.0				5.9	2.5					
	11/03/20			6.8				9.5	4.7					
	03/17/21							1.8					2.2	4.1
	06/04/21							2.5						
	09/14/21			5.7				4.2	1.8					
	12/07/21	2.2		4.6				5.3	2.4					
	03/02/22			4.9				4.4	2.1					
	06/02/22			3.7				3.4	1.8					
	09/08/22	1.9	2.9	6.2	2.2	2.5	9.2	5.2	2.3					
	12/08/22													
	03/17/23			7.3				3.9						
	06/01/23			5.7				5.5	2.2					

Table 2 - Summary of Detected Per- and Polyfluoroalkyl Substances in Temporary Treatment System Samples

		Compound (ng/L)												
		PFOS	PFOA	PFBA	PFBS	PFHxS	PFPeA	PFHxA	PFHpA	PFDoA	PFTriA	PFTeA	FOSA	6:2 FTS
Train 1-Lag 50%	02/14/20			2.1										
	03/06/20			2.9										
	04/01/20			3.6										
	05/06/20			4.9										
	08/04/20			6.8			4.5							
	11/03/20			7.0			8.7	3.4						
	03/17/21													
	06/04/21					1.9								
	09/14/21			5.4			4.4							
	12/07/21			5.4			5	2						
	03/02/22			4.5			3.8							
	06/02/22			3.6			2.9							
	09/08/22		2.1	6.9	1.8	1.8	8.6	4.4	1.8					
	12/08/22													
	03/17/23			6.8			2.0							
	06/01/23			6.3			5.2	1.8						
Train 1-Lag 75%	05/06/20			3.5										
	08/04/20			6.6										
	11/03/20			7.5			7.9							
	03/17/21													
	06/04/21													
	09/14/21			5.6			3.7							
	12/07/21			8.7			4.5							
	03/02/22			14.0			3.5							
	06/02/22			6.5			2.9							
	09/08/22			6.0			7.9	3.6						
	12/08/22													
	03/17/23			1.8										
	06/01/23			6.7			2.7							
Train 1-POST	04/01/20			2.0										
	05/06/20			3.6										
	08/04/20			5.9			2.2							
	11/03/20			7.1			5.6							5.5
	12/15/20													
	03/17/21													
	06/04/21													
	09/14/21			5.5			3.4							
	12/07/21			4.7			4.3							
	03/02/22			4.6			3.6							
	06/02/22			3.6			2.9							
	09/08/22			6.2			8.0	3.9						
	12/08/22													
Train 2-Lead 25%	03/17/23			3.1										
	06/01/23			5.0			2.3							
	01/09/20		2.2	4.9		2.2	4.6	2.9	1.9					
	02/14/20		2.7	3.7		2.3	5.3	3.1						
	03/06/20	1.7	1.9	5.1		1.7	3.0	2.0						
	04/01/20	2.0	2.1	4.5	1.9	1.9	3.5	2.8						
	05/06/20	3.5	2.7	4.2		3.0	4.1	3.3						
	08/04/20	6.2	3.9	5.5	1.9	3.6	7.8	5.3	3.1					
	11/03/20	6.8	3.8	5.8	2.8	5.4	9.4	6.7	3.5					
	12/15/20	1.8	1.8				4.7	3.4						
	03/17/21	6.6	3.5			3.9	5.4	3.9	2.3					1.8
	06/04/21	4.4	2.5			2.6	3.7	3.0						
	09/14/21	3.0	2.1	6.4	2.5	2.5	2.7							
	12/07/21	5.9	3.4	6	2.2	3.5	5.5	3.4	2.2					
	03/02/22	2.9	3.2	3.7	2	2.8	4.3	2.6						
	06/02/22	3.3	2.8	3.5	1.9	2.9	3.3	2.1						
	09/08/22	9.0	6.1	6.3	3.5	8.1	11.0	7.6	4.4					
	12/08/22	2.3	2.7	5.8	2.3	2.9	7.0	4.1	2.0					
	03/17/23	4.4	3.8	8.1	2.9	4.3	6.1	3.7	2.1					
	06/01/23	5.7	3.2	5.0	2.6	4.5	5.0	3.6	1.9					

Table 2 - Summary of Detected Per- and Polyfluoroalkyl Substances in Temporary Treatment System Samples

		Compound (ng/L)												
		PFOS	PFOA	PFBA	PFBS	PFHxS	PFPeA	PFHxA	PFHpA	PFDoA	PFTriA	PFTeA	FOSA	6:2 FTS
Train 2-Lead 50%	01/09/20			5.0			3.9	1.9						
	02/14/20			4.0			4.5	2.5						
	03/06/20			5.0			2.9	1.7						
	04/01/20			4.5			3.3	2.4						
	05/06/20	1.9	1.8	4.1			4.0	2.8						
	08/04/20	3.5	3.1	5.2		3.0	7.3	4.8	2.4					
	11/03/20	4.4	3.4	6.3	2.8	4.1	9.4	7.0	3.3					
	12/15/20						2.5							
	03/17/21	2.2	2.1			1.9	4.6	2.9						
	06/04/21	2.5	2.0			2.0	3.6	3.0						
	09/14/21	2.0	2	5.8	2.1		3.3							
	12/07/21	4.3	2.9	5.9		3.2	5.4		2.0					
	03/02/22	2.3	2.8	5.1	1.9	2.4	4.4	2.7						
	06/02/22	2.9	2.4	3.8		2.2	3.3	2.1						
	09/08/22	7.3	5.3	6.3	3.2	7.2	11.0	7.2	3.8					
	12/08/22			5.1			5.8	2.9						
	03/17/23	2.0	3.2	8.1	2.6	3.2	6.6	3.3	2.0					
	06/01/23	3.9	2.9	6.1	2.2	3.3	6.2	3.3						
Train 2-Lead 75%	01/09/20			4.0										
	02/14/20			4.2			2.6							
	03/06/20			5.5			2.3							
	04/01/20			4.3			2.9							
	05/06/20			4.6			3.8	1.9						
	08/04/20		1.8	5.3			6.7	4.0						
	11/03/20	2.0	2.2	6.9	2.3	2.7	9.9	6.6	2.6					
	12/15/20													
	03/17/21						3.0							
	06/04/21						3.3	2.2						
	09/14/21			5.5			3.3	1.7						
	12/07/21	2.3	2.0	5.3		1.9	5.1	2.9						
	03/02/22		2.1	5.0			4.2	2.6						
	06/02/22	2.3	2.3	3.7			3.4	2.0						
	09/08/22	5.9	4.2	6.1	2.7	5.6	10.0	6.4	3.4					
	12/08/22			4.2			4.2							
	03/17/23			7.1			5.1	2.5						
	06/01/23	2.7	2.4	5.6		3.1	5.3	3.1						
Train 2-MID	04/01/20			3.6			2.1							
	05/06/20			4.6			2.9							
	08/04/20			6.0			6.1	3.1						
	11/03/20			6.5	2.0	2.0	9.2	5.5	2.0				3.5	14
	12/15/20													
	03/17/21													
	06/04/21													
	09/14/21			5.8			3.6							
	12/07/21	2.1		5.1			4.8	2.8					26	
	03/02/22		1.9	4.7			4.2	2.4					12.0	
	06/02/22			*3.8/3.3			*3.4/2.7	*2.1/<1.9					*9.1/2.3	
Train 2-Lag 25%	09/08/22	4.2	3.5	6.5	2.5	4.8	9.7	5.9	2.7					
	12/08/22			4.5			4.0	1.8						
	03/17/23		1.8	7.3			5.4	2.4						
	06/01/23	2.2	1.9	5.5		2.6	5.3	2.8						
	02/14/20			2.3										
	03/06/20			3.5										
	04/01/20			3.7										
	05/06/20			6.1										
	08/04/20			6.0			5.2	1.8						
	11/03/20			6.9			9.5	4.1						
	03/17/21													
	06/04/21						4.2	2.1						
	09/14/21			5.4			4.5							
	12/07/21			5.3			4.8	2.1						
	03/02/22			4.5			3.9							
	06/02/22			3.5			2.9							
	09/08/22		2.2	6.3		2.2	8.2	4.5						
	12/08/22													
	03/17/23			7.4			5.2							
	06/01/23			5.2			4.8	2.3						

Table 2 - Summary of Detected Per- and Polyfluoroalkyl Substances in Temporary Treatment System Samples

		Compound (ng/L)												
		PFOS	PFOA	PFBA	PFBS	PFHxS	PFPeA	PFHxA	PFHpA	PFDoA	PFTriA	PFTeA	FOSA	6:2 FTS
Train 2-Lag 50%	03/06/20			2.8										
	04/01/20			2.4										
	05/06/20			5.3										
	08/04/20			6.3			4.0							
	11/03/20			7.1			8.8	3.1						
	03/17/21													
	06/04/21						1.9							
	09/14/21			4.4			3.2							
	12/07/21			5.3			4.2							
	03/02/22			4.7			3.8							
	06/02/22			3.7			2.8							
	09/08/22		1.9	5.8			7.8	4.1						
	12/08/22													
	03/17/23			7.3			3.6							
	06/01/23			5.4			4.7	1.9						
Train 2-Lag 75%	05/06/20			3.3										
	08/04/20			6.9										
	11/03/20			7.7			7.1							
	03/17/21													
	06/04/21													
	09/14/21			4.6			2.9							
	12/07/21			5.4			4.2							
	03/02/22			4.5			3.4							
	06/02/22			3.4			2.4							
	09/08/22			6.1			7.3	3.3						
	12/08/22													
	03/17/23			4.7										
	06/01/23			6.7			3.6							
Train 2-POST	05/06/20			3.4										
	08/04/20			5.9			2.1							
	11/03/20			8.0			6.1							13.0
	12/15/20													
	03/17/21													
	06/04/21													
	09/14/21			4.5			2.5							
	12/07/21			5.7			4							
	03/02/22			4.2			3.3							2.4
	06/02/22			3.7			2.8							6.0
	09/08/22			6.1			7.5	3.1						
	12/08/22													20
	03/17/23			4.4										
	06/01/23			5.8			2.8							3.1
Train 3-Lead 25%	01/09/20		1.8	4.8			4.3	2.6						
	02/14/20		2.3	3.9		1.9	5.0	2.8						
	03/06/20			5.1			2.8	1.9						
	04/01/20			4.1			3.3	2.5						
	05/06/20	3.0	2.4	4.5		2.7	4.1	3.0						
	08/04/20	6.6	4.1	5.4	2.1	4.0	8.1	5.1	3.1					
	11/03/20	5.8	3.8	5.9	2.8	5.2	9.5	6.7	3.4					
	12/15/20	2.1	2.0	4.6		2.1	5.6	4.0	1.8					
	03/17/21	4.3	2.6			2.9	4.8	3.2	1.8					
	06/04/21	4.9	2.4			2.9	3.8	3.0						
	09/14/21	3.0	2.1	5.1		2.3	2.6							
	12/07/21	5.4	3.7	4.7	1.9	3.5	5.1	3.2	2.0					
	03/02/22	2.6	3.1	5.2	2	2.8	4.4	2.6						
	06/02/22	3.1	2.6	3.5	1.8	2.5	2.9	2.0						
	09/08/22	8.9	5.6	6.5	3.6	7.8	11.0	7.6	3.6					
	12/08/22	2.3	2.5	5.5	2.2	3.0	6.2	3.5						
	03/17/23	3.4	3.7	6.9	2.6	4.0	4.9	3.1	2.0					
	06/01/23	5.9	4.4	7.0	2.9	5.6	6.5	4.1	2.2					

Table 2 - Summary of Detected Per- and Polyfluoroalkyl Substances in Temporary Treatment System Samples

		Compound (ng/L)												
		PFOS	PFOA	PFBA	PFBS	PFHxS	PFPeA	PFHxA	PFHpA	PFDoA	PFTriA	PFTeA	FOSA	6:2 FTS
Train 3-Lead 50%	01/09/20			5.1			3.3							
	02/14/20			3.8			4.2	2.1						
	03/06/20			4.8			2.6							
	04/01/20			4.0			3.2	1.9						
	05/06/20			4.8			3.9	2.3						
	08/04/20	2.7	2.6	4.8		2.3	6.2	4.2	2.2					
	11/03/20	4.4	3.3	6.0	2.6	4.3	9.2	6.1	3.2					
	12/15/20						2.1							
	03/17/21	2.1					4.3	2.6						
	06/04/21	2.6	1.9				3.6	2.8						
	09/14/21	1.9		5.1			3.4							
	12/07/21	4.5	3.1	4.8		3.0	5.1	3.1	2.0					
	03/02/22	2.3	2.6	4.8		2.7	4.4	2.6						
	06/02/22	2.8	2.3	3.6		2.0	3.1	1.9						
	09/08/22	7.4	5.2	6.4	3.2	6.6	11.0	7.1	3.5					
	12/08/22			5.4	1.9		6.0	3.2						
	03/17/23	2.3	2.8	6.3	2.3	3.1	5.0	2.8						
	06/01/23	4.9	3.6	5.6	2.7	4.3	6.0	3.7	1.9					
Train 3-Lead 75%	01/09/20			3.6										
	02/14/20			3.4			2.2							
	03/06/20			4.5			1.8							
	04/01/20			3.7			2.3							
	05/06/20			5.3			3.4							
	08/04/20			4.8			6.0	3.2						
	11/03/20		2.0	6.2		2.4	8.6	5.2	2.2					
	12/15/20													
	03/17/21						3.0							
	06/04/21						3.2	2.0						
	09/14/21			4.6			3.4	2						
	12/07/21	3.1	2.7	5.4		2.5	4.9	2.9						
	03/02/22		2.1	4.7			4.1	2.3						
	06/02/22	1.9	2.0	3.7		1.9	2.9	1.9						
	09/08/22	5.2	4.3	6.7	2.8	5.5	11.0	6.5	3.1					
	12/08/22			5.0			5.0	2.2						
	03/17/23		1.9	6.5	1.9		4.6	2.7						
	06/01/23	2.6	2.9	5.1	2.4	2.9	6.0	3.7						
Train 3-MID	04/01/20			3.4			1.8							
	05/06/20			5.1	8.7		2.4							23.0
	08/04/20			5.2			5.4	2.6						
	11/03/20			6.3			8.2	5.3	2.0					16.0
	12/15/20													
	03/17/21													
	06/04/21													
	09/14/21			4.5			3.4							
	12/07/21	2.1		5.9			5.2	2.8						
	03/02/22			4.3			3.5	2.0						
	06/02/22			3.4			3.1	2.2						
	09/08/22	3.4	3.2	6.2	2.3	4.1	9.7	5.5	2.5					9.1
	12/08/22			4.1			3.9	1.9						1.7
	03/17/23			7.1		1.8	5.7	2.8						2.0
	06/01/23	2.0	2.4	5.3	2.2	2.8	5.6	3.4						
Train 3-Lag 25%	02/14/20			2.8										
	03/06/20			3.9										
	04/01/20			3.4										
	05/06/20			5.2			1.9							
	08/04/20			5.2			4.5	1.8						
	11/03/20			6.3			7.6	3.8						
	03/17/21						2.0							
	06/04/21						2.6							
	09/14/21			4.8			4.3							
	12/07/21			6.2			5.4	2.5						
	03/02/22			4.5			3.8	2.0						
	06/02/22			3.2			3.0							
	09/08/22		2.6	6.2	2.1	2.4	9.1	5.1	2.1					
	12/08/22													
	03/17/23			6.1			4.4	2.0						
	06/01/23			5.6			5.7	2.8						

Table 2 - Summary of Detected Per- and Polyfluoroalkyl Substances in Temporary Treatment System Samples

		Compound (ng/L)												
		PFOS	PFOA	PFBA	PFBS	PFHxS	PFPeA	PFHxA	PFHpA	PFDoA	PFTriA	PFTeA	FOSA	6:2 FTS
Train 3-Lag 50%	02/14/20			2.0										
	03/06/20			2.3										
	04/01/20			3.2										
	05/06/20			5.1										
	08/04/20			5.3			4.1							
	11/03/20			6.5			7.7	3.3						
	03/17/21													
	06/04/21						2.1							
	09/14/21			4.6			4.5							
	12/07/21			5.8			5.4							
	03/02/22			4.3			3.6							
	06/02/22			3.4			2.8							
	09/08/22			6.5			8.3	4.2						
	12/08/22													
	03/17/23			6.2			2.2							
	06/01/23			5.4			5.6	2.0						16
Train 3-Lag 75%	05/06/20			3.6										
	08/04/20			5.7			2.3							
	11/03/20			6.7			6.8							
	03/17/21													
	06/04/21													
	09/14/21			5.3			3.6							
	12/07/21			4.8			5.4							
	03/02/22			4.3			3.7							
	06/02/22			3.4			3.0							
	09/08/22			5.6			7.0	2.9						
	12/08/22													
	03/17/23													
	06/01/23			7.0			3.1							
Train 3-POST	04/01/20			2.3										
	05/06/20			3.5										
	08/04/20			5.1			2.1							
	11/03/20			6.3			5.3	2.3					4.6	41
	12/15/20													
	03/17/21													
	06/04/21													
	09/14/21			5.0			3.0							
	12/07/21			5.2			4.9							
	03/02/22			*4.8/4.6			*3.8/3.8							*21/9.2
	06/02/22			3.8			3.3							5.4
	09/08/22			5.2			5.9	2.8						3.2
	12/08/22													
	03/17/23			2.8										4.1
	06/01/23			4.8			2.4							19

Table 2 - Summary of Detected Per- and Polyfluoroalkyl Substances in Temporary Treatment System Samples

		Compound (ng/L)												
		PFOS	PFOA	PFBA	PFBS	PFHxS	PFPeA	PFHxA	PFHpA	PFDoA	PFTriA	PFTeA	FOSA	6:2 FTS
Post GAC	03/06/20			1.9										
	05/06/20			3.4										
	08/04/20			5.8			2.2							
	11/03/20			7.7			6.1							
	12/15/20													
	03/17/21													
	06/04/21													
	09/14/21			5.6			3.6							
	12/07/21			5.3			3.9							
	03/02/22			4.0			3.3							
	06/02/22			3.6			3.0							
	09/08/22			6.0			7.4	3.6						
	12/08/22													
	03/17/23			4.1										
	06/01/23			5.3			2.8							
Post GAC (DUPLICATE)	04/01/20			1.8										
	05/06/20			3.4										
	08/04/20			6.1			2.3							
	11/03/20			7.6			6.2							
	12/15/20													
	03/17/21													
	06/04/21													
	09/14/21			5.5			3.7							
	12/07/21			5.3			4.3							
	03/02/22			4.4			3.4							
	06/02/22			3.8			3.0							
	09/08/22			6.0			7.5	3.7						
	12/08/22													
	03/17/23			3.7										
	06/01/23			5.7			2.8							

Value is estimated

Samples analyzed using the following methods:

EPA 537 (modified) through 6/4/2021

WS-LC-0025 Att1 through 6/4/21 for compliance point sampling (pre, mid, and post)

EPA 533 all samples beginning 9/14/2021

Samples noted as #/# were analyzed by more than one method.

Samples noted as \*#/# were re-extracted.

Blank cells indicate the location was either sampled without detection or the compound was not included in the laboratory method used.

Carbon in all vessels replaced prior to 12/15/2020 sample event.

Carbon replaced in North vessels and Lead/Lag configuration switched prior to 12/08/2022 sample event.

North vessel is in the 'Lead' position and South vessel is in the 'Lag' position for samples before October 2022.

South vessel is in the 'Lead' position and North vessel is in the 'Lag' position for samples after October 2022.

**June 1, 2023 Sample Event Laboratory Report**



---

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

June 19, 2023

David Chiusano  
NYDEC\_Arcadis US, Inc. - Clifton Park-NY  
855 Route 146, Suite 210  
Clifton Park, NY 12065

Project Location: New Windsor, NY  
Client Job Number:  
Project Number: 30058345  
Laboratory Work Order Number: 23F0275

Enclosed are results of analyses for samples as received by the laboratory on June 2, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Raymond J. McCarthy".

Raymond J. McCarthy  
Project Manager

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

NYDEC\_Arcadis US, Inc. - Clifton Park-NY  
855 Route 146, Suite 210  
Clifton Park, NY 12065  
ATTN: David Chiusano

REPORT DATE: 6/19/2023

PURCHASE ORDER NUMBER: 141586

PROJECT NUMBER: 30058345

#### ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23F0275

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: New Windsor, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
BH20230601-PRE-GAC	23F0275-01	Drinking Water		EPA 533	
BH20230601-POST-GAC	23F0275-02	Drinking Water		EPA 533	
BH20230601-POST-GAC-DUP	23F0275-03	Drinking Water		EPA 533	
BH20230601-IN-25	23F0275-04	Drinking Water		EPA 533	
BH20230601-IN-50	23F0275-05	Drinking Water		EPA 533	
BH20230601-IN-75	23F0275-06	Drinking Water		EPA 533	
BH20230601-1 POST	23F0275-07	Drinking Water		EPA 533	
BH20230601-1S-25	23F0275-08	Drinking Water		EPA 533	
BH20230601-1S-50	23F0275-09	Drinking Water		EPA 533	
BH20230601-1S-75	23F0275-10	Drinking Water		EPA 533	
BH20230601-1 MID	23F0275-11	Drinking Water		EPA 533	
BH20230601-2N-25	23F0275-12	Drinking Water		EPA 533	
BH20230601-2N-50	23F0275-13	Drinking Water		EPA 533	
BH20230601-2N-75	23F0275-14	Drinking Water		EPA 533	
BH20230601-2 POST	23F0275-15	Drinking Water		EPA 533	
BH20230601-2S-25	23F0275-16	Drinking Water		EPA 533	
BH20230601-2S-50	23F0275-17	Drinking Water		EPA 533	
BH20230601-2S-75	23F0275-18	Drinking Water		EPA 533	
BH20230601-2 MID	23F0275-19	Drinking Water		EPA 533	



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

#### CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

#### EPA 533

##### **Qualifications:**

###### **PF-17**

Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.

##### **Analyte & Samples(s) Qualified:**

###### **M2-6:2FTS**

23F0275-07[BH20230601-1 POST], 23F0275-09[BH20230601-1S-50], 23F0275-12[BH20230601-2N-25], 23F0275-13[BH20230601-2N-50],  
23F0275-17[BH20230601-2S-50], 23F0275-18[BH20230601-2S-75]

###### **M2-8:2FTS**

23F0275-01[BH20230601-PRE-GAC], 23F0275-03[BH20230601-POST-GAC-DUP], 23F0275-04[BH20230601-IN-25], 23F0275-05[BH20230601-IN-50],  
23F0275-06[BH20230601-IN-75], 23F0275-07[BH20230601-1 POST], 23F0275-08[BH20230601-1S-25], 23F0275-09[BH20230601-1S-50],  
23F0275-10[BH20230601-1S-75], 23F0275-11[BH20230601-1 MID], 23F0275-12[BH20230601-2N-25], 23F0275-13[BH20230601-2N-50],  
23F0275-14[BH20230601-2N-75], 23F0275-15[BH20230601-2 POST], 23F0275-16[BH20230601-2S-25], 23F0275-17[BH20230601-2S-50],  
23F0275-18[BH20230601-2S-75], 23F0275-19[BH20230601-2 MID], B342295-BLK1

###### **PF-18**

Duplicate analysis confirmed Extracted Internal Standard failure due to matrix effects.

##### **Analyte & Samples(s) Qualified:**

###### **M2-8:2FTS**

23F0275-02[BH20230601-POST-GAC], B342295-MS1, B342295-MSD1

###### **S-29**

Extracted Internal Standard is outside of control limits.

##### **Analyte & Samples(s) Qualified:**

###### **M2-8:2FTS**

B342295-BS1

###### **V-20**

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

##### **Analyte & Samples(s) Qualified:**

###### **11CI-PF3OUdS (F53B Major)**

S089226-CCV2

###### **9CI-PF3ONS (F53B Minor)**

S089226-CCV2

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington

Technical Representative



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-PRE-GAC

Sampled: 6/1/2023 09:55

**Sample ID:** 23F0275-01

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.2	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Perfluorobutanesulfonic acid (PFBS)	2.4	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Perfluoropentanoic acid (PFPeA)	5.2	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Perfluorohexanoic acid (PFHxA)	3.4	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Perfluorohexanesulfonic acid (PFHxS)	5.2	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Perfluoroheptanoic acid (PFHpA)	1.9	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Perfluorooctanoic acid (PFOA)	3.4	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Perfluorooctanesulfonic acid (PFOS)	6.3	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:41	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	110	50-200		6/15/23 18:41
<b>M2-8:2FTS</b>	<b>599</b> *	50-200	PF-17	6/15/23 18:41
MPFBA	115	50-200		6/15/23 18:41
M3HFPO-DA	78.8	50-200		6/15/23 18:41
M6PFDA	98.1	50-200		6/15/23 18:41
M3PFBS	115	50-200		6/15/23 18:41
M7PFUnA	89.8	50-200		6/15/23 18:41
M2-6:2FTS	158	50-200		6/15/23 18:41
M5PPeA	128	50-200		6/15/23 18:41
M5PFHxA	88.5	50-200		6/15/23 18:41
M3PFHxS	112	50-200		6/15/23 18:41
M4PFHpA	95.7	50-200		6/15/23 18:41
M8PFOA	104	50-200		6/15/23 18:41
M8PFOS	106	50-200		6/15/23 18:41
M9PFNA	103	50-200		6/15/23 18:41
MPFDoA	83.0	50-200		6/15/23 18:41



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-POST-GAC**Sample ID:** 23F0275-02

Start Date/Time: 6/1/2023 9:57:00AM

Sample Matrix: Drinking Water

Stop Date/Time: 6/1/2023 10:01:00AM

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.3	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Perfluoropentanoic acid (PFPeA)	2.8	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Perfluorohexanoic acid (PFHxA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Perfluorooctanoic acid (PFOA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 18:48	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	78.2	50-200		6/15/23 18:48
<b>M2-8:2FTS</b>	<b>534 *</b>	50-200	PF-18	6/15/23 18:48
MPFBA	110	50-200		6/15/23 18:48
M3HFPO-DA	94.4	50-200		6/15/23 18:48
M6PFDA	106	50-200		6/15/23 18:48
M3PFBS	107	50-200		6/15/23 18:48
M7PFUnA	96.8	50-200		6/15/23 18:48
M2-6:2FTS	111	50-200		6/15/23 18:48
M5PPeA	104	50-200		6/15/23 18:48
M5PFHxA	89.3	50-200		6/15/23 18:48
M3PFHxS	107	50-200		6/15/23 18:48
M4PFHpA	94.6	50-200		6/15/23 18:48
M8PFOA	105	50-200		6/15/23 18:48
M8PFOS	103	50-200		6/15/23 18:48
M9PFNA	109	50-200		6/15/23 18:48
MPFDoA	93.0	50-200		6/15/23 18:48



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-POST-GAC-DUP

Sampled: 6/1/2023 09:59

**Sample ID:** 23F0275-03

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.7	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Perfluoropentanoic acid (PFPeA)	2.8	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Perfluorohexanoic acid (PFHxA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Perfluorooctanoic acid (PFOA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 18:55	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	86.3	50-200		6/15/23 18:55
<b>M2-8:2FTS</b>	<b>684</b> *	50-200	PF-17	6/15/23 18:55
MPFBA	106	50-200		6/15/23 18:55
M3HFPO-DA	86.7	50-200		6/15/23 18:55
M6PFDA	99.2	50-200		6/15/23 18:55
M3PFBS	114	50-200		6/15/23 18:55
M7PFUnA	88.5	50-200		6/15/23 18:55
M2-6:2FTS	131	50-200		6/15/23 18:55
M5PPeA	98.8	50-200		6/15/23 18:55
M5PFHxA	84.3	50-200		6/15/23 18:55
M3PFHxS	112	50-200		6/15/23 18:55
M4PFHpA	87.7	50-200		6/15/23 18:55
M8PFOA	95.6	50-200		6/15/23 18:55
M8PFOS	111	50-200		6/15/23 18:55
M9PFNA	100	50-200		6/15/23 18:55
MPFDoA	83.4	50-200		6/15/23 18:55



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-IN-25

Sampled: 6/1/2023 10:11

**Sample ID:** 23F0275-04

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.7	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Perfluoropentanoic acid (PFPeA)	5.5	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Perfluorohexanoic acid (PFHxA)	2.2	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Perfluorooctanoic acid (PFOA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:02	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	88.2	50-200		6/15/23 19:02
<b>M2-8:2FTS</b>	<b>483</b> *	50-200	PF-17	6/15/23 19:02
MPFBA	94.2	50-200		6/15/23 19:02
M3HFPO-DA	72.0	50-200		6/15/23 19:02
M6PFDA	76.0	50-200		6/15/23 19:02
M3PFBS	102	50-200		6/15/23 19:02
M7PFUnA	73.8	50-200		6/15/23 19:02
M2-6:2FTS	171	50-200		6/15/23 19:02
M5PPeA	92.2	50-200		6/15/23 19:02
M5PFHxA	72.5	50-200		6/15/23 19:02
M3PFHxS	96.8	50-200		6/15/23 19:02
M4PFHpA	75.5	50-200		6/15/23 19:02
M8PFOA	85.1	50-200		6/15/23 19:02
M8PFOS	95.3	50-200		6/15/23 19:02
M9PFNA	83.9	50-200		6/15/23 19:02
MPFDoA	74.8	50-200		6/15/23 19:02



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-IN-50

Sampled: 6/1/2023 10:13

**Sample ID:** 23F0275-05

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL		DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
			MA ORSG	Units						
Perfluorobutanoic acid (PFBA)	6.3	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Perfluoropentanoic acid (PFPeA)	5.2	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Perfluorohexanoic acid (PFHxA)	1.8	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Perfluorooctanoic acid (PFOA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:10	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	93.6	50-200		6/15/23 19:10
<b>M2-8:2FTS</b>	<b>505</b> *	50-200	PF-17	6/15/23 19:10
MPFBA	95.6	50-200		6/15/23 19:10
M3HFPO-DA	76.5	50-200		6/15/23 19:10
M6PFDA	83.9	50-200		6/15/23 19:10
M3PFBS	102	50-200		6/15/23 19:10
M7PFUnA	87.2	50-200		6/15/23 19:10
M2-6:2FTS	157	50-200		6/15/23 19:10
M5PPeA	92.2	50-200		6/15/23 19:10
M5PFHxA	75.7	50-200		6/15/23 19:10
M3PFHxS	99.0	50-200		6/15/23 19:10
M4PFHpA	78.2	50-200		6/15/23 19:10
M8PFOA	86.9	50-200		6/15/23 19:10
M8PFOS	91.9	50-200		6/15/23 19:10
M9PFNA	92.4	50-200		6/15/23 19:10
MPFDoA	85.4	50-200		6/15/23 19:10



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-IN-75

Sampled: 6/1/2023 10:14

**Sample ID:** 23F0275-06Sample Matrix: Drinking Water**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	6.7	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Perfluoropentanoic acid (PFPeA)	2.7	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Perfluorohexanoic acid (PFHxA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Perfluorooctanoic acid (PFOA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:17	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	77.5	50-200		6/15/23 19:17
<b>M2-8:2FTS</b>	<b>564 *</b>	50-200	PF-17	6/15/23 19:17
MPFBA	95.9	50-200		6/15/23 19:17
M3HFPO-DA	75.8	50-200		6/15/23 19:17
M6PFDA	93.1	50-200		6/15/23 19:17
M3PFBS	99.2	50-200		6/15/23 19:17
M7PFUnA	87.4	50-200		6/15/23 19:17
M2-6:2FTS	152	50-200		6/15/23 19:17
M5PPeA	89.0	50-200		6/15/23 19:17
M5PFHxA	77.3	50-200		6/15/23 19:17
M3PFHxS	97.3	50-200		6/15/23 19:17
M4PFHpA	84.8	50-200		6/15/23 19:17
M8PFOA	93.4	50-200		6/15/23 19:17
M8PFOS	97.0	50-200		6/15/23 19:17
M9PFNA	98.5	50-200		6/15/23 19:17
MPFDoA	87.8	50-200		6/15/23 19:17

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-1 POST

Sampled: 6/1/2023 10:15

**Sample ID:** 23F0275-07Sample Matrix: Drinking Water**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.0	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Perfluoropentanoic acid (PFPeA)	2.3	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Perfluorohexanoic acid (PFHxA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Perfluorooctanoic acid (PFOA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:24	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	87.6	50-200		6/15/23 19:24
<b>M2-8:2FTS</b>	<b>538 *</b>	50-200	PF-17	6/15/23 19:24
MPFBA	96.6	50-200		6/15/23 19:24
M3HFPO-DA	67.5	50-200		6/15/23 19:24
M6PFDA	82.3	50-200		6/15/23 19:24
M3PFBS	104	50-200		6/15/23 19:24
M7PFUnA	62.7	50-200		6/15/23 19:24
<b>M2-6:2FTS</b>	<b>235 *</b>	50-200	PF-17	6/15/23 19:24
M5PPeA	88.8	50-200		6/15/23 19:24
M5PFHxA	70.5	50-200		6/15/23 19:24
M3PFHxS	101	50-200		6/15/23 19:24
M4PFHpA	75.9	50-200		6/15/23 19:24
M8PFOA	92.5	50-200		6/15/23 19:24
M8PFOS	101	50-200		6/15/23 19:24
M9PFNA	90.1	50-200		6/15/23 19:24
MPFDoA	90.5	50-200		6/15/23 19:24



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-1S-25

Sampled: 6/1/2023 10:20

**Sample ID:** 23F0275-08

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.2	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Perfluorobutanesulfonic acid (PFBS)	2.5	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Perfluoropentanoic acid (PFPeA)	5.4	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Perfluorohexanoic acid (PFHxA)	3.4	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Perfluorohexanesulfonic acid (PFHxS)	4.7	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Perfluoroheptanoic acid (PFHpA)	1.8	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Perfluorooctanoic acid (PFOA)	3.1	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Perfluorooctanesulfonic acid (PFOS)	5.2	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:31	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	109	50-200		6/15/23 19:31
<b>M2-8:2FTS</b>	<b>654</b> *	50-200	PF-17	6/15/23 19:31
MPFBA	102	50-200		6/15/23 19:31
M3HFPO-DA	74.1	50-200		6/15/23 19:31
M6PFDA	89.8	50-200		6/15/23 19:31
M3PFBS	105	50-200		6/15/23 19:31
M7PFUnA	87.1	50-200		6/15/23 19:31
M2-6:2FTS	176	50-200		6/15/23 19:31
M5PPeA	110	50-200		6/15/23 19:31
M5PFHxA	78.5	50-200		6/15/23 19:31
M3PFHxS	103	50-200		6/15/23 19:31
M4PFHpA	83.5	50-200		6/15/23 19:31
M8PFOA	91.4	50-200		6/15/23 19:31
M8PFOS	102	50-200		6/15/23 19:31
M9PFNA	92.4	50-200		6/15/23 19:31
MPFDoA	90.0	50-200		6/15/23 19:31



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-1S-50

Sampled: 6/1/2023 10:21

**Sample ID:** 23F0275-09

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	6.1	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Perfluorobutanesulfonic acid (PFBS)	2.3	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Perfluoropentanoic acid (PFPeA)	6.0	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Perfluorohexanoic acid (PFHxA)	3.5	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Perfluorohexanesulfonic acid (PFHxS)	3.8	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Perfluoroheptanoic acid (PFHpA)	1.9	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Perfluorooctanoic acid (PFOA)	3.3	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Perfluorooctanesulfonic acid (PFOS)	4.2	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/15/23 19:39	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	126	50-200		6/15/23 19:39
<b>M2-8:2FTS</b>	<b>639</b> *	50-200	PF-17	6/15/23 19:39
MPFBA	103	50-200		6/15/23 19:39
M3HFPO-DA	71.9	50-200		6/15/23 19:39
M6PFDA	92.6	50-200		6/15/23 19:39
M3PFBS	105	50-200		6/15/23 19:39
M7PFUnA	89.8	50-200		6/15/23 19:39
<b>M2-6:2FTS</b>	<b>259</b> *	50-200	PF-17	6/15/23 19:39
M5PPeA	111	50-200		6/15/23 19:39
M5PFHxA	78.3	50-200		6/15/23 19:39
M3PFHxS	106	50-200		6/15/23 19:39
M4PFHpA	84.4	50-200		6/15/23 19:39
M8PFOA	96.7	50-200		6/15/23 19:39
M8PFOS	102	50-200		6/15/23 19:39
M9PFNA	99.9	50-200		6/15/23 19:39
MPFDoA	92.8	50-200		6/15/23 19:39



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-1S-75

Sampled: 6/1/2023 10:23

**Sample ID:** 23F0275-10

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.3	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Perfluorobutanesulfonic acid (PFBS)	1.9	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Perfluoropentanoic acid (PFPeA)	6.0	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Perfluorohexanoic acid (PFHxA)	3.0	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Perfluorohexanesulfonic acid (PFHxS)	2.7	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Perfluorooctanoic acid (PFOA)	2.3	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Perfluorooctanesulfonic acid (PFOS)	2.9	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/15/23 19:46	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	100	50-200		6/15/23 19:46
<b>M2-8:2FTS</b>	<b>594</b> *	50-200	PF-17	6/15/23 19:46
MPFBA	105	50-200		6/15/23 19:46
M3HFPO-DA	82.3	50-200		6/15/23 19:46
M6PFDA	97.3	50-200		6/15/23 19:46
M3PFBS	103	50-200		6/15/23 19:46
M7PFUnA	95.7	50-200		6/15/23 19:46
M2-6:2FTS	149	50-200		6/15/23 19:46
M5PPeA	110	50-200		6/15/23 19:46
M5PFHxA	84.4	50-200		6/15/23 19:46
M3PFHxS	98.8	50-200		6/15/23 19:46
M4PFHpA	90.7	50-200		6/15/23 19:46
M8PFOA	97.5	50-200		6/15/23 19:46
M8PFOS	98.7	50-200		6/15/23 19:46
M9PFNA	102	50-200		6/15/23 19:46
MPFDoA	89.9	50-200		6/15/23 19:46



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-1 MID

Sampled: 6/1/2023 10:24

**Sample ID:** 23F0275-11

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.6	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Perfluorobutanesulfonic acid (PFBS)	2.0	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Perfluoropentanoic acid (PFPeA)	5.7	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Perfluorohexanoic acid (PFHxA)	3.3	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Perfluorohexanesulfonic acid (PFHxS)	2.3	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Perfluorooctanoic acid (PFOA)	2.0	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Perfluorooctanesulfonic acid (PFOS)	2.2	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:35	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	103	50-200		6/16/23 10:35
<b>M2-8:2FTS</b>	<b>526</b> *	50-200	PF-17	6/16/23 10:35
MPFBA	103	50-200		6/16/23 10:35
M3HFPO-DA	83.9	50-200		6/16/23 10:35
M6PFDA	95.4	50-200		6/16/23 10:35
M3PFBS	107	50-200		6/16/23 10:35
M7PFUnA	91.0	50-200		6/16/23 10:35
M2-6:2FTS	164	50-200		6/16/23 10:35
M5PPeA	117	50-200		6/16/23 10:35
M5PFHxA	88.2	50-200		6/16/23 10:35
M3PFHxS	102	50-200		6/16/23 10:35
M4PFHpA	91.0	50-200		6/16/23 10:35
M8PFOA	99.1	50-200		6/16/23 10:35
M8PFOS	94.8	50-200		6/16/23 10:35
M9PFNA	100	50-200		6/16/23 10:35
MPFDoA	93.6	50-200		6/16/23 10:35

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-2N-25

Sampled: 6/1/2023 10:29

**Sample ID:** 23F0275-12Sample Matrix: Drinking Water**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.2	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Perfluoropentanoic acid (PFPeA)	4.8	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Perfluorohexanoic acid (PFHxA)	2.3	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Perfluorodecanoic acid (PFDA)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Perfluorooctanoic acid (PFOA)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2
Perfluorononanoic acid (PFNA)	ND	1.7		ng/L	1		EPA 533	6/13/23	6/16/23 10:42	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	155	50-200		6/16/23 10:42
<b>M2-8:2FTS</b>	<b>655 *</b>	50-200	PF-17	6/16/23 10:42
MPFBA	111	50-200		6/16/23 10:42
M3HFPO-DA	84.0	50-200		6/16/23 10:42
M6PFDA	98.4	50-200		6/16/23 10:42
M3PFBS	118	50-200		6/16/23 10:42
M7PFUnA	101	50-200		6/16/23 10:42
<b>M2-6:2FTS</b>	<b>269 *</b>	50-200	PF-17	6/16/23 10:42
M5PPeA	120	50-200		6/16/23 10:42
M5PFHxA	91.5	50-200		6/16/23 10:42
M3PFHxS	111	50-200		6/16/23 10:42
M4PFHpA	98.0	50-200		6/16/23 10:42
M8PFOA	112	50-200		6/16/23 10:42
M8PFOS	102	50-200		6/16/23 10:42
M9PFNA	111	50-200		6/16/23 10:42
MPFDoA	107	50-200		6/16/23 10:42



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-2N-50

Sampled: 6/1/2023 10:31

**Sample ID:** 23F0275-13Sample Matrix: Drinking Water**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.4	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Perfluoropentanoic acid (PFPeA)	4.7	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Perfluorohexanoic acid (PFHxA)	1.9	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Perfluorooctanoic acid (PFOA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 10:50	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	129	50-200		6/16/23 10:50
<b>M2-8:2FTS</b>	<b>533 *</b>	50-200	PF-17	6/16/23 10:50
MPFBA	105	50-200		6/16/23 10:50
M3HFPO-DA	80.5	50-200		6/16/23 10:50
M6PFDA	91.6	50-200		6/16/23 10:50
M3PFBS	113	50-200		6/16/23 10:50
M7PFUnA	90.8	50-200		6/16/23 10:50
<b>M2-6:2FTS</b>	<b>218 *</b>	50-200	PF-17	6/16/23 10:50
M5PPeA	105	50-200		6/16/23 10:50
M5PFHxA	84.9	50-200		6/16/23 10:50
M3PFHxS	107	50-200		6/16/23 10:50
M4PFHpA	90.7	50-200		6/16/23 10:50
M8PFOA	98.0	50-200		6/16/23 10:50
M8PFOS	94.3	50-200		6/16/23 10:50
M9PFNA	102	50-200		6/16/23 10:50
MPFDoA	92.8	50-200		6/16/23 10:50



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-2N-75

Sampled: 6/1/2023 10:32

**Sample ID:** 23F0275-14

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	6.7	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Perfluoropentanoic acid (PFPeA)	3.6	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Perfluorohexanoic acid (PFHxA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Perfluorooctanoic acid (PFOA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 10:57	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	93.1	50-200		6/16/23 10:57
<b>M2-8:2FTS</b>	<b>590</b> *	50-200	PF-17	6/16/23 10:57
MPFBA	99.2	50-200		6/16/23 10:57
M3HFPO-DA	83.1	50-200		6/16/23 10:57
M6PFDA	86.6	50-200		6/16/23 10:57
M3PFBS	107	50-200		6/16/23 10:57
M7PFUnA	84.0	50-200		6/16/23 10:57
M2-6:2FTS	150	50-200		6/16/23 10:57
M5PPeA	94.1	50-200		6/16/23 10:57
M5PFHxA	81.5	50-200		6/16/23 10:57
M3PFHxS	97.1	50-200		6/16/23 10:57
M4PFHpA	87.2	50-200		6/16/23 10:57
M8PFOA	89.3	50-200		6/16/23 10:57
M8PFOS	93.2	50-200		6/16/23 10:57
M9PFNA	93.1	50-200		6/16/23 10:57
MPFDoA	91.9	50-200		6/16/23 10:57



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-2 POST

Sampled: 6/1/2023 10:36

**Sample ID:** 23F0275-15

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.8	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Perfluoropentanoic acid (PFPeA)	2.8	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Perfluorohexanoic acid (PFHxA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	3.1	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Perfluorooctanoic acid (PFOA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:04	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	87.8	50-200		6/16/23 11:04
<b>M2-8:2FTS</b>	<b>553</b> *	50-200	PF-17	6/16/23 11:04
MPFBA	93.3	50-200		6/16/23 11:04
M3HFPO-DA	70.8	50-200		6/16/23 11:04
M6PFDA	85.5	50-200		6/16/23 11:04
M3PFBS	111	50-200		6/16/23 11:04
M7PFUnA	86.8	50-200		6/16/23 11:04
M2-6:2FTS	194	50-200		6/16/23 11:04
M5PPeA	88.1	50-200		6/16/23 11:04
M5PFHxA	71.4	50-200		6/16/23 11:04
M3PFHxS	103	50-200		6/16/23 11:04
M4PFHpA	77.3	50-200		6/16/23 11:04
M8PFOA	86.4	50-200		6/16/23 11:04
M8PFOS	96.4	50-200		6/16/23 11:04
M9PFNA	92.0	50-200		6/16/23 11:04
MPFDoA	87.7	50-200		6/16/23 11:04



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-2S-25

Sampled: 6/1/2023 10:40

**Sample ID:** 23F0275-16Sample Matrix: Drinking Water**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.0	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Perfluorobutanesulfonic acid (PFBS)	2.6	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Perfluoropentanoic acid (PFPeA)	5.0	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Perfluorohexanoic acid (PFHxA)	3.6	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Perfluorohexanesulfonic acid (PFHxS)	4.5	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Perfluoroheptanoic acid (PFHpA)	1.9	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Perfluorooctanoic acid (PFOA)	3.2	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Perfluorooctanesulfonic acid (PFOS)	5.7	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:11	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	114	50-200		6/16/23 11:11
<b>M2-8:2FTS</b>	<b>617</b> *	50-200	PF-17	6/16/23 11:11
MPFBA	102	50-200		6/16/23 11:11
M3HFPO-DA	75.4	50-200		6/16/23 11:11
M6PFDA	89.9	50-200		6/16/23 11:11
M3PFBS	108	50-200		6/16/23 11:11
M7PFUnA	87.6	50-200		6/16/23 11:11
M2-6:2FTS	188	50-200		6/16/23 11:11
M5PPeA	114	50-200		6/16/23 11:11
M5PFHxA	80.1	50-200		6/16/23 11:11
M3PFHxS	100	50-200		6/16/23 11:11
M4PFHpA	85.9	50-200		6/16/23 11:11
M8PFOA	93.7	50-200		6/16/23 11:11
M8PFOS	99.2	50-200		6/16/23 11:11
M9PFNA	89.9	50-200		6/16/23 11:11
MPFDoA	88.1	50-200		6/16/23 11:11



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-2S-50

Sampled: 6/1/2023 10:41

**Sample ID:** 23F0275-17Sample Matrix: Drinking Water**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	6.1	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Perfluorobutanesulfonic acid (PFBS)	2.2	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Perfluoropentanoic acid (PFPeA)	6.2	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Perfluorohexanoic acid (PFHxA)	3.3	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Perfluorohexanesulfonic acid (PFHxS)	3.3	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Perfluorooctanoic acid (PFOA)	2.9	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Perfluorooctanesulfonic acid (PFOS)	3.9	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L	1		EPA 533	6/13/23	6/16/23 11:18	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	150	50-200		6/16/23 11:18
<b>M2-8:2FTS</b>	<b>573 *</b>	50-200	PF-17	6/16/23 11:18
MPFBA	98.3	50-200		6/16/23 11:18
M3HFPO-DA	74.0	50-200		6/16/23 11:18
M6PFDA	79.5	50-200		6/16/23 11:18
M3PFBS	110	50-200		6/16/23 11:18
M7PFUnA	84.0	50-200		6/16/23 11:18
<b>M2-6:2FTS</b>	<b>273 *</b>	50-200	PF-17	6/16/23 11:18
M5PPeA	104	50-200		6/16/23 11:18
M5PFHxA	75.5	50-200		6/16/23 11:18
M3PFHxS	106	50-200		6/16/23 11:18
M4PFHpA	83.0	50-200		6/16/23 11:18
M8PFOA	89.2	50-200		6/16/23 11:18
M8PFOS	97.6	50-200		6/16/23 11:18
M9PFNA	87.0	50-200		6/16/23 11:18
MPFDoA	85.5	50-200		6/16/23 11:18



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-2S-75

Sampled: 6/1/2023 10:42

**Sample ID:** 23F0275-18Sample Matrix: Drinking Water**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.6	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Perfluoropentanoic acid (PFPeA)	5.3	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Perfluorohexanoic acid (PFHxA)	3.1	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Perfluorohexanesulfonic acid (PFHxS)	3.1	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Perfluorooctanoic acid (PFOA)	2.4	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Perfluorooctanesulfonic acid (PFOS)	2.7	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:26	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	144	50-200		6/16/23 11:26
<b>M2-8:2FTS</b>	<b>494</b> *	50-200	PF-17	6/16/23 11:26
MPFBA	98.4	50-200		6/16/23 11:26
M3HFPO-DA	72.2	50-200		6/16/23 11:26
M6PFDA	89.4	50-200		6/16/23 11:26
M3PFBS	105	50-200		6/16/23 11:26
M7PFUnA	91.8	50-200		6/16/23 11:26
<b>M2-6:2FTS</b>	<b>267</b> *	50-200	PF-17	6/16/23 11:26
M5PPeA	108	50-200		6/16/23 11:26
M5PFHxA	79.5	50-200		6/16/23 11:26
M3PFHxS	98.6	50-200		6/16/23 11:26
M4PFHpA	82.4	50-200		6/16/23 11:26
M8PFOA	93.0	50-200		6/16/23 11:26
M8PFOS	93.6	50-200		6/16/23 11:26
M9PFNA	95.6	50-200		6/16/23 11:26
MPFDoA	91.3	50-200		6/16/23 11:26



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0275

Date Received: 6/2/2023

**Field Sample #:** BH20230601-2 MID

Sampled: 6/1/2023 10:45

**Sample ID:** 23F0275-19Sample Matrix: Drinking Water**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.5	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Perfluoropentanoic acid (PFPeA)	5.3	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Perfluorohexanoic acid (PFHxA)	2.8	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Perfluorohexanesulfonic acid (PFHxS)	2.6	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Perfluorooctanoic acid (PFOA)	1.9	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Perfluorooctanesulfonic acid (PFOS)	2.2	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/13/23	6/16/23 11:33	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	98.3	50-200		6/16/23 11:33
<b>M2-8:2FTS</b>	<b>544</b> *	50-200	PF-17	6/16/23 11:33
MPFBA	96.4	50-200		6/16/23 11:33
M3HFPO-DA	79.4	50-200		6/16/23 11:33
M6PFDA	86.5	50-200		6/16/23 11:33
M3PFBS	102	50-200		6/16/23 11:33
M7PFUnA	84.8	50-200		6/16/23 11:33
M2-6:2FTS	174	50-200		6/16/23 11:33
M5PPeA	99.0	50-200		6/16/23 11:33
M5PFHxA	74.3	50-200		6/16/23 11:33
M3PFHxS	95.5	50-200		6/16/23 11:33
M4PFHpA	80.4	50-200		6/16/23 11:33
M8PFOA	85.9	50-200		6/16/23 11:33
M8PFOS	97.3	50-200		6/16/23 11:33
M9PFNA	86.4	50-200		6/16/23 11:33
MPFDoA	85.2	50-200		6/16/23 11:33

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

### Sample Extraction Data

**Prep Method: EPA 533-EPA 533**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0275-01 [BH20230601-PRE-GAC]	B342295	267	1.00	06/13/23
23F0275-02 [BH20230601-POST-GAC]	B342295	269	1.00	06/13/23
23F0275-03 [BH20230601-POST-GAC-DUP]	B342295	275	1.00	06/13/23
23F0275-04 [BH20230601-IN-25]	B342295	273	1.00	06/13/23
23F0275-05 [BH20230601-IN-50]	B342295	272	1.00	06/13/23
23F0275-06 [BH20230601-IN-75]	B342295	284	1.00	06/13/23
23F0275-07 [BH20230601-1 POST]	B342295	276	1.00	06/13/23
23F0275-08 [BH20230601-1S-25]	B342295	275	1.00	06/13/23
23F0275-09 [BH20230601-1S-50]	B342295	260	1.00	06/13/23
23F0275-10 [BH20230601-1S-75]	B342295	274	1.00	06/13/23
23F0275-11 [BH20230601-1 MID]	B342295	271	1.00	06/13/23
23F0275-12 [BH20230601-2N-25]	B342295	288	1.00	06/13/23
23F0275-13 [BH20230601-2N-50]	B342295	273	1.00	06/13/23
23F0275-14 [BH20230601-2N-75]	B342295	259	1.00	06/13/23
23F0275-15 [BH20230601-2 POST]	B342295	275	1.00	06/13/23
23F0275-16 [BH20230601-2S-25]	B342295	278	1.00	06/13/23
23F0275-17 [BH20230601-2S-50]	B342295	266	1.00	06/13/23
23F0275-18 [BH20230601-2S-75]	B342295	273	1.00	06/13/23
23F0275-19 [BH20230601-2 MID]	B342295	282	1.00	06/13/23

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

**QUALITY CONTROL****Semivolatile Organic Compounds by - LC/MS-MS - Quality Control**

Analyte	Reporting Result	Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch B342295 - EPA 533**

<b>Blank (B342295-BLK1)</b>	Prepared: 06/13/23 Analyzed: 06/15/23										
Perfluorobutanoic acid (PFBA)	ND	2.0		ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	2.0		ng/L							
Perfluoropentanoic acid (PFPeA)	ND	2.0		ng/L							
Perfluorohexanoic acid (PFHxA)	ND	2.0		ng/L							
11Cl-PF3OUDs (F53B Major)	ND	2.0		ng/L							
9Cl-PF3ONS (F53B Minor)	ND	2.0		ng/L							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	2.0		ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	2.0		ng/L							
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	2.0		ng/L							
Perfluorodecanoic acid (PFDA)	ND	2.0		ng/L							
Perfluorododecanoic acid (PFDoA)	ND	2.0		ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEsA)	ND	2.0		ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.0		ng/L							
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	2.0		ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	2.0		ng/L							
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	2.0		ng/L							
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	2.0		ng/L							
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	2.0		ng/L							
Perfluoropentanesulfonic acid (PFPeS)	ND	2.0		ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	2.0		ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0		ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	2.0		ng/L							
Perfluorooctanoic acid (PFOA)	ND	2.0		ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	2.0		ng/L							
Perfluorononanoic acid (PFNA)	ND	2.0		ng/L							

Surrogate: M2-4:2FTS	29.9		ng/L	37.2		80.4	50-200				
<b>Surrogate: M2-8:2FTS</b>	182		ng/L	38.1		479 *	50-200				PF-17
Surrogate: MPFBA	41.4		ng/L	39.6		105	50-200				
Surrogate: M3HFPO-DA	31.9		ng/L	39.6		80.4	50-200				
Surrogate: M6PFDA	39.1		ng/L	39.6		98.6	50-200				
Surrogate: M3PFBS	37.0		ng/L	36.9		100	50-200				
Surrogate: M7PFUnA	36.0		ng/L	39.6		90.9	50-200				
Surrogate: M2-6:2FTS	48.5		ng/L	37.7		129	50-200				
Surrogate: M5PFPeA	39.6		ng/L	39.6		99.9	50-200				
Surrogate: M5PFHxA	33.9		ng/L	39.6		85.5	50-200				
Surrogate: M3PFHxS	36.4		ng/L	37.6		96.8	50-200				
Surrogate: M4PFHpA	35.8		ng/L	39.6		90.2	50-200				
Surrogate: M8PFOA	38.8		ng/L	39.6		98.0	50-200				
Surrogate: M8PFOS	35.9		ng/L	38.0		94.3	50-200				
Surrogate: M9PFNA	41.4		ng/L	39.6		105	50-200				
Surrogate: MPFDoA	33.9		ng/L	39.6		85.4	50-200				

<b>LCS (B342295-BS1)</b>	Prepared: 06/13/23 Analyzed: 06/15/23						
Perfluorobutanoic acid (PFBA)	24.8	2.0	ng/L	19.8		125	70-130
Perfluorobutanesulfonic acid (PFBS)	21.9	2.0	ng/L	17.5		125	70-130
Perfluoropentanoic acid (PFPeA)	24.7	2.0	ng/L	19.8		125	70-130
Perfluorohexanoic acid (PFHxA)	24.4	2.0	ng/L	19.8		124	70-130
11Cl-PF3OUDs (F53B Major)	21.1	2.0	ng/L	18.6		113	70-130

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

**QUALITY CONTROL****Semivolatile Organic Compounds by - LC/MS-MS - Quality Control**

Analyte	Reporting Result	Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit	Notes
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**Batch B342295 - EPA 533**

LCS (B342295-BS1)							Prepared: 06/13/23 Analyzed: 06/15/23			
9Cl-PF3ONS (F53B Minor)	22.2	2.0		ng/L	18.4		121	70-130		
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	22.1	2.0		ng/L	18.6		119	70-130		
Hexafluoropropylene oxide dimer acid (HFPO-DA)	21.7	2.0		ng/L	19.8		110	70-130		
8:2 Fluorotelomersulfonic acid (8:2FTS A)	23.4	2.0		ng/L	19.0		123	70-130		
Perfluorodecanoic acid (PFDA)	23.5	2.0		ng/L	19.8		119	70-130		
Perfluorododecanoic acid (PFDoA)	25.0	2.0		ng/L	19.8		127	70-130		
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	22.2	2.0		ng/L	17.6		126	70-130		
Perfluoroheptanesulfonic acid (PFHpS)	19.5	2.0		ng/L	18.9		103	70-130		
4:2 Fluorotelomersulfonic acid (4:2FTS A)	20.8	2.0		ng/L	18.5		113	70-130		
Perfluorohexanesulfonic acid (PFHxS)	21.6	2.0		ng/L	18.1		119	70-130		
Perfluoro-4-oxapentanoic acid (PFMPA)	22.2	2.0		ng/L	19.8		113	70-130		
Perfluoro-5-oxahexanoic acid (PFMBA)	21.7	2.0		ng/L	19.8		110	70-130		
6:2 Fluorotelomersulfonic acid (6:2FTS A)	19.2	2.0		ng/L	18.8		102	70-130		
Perfluoropentanesulfonic acid (PFPeS)	22.4	2.0		ng/L	18.6		121	70-130		
Perfluoroundecanoic acid (PFUnA)	24.8	2.0		ng/L	19.8		125	70-130		
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	21.7	2.0		ng/L	19.8		110	70-130		
Perfluoroheptanoic acid (PFHpA)	24.0	2.0		ng/L	19.8		121	70-130		
Perfluoroctanoic acid (PFOA)	24.5	2.0		ng/L	19.8		124	70-130		
Perfluorooctanesulfonic acid (PFOS)	21.0	2.0		ng/L	18.3		115	70-130		
Perfluorononanoic acid (PFNA)	21.1	2.0		ng/L	19.8		107	70-130		
Surrogate: M2-4:2FTS	29.9			ng/L	37.1		80.6	50-200		
<b>Surrogate: M2-8:2FTS</b>	<b>138</b>			ng/L	38.0	<b>363</b>	*	50-200		S-29
Surrogate: MPFBA	42.1			ng/L	39.5	106	50-200			
Surrogate: M3HFPO-DA	32.0			ng/L	39.5	81.0	50-200			
Surrogate: M6PFDA	40.3			ng/L	39.5	102	50-200			
Surrogate: M3PFBS	35.5			ng/L	36.8	96.5	50-200			
Surrogate: M7PFUnA	36.8			ng/L	39.5	93.0	50-200			
Surrogate: M2-6:2FTS	42.2			ng/L	37.6	112	50-200			
Surrogate: M5PFPeA	41.7			ng/L	39.5	105	50-200			
Surrogate: MSPFHxA	35.0			ng/L	39.5	88.5	50-200			
Surrogate: M3PFHxS	37.1			ng/L	37.5	98.9	50-200			
Surrogate: M4PFHpA	36.3			ng/L	39.5	91.9	50-200			
Surrogate: M8PFOA	39.3			ng/L	39.5	99.3	50-200			
Surrogate: M8PFOS	39.7			ng/L	37.9	105	50-200			
Surrogate: M9PFNA	42.1			ng/L	39.5	106	50-200			
Surrogate: MPFDoA	34.5			ng/L	39.5	87.3	50-200			

Matrix Spike (B342295-MS1)							Source: 23F0275-02 Prepared: 06/13/23 Analyzed: 06/15/23			
Perfluorobutanoic acid (PFBA)	28.5	1.9		ng/L	18.8	5.34	123	70-130		
Perfluorobutanesulfonic acid (PFBS)	20.4	1.9		ng/L	16.7	ND	123	70-130		
Perfluoropentanoic acid (PFPeA)	25.4	1.9		ng/L	18.8	2.75	120	70-130		
Perfluorohexanoic acid (PFHxA)	24.4	1.9		ng/L	18.8	0.792	125	70-130		
11Cl-PF3OUDS (F53B Major)	20.7	1.9		ng/L	17.7	ND	117	70-130		
9Cl-PF3ONS (F53B Minor)	22.0	1.9		ng/L	17.6	ND	125	70-130		
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	19.3	1.9		ng/L	17.7	ND	109	70-130		
Hexafluoropropylene oxide dimer acid (HFPO-DA)	20.1	1.9		ng/L	18.8	ND	107	70-130		
8:2 Fluorotelomersulfonic acid (8:2FTS A)	21.7	1.9		ng/L	18.1	ND	120	70-130		

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

**QUALITY CONTROL****Semivolatile Organic Compounds by - LC/MS-MS - Quality Control**

Analyte	Reporting Result	Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit	Notes
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**Batch B342295 - EPA 533**

Matrix Spike (B342295-MS1)	Source: 23F0275-02			Prepared: 06/13/23 Analyzed: 06/15/23				
Perfluorodecanoic acid (PFDA)	21.5	1.9	ng/L	18.8	ND	114	70-130	
Perfluorododecanoic acid (PFDoA)	22.0	1.9	ng/L	18.8	ND	117	70-130	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	20.7	1.9	ng/L	16.8	ND	124	70-130	
Perfluoroheptanesulfonic acid (PFHpS)	19.7	1.9	ng/L	18.0	ND	110	70-130	
4:2 Fluorotelomersulfonic acid (4:2FTS A)	19.0	1.9	ng/L	17.6	ND	108	70-130	
Perfluorohexanesulfonic acid (PFHxS)	19.9	1.9	ng/L	17.2	ND	115	70-130	
Perfluoro-4-oxapentanoic acid (PFMPA)	20.7	1.9	ng/L	18.8	ND	110	70-130	
Perfluoro-5-oxahexanoic acid (PFMBA)	20.0	1.9	ng/L	18.8	ND	106	70-130	
6:2 Fluorotelomersulfonic acid (6:2FTS A)	15.8	1.9	ng/L	17.9	ND	88.3	70-130	
Perfluoropentanesulfonic acid (PFPeS)	20.4	1.9	ng/L	17.7	ND	115	70-130	
Perfluoroundecanoic acid (PFUnA)	22.0	1.9	ng/L	18.8	ND	117	70-130	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	20.4	1.9	ng/L	18.8	ND	108	70-130	
Perfluoroheptanoic acid (PFHpA)	21.6	1.9	ng/L	18.8	ND	114	70-130	
Perfluoroctanoic acid (PFOA)	24.0	1.9	ng/L	18.8	ND	127	70-130	
Perfluoroctanesulfonic acid (PFOS)	20.6	1.9	ng/L	17.4	ND	118	70-130	
Perfluorononanoic acid (PFNA)	18.7	1.9	ng/L	18.8	ND	99.4	70-130	
Surrogate: M2-4:2FTS	30.2		ng/L	35.3	85.5	50-200		
<b>Surrogate: M2-8:2FTS</b>	<b>205</b>		ng/L	36.2	<b>565</b>	*	50-200	PF-18
Surrogate: MPFBA	38.2		ng/L	37.7	101	50-200		
Surrogate: M3HFPO-DA	29.1		ng/L	37.7	77.3	50-200		
Surrogate: M6PFDA	35.3		ng/L	37.7	93.8	50-200		
Surrogate: M3PFBS	35.8		ng/L	35.1	102	50-200		
Surrogate: M7PFUnA	32.7		ng/L	37.7	86.9	50-200		
Surrogate: M2-6:2FTS	49.9		ng/L	35.8	139	50-200		
Surrogate: M5PFPeA	37.4		ng/L	37.7	99.2	50-200		
Surrogate: M5PFHxA	30.3		ng/L	37.7	80.3	50-200		
Surrogate: M3PFHxS	37.0		ng/L	35.7	104	50-200		
Surrogate: M4PFHpA	32.4		ng/L	37.7	86.0	50-200		
Surrogate: M8PFOA	34.2		ng/L	37.7	90.8	50-200		
Surrogate: M8PFOS	36.5		ng/L	36.1	101	50-200		
Surrogate: M9PFNA	36.2		ng/L	37.7	96.1	50-200		
Surrogate: MPFDoA	32.9		ng/L	37.7	87.3	50-200		

Matrix Spike Dup (B342295-MSD1)	Source: 23F0275-02			Prepared: 06/13/23 Analyzed: 06/15/23			
Perfluorobutanoic acid (PFBA)	28.2	1.9	ng/L	18.8	5.34	121	70-130 1.20 30
Perfluorobutanesulfonic acid (PFBS)	20.4	1.9	ng/L	16.7	ND	122	70-130 0.198 30
Perfluoropentanoic acid (PFPeA)	25.6	1.9	ng/L	18.8	2.75	121	70-130 0.782 30
Perfluorohexanoic acid (PFHxA)	23.3	1.9	ng/L	18.8	0.792	120	70-130 4.35 30
11Cl-PF3OUDs (F53B Major)	20.4	1.9	ng/L	17.7	ND	115	70-130 1.73 30
9Cl-PF3ONS (F53B Minor)	21.6	1.9	ng/L	17.5	ND	123	70-130 1.87 30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	19.7	1.9	ng/L	17.7	ND	111	70-130 1.83 30
Hexafluoropropylene oxide dimer acid (HFPO-DA)	19.6	1.9	ng/L	18.8	ND	104	70-130 2.64 30
8:2 Fluorotelomersulfonic acid (8:2FTS A)	22.6	1.9	ng/L	18.1	ND	125	70-130 3.98 30
Perfluorodecanoic acid (PFDA)	21.4	1.9	ng/L	18.8	ND	114	70-130 0.683 30
Perfluorododecanoic acid (PFDoA)	22.9	1.9	ng/L	18.8	ND	122	70-130 4.30 30
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	20.4	1.9	ng/L	16.8	ND	122	70-130 1.49 30
Perfluoroheptanesulfonic acid (PFHpS)	20.2	1.9	ng/L	18.0	ND	113	70-130 2.61 30
4:2 Fluorotelomersulfonic acid (4:2FTS A)	19.7	1.9	ng/L	17.6	ND	112	70-130 3.50 30

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**QUALITY CONTROL****Semivolatile Organic Compounds by - LC/MS-MS - Quality Control**

Analyte	Reporting Result	Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit	Notes
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**Batch B342295 - EPA 533**

Matrix Spike Dup (B342295-MSD1)	Source: 23F0275-02		Prepared: 06/13/23 Analyzed: 06/15/23						
Perfluorohexanesulfonic acid (PFHxS)	20.7	1.9	ng/L	17.2	ND	120	70-130	3.93	30
Perfluoro-4-oxapentanoic acid (PFMPA)	20.8	1.9	ng/L	18.8	ND	110	70-130	0.399	30
Perfluoro-5-oxahexanoic acid (PFMBA)	20.1	1.9	ng/L	18.8	ND	107	70-130	0.130	30
6:2 Fluorotelomersulfonic acid (6:2FTS A)	17.3	1.9	ng/L	17.9	ND	96.9	70-130	9.28	30
Perfluoropentanesulfonic acid (PFPeS)	22.4	1.9	ng/L	17.7	ND	127	70-130	9.35	30
Perfluoroundecanoic acid (PFUnA)	21.9	1.9	ng/L	18.8	ND	117	70-130	0.292	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	21.1	1.9	ng/L	18.8	ND	112	70-130	3.66	30
Perfluoroheptanoic acid (PFHpA)	21.6	1.9	ng/L	18.8	ND	115	70-130	0.147	30
Perfluoroctanoic acid (PFOA)	23.4	1.9	ng/L	18.8	ND	124	70-130	2.48	30
Perfluorooctanesulfonic acid (PFOS)	20.3	1.9	ng/L	17.4	ND	116	70-130	1.75	30
Perfluorononanoic acid (PFNA)	18.5	1.9	ng/L	18.8	ND	98.3	70-130	1.14	30
Surrogate: M2-4:2FTS	31.2		ng/L	35.3		88.3	50-200		
<b>Surrogate: M2-8:2FTS</b>	241		ng/L	36.2		<b>668</b>	*	50-200	PF-18
Surrogate: MPFBA	38.5		ng/L	37.7		102	50-200		
Surrogate: M3HFPO-DA	32.6		ng/L	37.7		86.7	50-200		
Surrogate: M6PFDA	38.6		ng/L	37.7		103	50-200		
Surrogate: M3PFBS	39.5		ng/L	35.1		113	50-200		
Surrogate: M7PFUnA	35.0		ng/L	37.7		93.0	50-200		
Surrogate: M2-6:2FTS	44.2		ng/L	35.8		123	50-200		
Surrogate: M5PFPeA	37.7		ng/L	37.7		100	50-200		
Surrogate: M5PFHxA	32.7		ng/L	37.7		86.8	50-200		
Surrogate: M3PFHxS	38.4		ng/L	35.7		107	50-200		
Surrogate: M4PFHpA	35.2		ng/L	37.7		93.5	50-200		
Surrogate: M8PFOA	36.7		ng/L	37.7		97.4	50-200		
Surrogate: M8PFOS	39.2		ng/L	36.1		108	50-200		
Surrogate: M9PFNA	39.5		ng/L	37.7		105	50-200		
Surrogate: MPFDa	33.0		ng/L	37.7		87.7	50-200		

**FLAG/QUALIFIER SUMMARY**

- \* QC result is outside of established limits.
- † Wide recovery limits established for difficult compound.
- ‡ Wide RPD limits established for difficult compound.
- # Data exceeded client recommended or regulatory level
- ND Not Detected
- RL Reporting Limit
- DL Method Detection Limit
- MCL Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

- PF-17 Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.
- PF-18 Duplicate analysis confirmed Extracted Internal Standard failure due to matrix effects.
- S-29 Extracted Internal Standard is outside of control limits.
- V-20 Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side.  
Data validation is not affected since sample result was "not detected" for this compound.



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

#### CERTIFICATIONS

##### Certified Analyses included in this Report

Analyte	Certifications
<b>EPA 533 in Drinking Water</b>	
Perfluorobutanoic acid (PFBA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorobutanesulfonic acid (PFBS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoropentanoic acid (PFPeA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorohexanoic acid (PFHxA)	NH,NY,VT-DW,ME,NJ,PA,CT
11Cl-PF3OUdS (F53B Major)	NH,NY,VT-DW,ME,NJ,PA,CT
9Cl-PF3ONS (F53B Minor)	NH,NY,VT-DW,ME,NJ,PA,CT
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH,NY,VT-DW,ME,NJ,PA,CT
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH,NY,VT-DW,ME,NJ,PA,CT
8:2 Fluorotelomersulfonic acid (8:2FTS A)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorodecanoic acid (PFDA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorododecanoic acid (PFDaA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoroheptanesulfonic acid (PFHpS)	NH,NY,VT-DW,ME,NJ,PA,CT
4:2 Fluorotelomersulfonic acid (4:2FTS A)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorohexanesulfonic acid (PFHxS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoro-4-oxapentanoic acid (PFMPA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoro-5-oxahexanoic acid (PFMBA)	NH,NY,VT-DW,ME,NJ,PA,CT
6:2 Fluorotelomersulfonic acid (6:2FTS A)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoropentanesulfonic acid (PFPeS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoroundecanoic acid (PFUnA)	NH,NY,VT-DW,ME,NJ,PA,CT
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoroheptanoic acid (PFHpA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoroctanoic acid (PFOA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorooctanesulfonic acid (PFOS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluororononanoic acid (PFNA)	NH,NY,VT-DW,ME,NJ,PA,CT

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2024
ME	State of Maine	MA00100	06/9/2025
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2024





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## ENV-FRM-ELON-0001 V05 Sample Receiving Checklist

## Log In Back-Sheet



Login Sample Receipt Checklist - (Rejection Criteria Listing  
- Using Acceptance Policy) Any False statement will be  
brought to the attention of the Client - True or False

Client NYSDES/ARCADIS  
Project Stewart ANG-butter hill  
MCP/RCP Required N/A  
Deliverable Package Requirement N/A  
Location New Windsor, NY  
PWSID# (When Applicable) N/A  
Arrival Method:  
Courier  Fed Ex  Walk In  Other   
Received By / Date / Time AM/6-23/0955  
Back Sheet By / Date / Time AM/6-23/0955  
Temperature Method Temp. 6.0m # 5  
Temp  < 6°C Actual Temperature 5.4/3.0°C  
Rush Samples: Yes / No Notify  
Short Hold: Yes / No Notify

Notes regarding Samples/COC outside of SOP:

Split workorder after the first 20 samples

	True	False
<u>Received on Ice</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Received in Cooler</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Custody Seal: DATE</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>TIME</u>		
<u>COC Relinquished</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>CO/C/Samples Labels Agree</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>All Samples in Good Condition</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Samples Received within Holding Time</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Is there enough Volume</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Proper Media/Container Used</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Splitting Samples Required</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>MS/MSD</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Trip Blanks</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Lab to Filters</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>CO/C Legible</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>CO/C Included: (Check all included)</u>		
Client <input checked="" type="checkbox"/>	Analysis <input type="checkbox"/>	Sampler Name <input type="checkbox"/>
Project <input checked="" type="checkbox"/>	IDs <input type="checkbox"/>	Collection Date/Time <input type="checkbox"/>
All Samples Proper pH: <u>N/A</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Additional Container Notes

Soils Jars (Circle Amb/Clear)	Sample									
	16oz Amb/Clear	8oz Amb/Clear	4oz Amb/Clear	2oz Amb/Clear	1 Liter	250mL	100mL	1 Liter	500mL	250mL
Ambers										
Unpreserved	HCl	Sulfuric	Phosphoric	HCl	Unpreserved	Unpreserved	Unpreserved	Unpreserved	Unpreserved	Plastics
Unpreserved	HCl	Sulfuric	Phosphoric	HCl	Unpreserved	Unpreserved	Unpreserved	Unpreserved	Unpreserved	VOA Vials
Unpreserved	Sulfuric	Sulfuric	Sulfuric	Sulfuric	Unpreserved	Unpreserved	Unpreserved	Unpreserved	Unpreserved	Other / Fill in
Unpreserved	Nitric	Nitric	Nitric	Nitric	Unpreserved	Unpreserved	Unpreserved	Unpreserved	Unpreserved	250 mL Plas+.
Unpreserved	NaOH	NaOH	NaOH/Zinc	NaOH	Unpreserved	Unpreserved	Unpreserved	Unpreserved	Unpreserved	Quinacridone Acetate
Unpreserved	HCl	Unpreserved	MeOH	HCl	Unpreserved	Unpreserved	Unpreserved	Unpreserved	Unpreserved	250 mL Plas+.
Unpreserved	MeOH	Unpreserved	D.I. Water	BISulfate	COI/Bact	2	8	2	7	T
Unpreserved	D.I. Water	Unpreserved	BISulfate	Unpreserved	COI/Bact	2	8	2	7	T



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June 22, 2023

David Chiusano  
NYDEC\_Arcadis US, Inc. - Clifton Park-NY  
855 Route 146, Suite 210  
Clifton Park, NY 12065

Project Location: New Windsor, NY  
Client Job Number:  
Project Number: 30058345  
Laboratory Work Order Number: 23F0290

Enclosed are results of analyses for samples as received by the laboratory on June 2, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Raymond J. McCarthy".

Raymond J. McCarthy  
Project Manager

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NYDEC\_Arcadis US, Inc. - Clifton Park-NY  
855 Route 146, Suite 210  
Clifton Park, NY 12065  
ATTN: David Chiusano

REPORT DATE: 6/22/2023

PURCHASE ORDER NUMBER: 141586

PROJECT NUMBER: 30058345

#### ANALYTICAL SUMMARY

---

WORK ORDER NUMBER: 23F0290

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: New Windsor, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
BH20230601-3N-25	23F0290-01	Drinking Water		EPA 533	
BH20230601-3N-75	23F0290-02	Drinking Water		EPA 533	
BH20230601-3N-50	23F0290-03	Drinking Water		EPA 533	
BH20230601-3 POST	23F0290-04	Drinking Water		EPA 533	
BH20230601-3S-25	23F0290-05	Drinking Water		EPA 533	
BH20230601-3S-50	23F0290-06	Drinking Water		EPA 533	
BH20230601-3S-75	23F0290-07	Drinking Water		EPA 533	
BH20230601-3 MID	23F0290-08	Drinking Water		EPA 533	
BH20230601-1 RAW	23F0290-09	Drinking Water		EPA 533	
BH20230601-2 RAW	23F0290-10	Drinking Water		EPA 533	
BH20230601-3 RAW	23F0290-11	Drinking Water		EPA 533	



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#### CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

#### EPA 533

##### **Qualifications:**

###### **PF-17**

Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.

##### **Analyte & Samples(s) Qualified:**

###### **M2-8:2FTS**

23F0290-01[BH20230601-3N-25], 23F0290-03[BH20230601-3N-50], 23F0290-04RE1[BH20230601-3 POST], 23F0290-06[BH20230601-3S-50],  
23F0290-07[BH20230601-3S-75], 23F0290-08[BH20230601-3 MID], 23F0290-09[BH20230601-1 RAW], 23F0290-10[BH20230601-2 RAW], 23F0290-11[BH20230601-3  
RAW], B343575-BLK1

###### **S-29**

Extracted Internal Standard is outside of control limits.

##### **Analyte & Samples(s) Qualified:**

###### **M2-8:2FTS**

B343575-BS1, B343575-BSD1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Lisa A. Worthington

Technical Representative



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0290

Date Received: 6/2/2023

**Field Sample #:** BH20230601-3N-25

Sampled: 6/1/2023 10:49

**Sample ID:** 23F0290-01

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.6	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Perfluoropentanoic acid (PFPeA)	5.7	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Perfluorohexanoic acid (PFHxA)	2.8	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Perfluorooctanoic acid (PFOA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:47	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	115	50-200		6/15/23 12:47
<b>M2-8:2FTS</b>	<b>264 *</b>	50-200	PF-17	6/15/23 12:47
MPFBA	100	50-200		6/15/23 12:47
M3HFPO-DA	64.9	50-200		6/15/23 12:47
M6PFDA	81.7	50-200		6/15/23 12:47
M3PFBS	103	50-200		6/15/23 12:47
M7PFUnA	81.5	50-200		6/15/23 12:47
M2-6:2FTS	186	50-200		6/15/23 12:47
M5PPPeA	98.3	50-200		6/15/23 12:47
M5PFHxA	79.0	50-200		6/15/23 12:47
M3PFHxS	98.5	50-200		6/15/23 12:47
M4PFHpA	84.4	50-200		6/15/23 12:47
M8PFOA	93.8	50-200		6/15/23 12:47
M8PFOS	91.4	50-200		6/15/23 12:47
M9PFNA	96.8	50-200		6/15/23 12:47
MPFDoA	81.6	50-200		6/15/23 12:47



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Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0290

Date Received: 6/2/2023

**Field Sample #:** BH20230601-3N-75

Sampled: 6/1/2023 10:53

**Sample ID:** 23F0290-02

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	7.0	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Perfluoropentanoic acid (PFPeA)	3.1	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Perfluorohexanoic acid (PFHxA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Perfluorooctanoic acid (PFOA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 12:54	JR2
Surrogates	% Recovery	Recovery Limits	Flag/Qual							
M2-4:2FTS	65.2	50-200							6/15/23 12:54	
M2-8:2FTS	183	50-200							6/15/23 12:54	
MPFBA	80.4	50-200							6/15/23 12:54	
M3HFPO-DA	70.9	50-200							6/15/23 12:54	
M6PFDA	65.6	50-200							6/15/23 12:54	
M3PFBS	81.9	50-200							6/15/23 12:54	
M7PFUnA	57.4	50-200							6/15/23 12:54	
M2-6:2FTS	136	50-200							6/15/23 12:54	
M5PPPeA	74.7	50-200							6/15/23 12:54	
M5PFHxA	66.1	50-200							6/15/23 12:54	
M3PFHxS	74.8	50-200							6/15/23 12:54	
M4PFHpA	71.0	50-200							6/15/23 12:54	
M8PFOA	75.0	50-200							6/15/23 12:54	
M8PFOS	74.4	50-200							6/15/23 12:54	
M9PFNA	78.7	50-200							6/15/23 12:54	
MPFDoA	54.1	50-200							6/15/23 12:54	



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Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0290

Date Received: 6/2/2023

**Field Sample #:** BH20230601-3N-50

Sampled: 6/1/2023 10:51

**Sample ID:** 23F0290-03

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.4	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Perfluoropentanoic acid (PFPeA)	5.6	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Perfluorohexanoic acid (PFHxA)	2.0	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	16	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Perfluorooctanoic acid (PFOA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 13:02	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	79.4	50-200		6/15/23 13:02
<b>M2-8:2FTS</b>	<b>229</b> *	50-200	PF-17	6/15/23 13:02
MPFBA	79.8	50-200		6/15/23 13:02
M3HFPO-DA	70.0	50-200		6/15/23 13:02
M6PFDA	64.8	50-200		6/15/23 13:02
M3PFBS	81.4	50-200		6/15/23 13:02
M7PFUnA	61.7	50-200		6/15/23 13:02
M2-6:2FTS	143	50-200		6/15/23 13:02
M5PPPeA	74.1	50-200		6/15/23 13:02
M5PFHxA	63.9	50-200		6/15/23 13:02
M3PFHxS	75.2	50-200		6/15/23 13:02
M4PFHpA	69.6	50-200		6/15/23 13:02
M8PFOA	74.6	50-200		6/15/23 13:02
M8PFOS	73.9	50-200		6/15/23 13:02
M9PFNA	79.1	50-200		6/15/23 13:02
MPFDoA	61.5	50-200		6/15/23 13:02



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0290

Date Received: 6/2/2023

**Field Sample #:** BH20230601-3 POST

Sampled: 6/1/2023 10:55

**Sample ID:** 23F0290-04

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL		DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
			MA ORSG	Units						
Perfluorobutanoic acid (PFBA)	4.8	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Perfluorobutanesulfonic acid (PFBS)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Perfluoropentanoic acid (PFPeA)	2.4	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Perfluorohexanoic acid (PFHxA)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	19	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Perfluorooctanoic acid (PFOA)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Perfluorooctanesulfonic acid (PFOS)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L	1		EPA 533	6/20/23	6/22/23 10:04	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	86.0	50-200		6/22/23 10:04
<b>M2-8:2FTS</b>	<b>350</b> *	50-200	PF-17	6/22/23 10:04
MPFBA	94.3	50-200		6/22/23 10:04
M3HFPO-DA	71.0	50-200		6/22/23 10:04
M6PFDA	90.4	50-200		6/22/23 10:04
M3PFBS	95.3	50-200		6/22/23 10:04
M7PFUnA	87.7	50-200		6/22/23 10:04
M2-6:2FTS	174	50-200		6/22/23 10:04
M5PPPeA	100	50-200		6/22/23 10:04
M5PFHxA	82.7	50-200		6/22/23 10:04
M3PFHxS	96.6	50-200		6/22/23 10:04
M4PFHpA	87.2	50-200		6/22/23 10:04
M8PFOA	93.8	50-200		6/22/23 10:04
M8PFOS	105	50-200		6/22/23 10:04
M9PFNA	88.1	50-200		6/22/23 10:04
MPFDoA	89.5	50-200		6/22/23 10:04



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0290

Date Received: 6/2/2023

**Field Sample #:** BH20230601-3S-25

Sampled: 6/1/2023 10:59

**Sample ID:** 23F0290-05

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	7.0	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Perfluorobutanesulfonic acid (PFBS)	2.9	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Perfluoropentanoic acid (PFPeA)	6.5	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Perfluorohexanoic acid (PFHxA)	4.1	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Perfluorohexanesulfonic acid (PFHxS)	5.6	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Perfluoroheptanoic acid (PFHpA)	2.2	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Perfluorooctanoic acid (PFOA)	4.4	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Perfluorooctanesulfonic acid (PFOS)	5.9	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:16	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	82.0	50-200		6/15/23 13:16
M2-8:2FTS	175	50-200		6/15/23 13:16
MPFBA	79.4	50-200		6/15/23 13:16
M3HFPO-DA	62.6	50-200		6/15/23 13:16
M6PFDA	56.4	50-200		6/15/23 13:16
M3PFBS	75.0	50-200		6/15/23 13:16
M7PFUnA	56.4	50-200		6/15/23 13:16
M2-6:2FTS	140	50-200		6/15/23 13:16
M5PPPeA	83.8	50-200		6/15/23 13:16
M5PFHxA	59.6	50-200		6/15/23 13:16
M3PFHxS	71.6	50-200		6/15/23 13:16
M4PFHpA	59.3	50-200		6/15/23 13:16
M8PFOA	58.8	50-200		6/15/23 13:16
M8PFOS	76.4	50-200		6/15/23 13:16
M9PFNA	59.9	50-200		6/15/23 13:16
MPFDoA	60.5	50-200		6/15/23 13:16



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0290

Date Received: 6/2/2023

**Field Sample #:** BH20230601-3S-50

Sampled: 6/1/2023 11:00

**Sample ID:** 23F0290-06Sample Matrix: Drinking Water**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.6	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Perfluorobutanesulfonic acid (PFBS)	2.7	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Perfluoropentanoic acid (PFPeA)	6.0	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Perfluorohexanoic acid (PFHxA)	3.7	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Perfluorohexanesulfonic acid (PFHxS)	4.3	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Perfluoroheptanoic acid (PFHpA)	1.9	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Perfluorooctanoic acid (PFOA)	3.6	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Perfluorooctanesulfonic acid (PFOS)	4.9	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:23	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	87.3	50-200		6/15/23 13:23
<b>M2-8:2FTS</b>	<b>273</b> *	50-200	PF-17	6/15/23 13:23
MPFBA	87.7	50-200		6/15/23 13:23
M3HFPO-DA	75.8	50-200		6/15/23 13:23
M6PFDA	68.4	50-200		6/15/23 13:23
M3PFBS	86.0	50-200		6/15/23 13:23
M7PFUnA	66.5	50-200		6/15/23 13:23
M2-6:2FTS	132	50-200		6/15/23 13:23
M5PPPeA	90.4	50-200		6/15/23 13:23
M5PFHxA	68.3	50-200		6/15/23 13:23
M3PFHxS	85.3	50-200		6/15/23 13:23
M4PFHpA	72.8	50-200		6/15/23 13:23
M8PFOA	74.8	50-200		6/15/23 13:23
M8PFOS	83.8	50-200		6/15/23 13:23
M9PFNA	76.3	50-200		6/15/23 13:23
MPFDoA	69.5	50-200		6/15/23 13:23



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0290

Date Received: 6/2/2023

**Field Sample #:** BH20230601-3S-75

Sampled: 6/1/2023 11:02

**Sample ID:** 23F0290-07

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.1	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Perfluorobutanesulfonic acid (PFBS)	2.4	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Perfluoropentanoic acid (PFPeA)	6.0	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Perfluorohexanoic acid (PFHxA)	3.7	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Perfluorohexanesulfonic acid (PFHxS)	2.9	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Perfluorooctanoic acid (PFOA)	2.9	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Perfluorooctanesulfonic acid (PFOS)	2.6	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:30	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	129	50-200		6/15/23 13:30
<b>M2-8:2FTS</b>	<b>246</b> *	50-200	PF-17	6/15/23 13:30
MPFBA	83.1	50-200		6/15/23 13:30
M3HFPO-DA	65.7	50-200		6/15/23 13:30
M6PFDA	64.9	50-200		6/15/23 13:30
M3PFBS	83.1	50-200		6/15/23 13:30
M7PFUnA	63.4	50-200		6/15/23 13:30
M2-6:2FTS	173	50-200		6/15/23 13:30
M5PPPeA	84.6	50-200		6/15/23 13:30
M5PFHxA	64.3	50-200		6/15/23 13:30
M3PFHxS	80.7	50-200		6/15/23 13:30
M4PFHpA	67.5	50-200		6/15/23 13:30
M8PFOA	74.1	50-200		6/15/23 13:30
M8PFOS	79.2	50-200		6/15/23 13:30
M9PFNA	77.7	50-200		6/15/23 13:30
MPFDoA	63.4	50-200		6/15/23 13:30



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0290

Date Received: 6/2/2023

**Field Sample #:** BH20230601-3 MID

Sampled: 6/1/2023 11:05

**Sample ID:** 23F0290-08

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.3	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Perfluorobutanesulfonic acid (PFBS)	2.2	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Perfluoropentanoic acid (PFPeA)	5.6	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Perfluorohexanoic acid (PFHxA)	3.4	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Perfluorohexanesulfonic acid (PFHxS)	2.8	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Perfluorooctanoic acid (PFOA)	2.4	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Perfluorooctanesulfonic acid (PFOS)	2.0	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 13:53	JR2
Surrogates	% Recovery		Recovery Limits			Flag/Qual				
M2-4:2FTS	90.2		50-200							6/15/23 13:53
<b>M2-8:2FTS</b>	<b>228</b>	*	50-200			PF-17				6/15/23 13:53
MPFBA	82.3		50-200							6/15/23 13:53
M3HFPO-DA	66.3		50-200							6/15/23 13:53
M6PFDA	62.2		50-200							6/15/23 13:53
M3PFBS	79.4		50-200							6/15/23 13:53
M7PFUnA	61.5		50-200							6/15/23 13:53
M2-6:2FTS	160		50-200							6/15/23 13:53
M5PPPeA	89.7		50-200							6/15/23 13:53
M5PFHxA	67.0		50-200							6/15/23 13:53
M3PFHxS	74.6		50-200							6/15/23 13:53
M4PFHpA	68.6		50-200							6/15/23 13:53
M8PFOA	77.1		50-200							6/15/23 13:53
M8PFOS	63.9		50-200							6/15/23 13:53
M9PFNA	76.4		50-200							6/15/23 13:53
MPFDoA	63.6		50-200							6/15/23 13:53



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0290

Date Received: 6/2/2023

**Field Sample #:** BH20230601-1 RAW

Sampled: 6/1/2023 11:31

**Sample ID:** 23F0290-09

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL		DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
			MA ORSG	Units						
Perfluorobutanoic acid (PFBA)	9.9	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Perfluorobutanesulfonic acid (PFBS)	5.9	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Perfluoropentanoic acid (PFPeA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Perfluorohexanoic acid (PFHxA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Perfluorohexanesulfonic acid (PFHxS)	5.4	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Perfluorooctanoic acid (PFOA)	4.1	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Perfluorooctanesulfonic acid (PFOS)	5.7	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:00	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	83.1	50-200		6/15/23 14:00
<b>M2-8:2FTS</b>	<b>316</b> *	50-200	PF-17	6/15/23 14:00
MPFBA	92.2	50-200		6/15/23 14:00
M3HFPO-DA	69.0	50-200		6/15/23 14:00
M6PFDA	72.1	50-200		6/15/23 14:00
M3PFBS	89.6	50-200		6/15/23 14:00
M7PFUnA	65.6	50-200		6/15/23 14:00
M2-6:2FTS	119	50-200		6/15/23 14:00
M5PPPeA	96.6	50-200		6/15/23 14:00
M5PFHxA	71.1	50-200		6/15/23 14:00
M3PFHxS	85.2	50-200		6/15/23 14:00
M4PFHpA	75.4	50-200		6/15/23 14:00
M8PFOA	81.9	50-200		6/15/23 14:00
M8PFOS	83.3	50-200		6/15/23 14:00
M9PFNA	79.7	50-200		6/15/23 14:00
MPFDoA	65.9	50-200		6/15/23 14:00



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0290

Date Received: 6/2/2023

**Field Sample #:** BH20230601-2 RAW

Sampled: 6/1/2023 11:40

**Sample ID:** 23F0290-10

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL		DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
			MA ORSG	Units						
Perfluorobutanoic acid (PFBA)	7.6	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Perfluorobutanesulfonic acid (PFBS)	2.7	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Perfluoropentanoic acid (PFPeA)	6.5	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Perfluorohexanoic acid (PFHxA)	2.8	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Perfluorohexanesulfonic acid (PFHxS)	5.6	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Perfluoroheptanoic acid (PFHpA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Perfluorooctanoic acid (PFOA)	4.2	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Perfluorooctanesulfonic acid (PFOS)	5.3	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L	1		EPA 533	6/14/23	6/15/23 14:07	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	86.8	50-200		6/15/23 14:07
<b>M2-8:2FTS</b>	<b>281</b> *	50-200	PF-17	6/15/23 14:07
MPFBA	95.1	50-200		6/15/23 14:07
M3HFPO-DA	63.4	50-200		6/15/23 14:07
M6PFDA	69.0	50-200		6/15/23 14:07
M3PFBS	93.5	50-200		6/15/23 14:07
M7PFUnA	53.8	50-200		6/15/23 14:07
M2-6:2FTS	132	50-200		6/15/23 14:07
M5PPPeA	100	50-200		6/15/23 14:07
M5PFHxA	70.3	50-200		6/15/23 14:07
M3PFHxS	86.2	50-200		6/15/23 14:07
M4PFHpA	74.0	50-200		6/15/23 14:07
M8PFOA	74.0	50-200		6/15/23 14:07
M8PFOS	89.8	50-200		6/15/23 14:07
M9PFNA	76.5	50-200		6/15/23 14:07
MPFDoA	59.7	50-200		6/15/23 14:07



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: New Windsor, NY

Sample Description:

Work Order: 23F0290

Date Received: 6/2/2023

**Field Sample #:** BH20230601-3 RAW

Sampled: 6/1/2023 11:17

**Sample ID:** 23F0290-11

Sample Matrix: Drinking Water

**Semivolatile Organic Compounds by - LC/MS-MS**

Analyte	Results	RL	MCL/SMCL		DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
			MA ORSG	Units						
Perfluorobutanoic acid (PFBA)	5.8	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Perfluorobutanesulfonic acid (PFBS)	2.7	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Perfluoropentanoic acid (PFPeA)	7.6	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Perfluorohexanoic acid (PFHxA)	3.9	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
11Cl-PF3OUDs (F53B Major)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
9Cl-PF3ONS (F53B Minor)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Perfluorodecanoic acid (PFDA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Perfluorododecanoic acid (PFDoA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Perfluorohexanesulfonic acid (PFHxS)	5.9	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Perfluoropentanesulfonic acid (PFPeS)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Perfluoroundecanoic acid (PFUnA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Perfluoroheptanoic acid (PFHpA)	2.0	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Perfluorooctanoic acid (PFOA)	4.3	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Perfluorooctanesulfonic acid (PFOS)	6.8	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2
Perfluorononanoic acid (PFNA)	ND	1.8		ng/L	1		EPA 533	6/14/23	6/15/23 14:14	JR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
M2-4:2FTS	91.5	50-200		6/15/23 14:14
<b>M2-8:2FTS</b>	<b>249</b> *	50-200	PF-17	6/15/23 14:14
MPFBA	90.3	50-200		6/15/23 14:14
M3HFPO-DA	67.5	50-200		6/15/23 14:14
M6PFDA	69.4	50-200		6/15/23 14:14
M3PFBS	87.7	50-200		6/15/23 14:14
M7PFUnA	69.1	50-200		6/15/23 14:14
M2-6:2FTS	140	50-200		6/15/23 14:14
M5PPPeA	99.0	50-200		6/15/23 14:14
M5PFHxA	71.0	50-200		6/15/23 14:14
M3PFHxS	83.2	50-200		6/15/23 14:14
M4PFHpA	75.5	50-200		6/15/23 14:14
M8PFOA	78.0	50-200		6/15/23 14:14
M8PFOS	81.3	50-200		6/15/23 14:14
M9PFNA	79.6	50-200		6/15/23 14:14
MPFDoA	69.4	50-200		6/15/23 14:14



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

### Sample Extraction Data

**Prep Method: EPA 533-EPA 533**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0290-01 [BH20230601-3N-25]	B342294	275	1.00	06/14/23
23F0290-02 [BH20230601-3N-75]	B342294	276	1.00	06/14/23
23F0290-03 [BH20230601-3N-50]	B342294	277	1.00	06/14/23
23F0290-05 [BH20230601-3S-25]	B342294	269	1.00	06/14/23
23F0290-06 [BH20230601-3S-50]	B342294	270	1.00	06/14/23
23F0290-07 [BH20230601-3S-75]	B342294	267	1.00	06/14/23
23F0290-08 [BH20230601-3 MID]	B342294	268	1.00	06/14/23
23F0290-09 [BH20230601-1 RAW]	B342294	269	1.00	06/14/23
23F0290-10 [BH20230601-2 RAW]	B342294	263	1.00	06/14/23
23F0290-11 [BH20230601-3 RAW]	B342294	272	1.00	06/14/23

**Prep Method: EPA 533-EPA 533**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23F0290-04RE1 [BH20230601-3 POST]	B343575	268	1.00	06/20/23

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

**QUALITY CONTROL****Semivolatile Organic Compounds by - LC/MS-MS - Quality Control**

Analyte	Reporting Result	Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit	Notes
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**Batch B342294 - EPA 533**

<b>Blank (B342294-BLK1)</b>	Prepared: 06/14/23 Analyzed: 06/15/23									
Perfluorobutanoic acid (PFBA)	ND	1.9		ng/L						
Perfluorobutanesulfonic acid (PFBS)	ND	1.9		ng/L						
Perfluoropentanoic acid (PFPeA)	ND	1.9		ng/L						
Perfluorohexanoic acid (PFHxA)	ND	1.9		ng/L						
11Cl-PF3OUDs (F53B Major)	ND	1.9		ng/L						
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L						
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L						
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L						
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L						
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L						
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L						
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEsA)	ND	1.9		ng/L						
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L						
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L						
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9		ng/L						
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L						
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L						
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9		ng/L						
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9		ng/L						
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L						
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L						
Perfluoroheptanoic acid (PFHpA)	ND	1.9		ng/L						
Perfluorooctanoic acid (PFOA)	ND	1.9		ng/L						
Perfluorooctanesulfonic acid (PFOS)	ND	1.9		ng/L						
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L						
Surrogate: M2-4:2FTS	26.4			ng/L	35.9		73.4	50-200		
Surrogate: M2-8:2FTS	44.9			ng/L	36.7		122	50-200		
Surrogate: MPFBA	34.9			ng/L	38.3		91.1	50-200		
Surrogate: M3HFPO-DA	29.6			ng/L	38.3		77.3	50-200		
Surrogate: M6PFDA	28.3			ng/L	38.3		73.9	50-200		
Surrogate: M3PFBS	32.5			ng/L	35.7		91.2	50-200		
Surrogate: M7PFUnA	28.8			ng/L	38.3		75.3	50-200		
Surrogate: M2-6:2FTS	39.8			ng/L	36.4		109	50-200		
Surrogate: M5PFPeA	33.3			ng/L	38.3		87.1	50-200		
Surrogate: M5PFHxA	27.6			ng/L	38.3		72.2	50-200		
Surrogate: M3PFHxS	31.0			ng/L	36.3		85.6	50-200		
Surrogate: M4PFHpA	29.5			ng/L	38.3		77.0	50-200		
Surrogate: M8PFOA	31.2			ng/L	38.3		81.5	50-200		
Surrogate: M8PFOS	30.5			ng/L	36.7		83.2	50-200		
Surrogate: M9PFNA	31.6			ng/L	38.3		82.5	50-200		
Surrogate: MPFDoA	27.8			ng/L	38.3		72.6	50-200		

<b>LCS (B342294-BS1)</b>	Prepared: 06/14/23 Analyzed: 06/15/23									
Perfluorobutanoic acid (PFBA)	8.94	1.9		ng/L	9.62		92.9	70-130		
Perfluorobutanesulfonic acid (PFBS)	7.66	1.9		ng/L	8.52		89.9	70-130		
Perfluoropentanoic acid (PFPeA)	8.59	1.9		ng/L	9.62		89.2	70-130		
Perfluorohexanoic acid (PFHxA)	8.96	1.9		ng/L	9.62		93.1	70-130		
11Cl-PF3OUDs (F53B Major)	9.39	1.9		ng/L	9.07		104	70-130		

**QUALITY CONTROL****Semivolatile Organic Compounds by - LC/MS-MS - Quality Control**

Analyte	Reporting Result	Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit	Notes
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**Batch B342294 - EPA 533**

LCS (B342294-BS1)							Prepared: 06/14/23 Analyzed: 06/15/23			
9Cl-PF3ONS (F53B Minor)	9.53	1.9		ng/L	8.97		106	70-130		
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	8.79	1.9		ng/L	9.07		97.0	70-130		
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.15	1.9		ng/L	9.62		74.3	70-130		
8:2 Fluorotelomersulfonic acid (8:2FTS A)	8.08	1.9		ng/L	9.24		87.5	70-130		
Perfluorodecanoic acid (PFDA)	8.44	1.9		ng/L	9.62		87.7	70-130		
Perfluorododecanoic acid (PFDoA)	9.13	1.9		ng/L	9.62		94.9	70-130		
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	8.64	1.9		ng/L	8.57		101	70-130		
Perfluoroheptanesulfonic acid (PFHpS)	7.89	1.9		ng/L	9.19		85.8	70-130		
4:2 Fluorotelomersulfonic acid (4:2FTS A)	7.58	1.9		ng/L	9.00		84.3	70-130		
Perfluorohexanesulfonic acid (PFHxS)	7.97	1.9		ng/L	8.81		90.5	70-130		
Perfluoro-4-oxapentanoic acid (PFMPA)	8.54	1.9		ng/L	9.62		88.7	70-130		
Perfluoro-5-oxahexanoic acid (PFMBA)	8.25	1.9		ng/L	9.62		85.7	70-130		
6:2 Fluorotelomersulfonic acid (6:2FTS A)	7.53	1.9		ng/L	9.14		82.4	70-130		
Perfluoropentanesulfonic acid (PFPeS)	8.05	1.9		ng/L	9.05		89.0	70-130		
Perfluoroundecanoic acid (PFUnA)	9.30	1.9		ng/L	9.62		96.6	70-130		
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	8.70	1.9		ng/L	9.62		90.4	70-130		
Perfluoroheptanoic acid (PFHpA)	8.57	1.9		ng/L	9.62		89.1	70-130		
Perfluoroctanoic acid (PFOA)	8.84	1.9		ng/L	9.62		91.8	70-130		
Perfluorooctanesulfonic acid (PFOS)	7.84	1.9		ng/L	8.90		88.0	70-130		
Perfluorononanoic acid (PFNA)	7.16	1.9		ng/L	9.62		74.3	70-130		
Surrogate: M2-4:2FTS	28.1			ng/L	36.1		77.8	50-200		
Surrogate: M2-8:2FTS	45.3			ng/L	37.0		123	50-200		
Surrogate: MPFBA	36.3			ng/L	38.5		94.3	50-200		
Surrogate: M3HFPO-DA	31.6			ng/L	38.5		82.2	50-200		
Surrogate: M6PFDA	31.0			ng/L	38.5		80.5	50-200		
Surrogate: M3PFBS	33.8			ng/L	35.9		94.2	50-200		
Surrogate: M7PFUnA	29.9			ng/L	38.5		77.7	50-200		
Surrogate: M2-6:2FTS	40.3			ng/L	36.6		110	50-200		
Surrogate: M5PFPeA	35.3			ng/L	38.5		91.6	50-200		
Surrogate: MSPFHxA	30.0			ng/L	38.5		77.9	50-200		
Surrogate: M3PFHxS	32.4			ng/L	36.5		88.6	50-200		
Surrogate: M4PFHpA	32.2			ng/L	38.5		83.7	50-200		
Surrogate: M8PFOA	33.4			ng/L	38.5		86.8	50-200		
Surrogate: M8PFOS	31.6			ng/L	36.9		85.7	50-200		
Surrogate: M9PFNA	35.5			ng/L	38.5		92.3	50-200		
Surrogate: MPFDoA	29.8			ng/L	38.5		77.5	50-200		

LCS Dup (B342294-BSD1)							Prepared: 06/14/23 Analyzed: 06/15/23			
Perfluorobutanoic acid (PFBA)	9.35	1.9		ng/L	9.47		98.8	70-130	4.46	30
Perfluorobutanesulfonic acid (PFBS)	7.94	1.9		ng/L	8.38		94.8	70-130	3.57	30
Perfluoropentanoic acid (PFPeA)	9.35	1.9		ng/L	9.47		98.8	70-130	8.51	30
Perfluorohexanoic acid (PFHxA)	9.06	1.9		ng/L	9.47		95.8	70-130	1.13	30
11Cl-PF3OUdS (F53B Major)	9.42	1.9		ng/L	8.92		106	70-130	0.343	30
9Cl-PF3ONS (F53B Minor)	9.31	1.9		ng/L	8.82		105	70-130	2.38	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	9.26	1.9		ng/L	8.92		104	70-130	5.16	30
Hexafluoropropylene oxide dimer acid (HFPO-DA)	9.26	1.9		ng/L	9.47		97.9	70-130	25.8	30
8:2 Fluorotelomersulfonic acid (8:2FTS A)	7.69	1.9		ng/L	9.09		84.6	70-130	4.99	30

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

**QUALITY CONTROL****Semivolatile Organic Compounds by - LC/MS-MS - Quality Control**

Analyte	Reporting Result	Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit	Notes
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**Batch B342294 - EPA 533**

LCS Dup (B342294-BSD1)										Prepared: 06/14/23	Analyzed: 06/15/23
Perfluorodecanoic acid (PFDA)	8.72	1.9		ng/L	9.47		92.1	70-130	3.29		30
Perfluorododecanoic acid (PFDoA)	9.32	1.9		ng/L	9.47		98.5	70-130	2.06		30
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	8.81	1.9		ng/L	8.42		105	70-130	1.95		30
Perfluoroheptanesulfonic acid (PFHpS)	8.08	1.9		ng/L	9.04		89.4	70-130	2.48		30
4:2 Fluorotelomersulfonic acid (4:2FTS A)	7.43	1.9		ng/L	8.85		83.9	70-130	2.09		30
Perfluorohexanesulfonic acid (PFHxS)	8.50	1.9		ng/L	8.66		98.2	70-130	6.50		30
Perfluoro-4-oxapentanoic acid (PFMPA)	8.67	1.9		ng/L	9.47		91.6	70-130	1.59		30
Perfluoro-5-oxahexanoic acid (PFMBA)	8.78	1.9		ng/L	9.47		92.8	70-130	6.28		30
6:2 Fluorotelomersulfonic acid (6:2FTS A)	7.10	1.9		ng/L	8.99		79.0	70-130	5.89		30
Perfluoropentanesulfonic acid (PFPeS)	8.87	1.9		ng/L	8.90		99.7	70-130	9.66		30
Perfluoroundecanoic acid (PFUnA)	8.51	1.9		ng/L	9.47		90.0	70-130	8.76		30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	9.17	1.9		ng/L	9.47		96.9	70-130	5.26		30
Perfluoroheptanoic acid (PFHpA)	8.58	1.9		ng/L	9.47		90.7	70-130	0.143		30
Perfluoroctanoic acid (PFOA)	8.90	1.9		ng/L	9.47		94.1	70-130	0.710		30
Perfluoroctanesulfonic acid (PFOS)	8.68	1.9		ng/L	8.76		99.1	70-130	10.2		30
Perfluorononanoic acid (PFNA)	7.58	1.9		ng/L	9.47		80.1	70-130	5.76		30
Surrogate: M2-4:2FTS	28.2			ng/L	35.5		79.3	50-200			
Surrogate: M2-8:2FTS	44.8			ng/L	36.3		123	50-200			
Surrogate: MPFBA	36.0			ng/L	37.9		95.2	50-200			
Surrogate: M3HFPO-DA	30.5			ng/L	37.9		80.5	50-200			
Surrogate: M6PFDA	30.5			ng/L	37.9		80.5	50-200			
Surrogate: M3PFBS	33.2			ng/L	35.3		94.0	50-200			
Surrogate: M7PFUnA	30.6			ng/L	37.9		80.9	50-200			
Surrogate: M2-6:2FTS	40.1			ng/L	36.0		111	50-200			
Surrogate: M5PFPeA	34.0			ng/L	37.9		89.9	50-200			
Surrogate: M5PFHxA	30.2			ng/L	37.9		79.7	50-200			
Surrogate: M3PFHxS	31.4			ng/L	35.9		87.3	50-200			
Surrogate: M4PFHpA	31.7			ng/L	37.9		83.8	50-200			
Surrogate: M8PFOA	33.3			ng/L	37.9		88.1	50-200			
Surrogate: M8PFOS	31.2			ng/L	36.3		86.0	50-200			
Surrogate: M9PFNA	35.1			ng/L	37.9		92.6	50-200			
Surrogate: MPFDoA	29.8			ng/L	37.9		78.7	50-200			

**Batch B343575 - EPA 533**

Blank (B343575-BLK1)										Prepared: 06/20/23	Analyzed: 06/22/23
Perfluorobutanoic acid (PFBA)	ND	1.9		ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	1.9		ng/L							
Perfluoropentanoic acid (PFPeA)	ND	1.9		ng/L							
Perfluorohexanoic acid (PFHxA)	ND	1.9		ng/L							
11Cl-PF3OuDS (F53B Major)	ND	1.9		ng/L							
9Cl-PF3ONS (F53B Minor)	ND	1.9		ng/L							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9		ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9		ng/L							
8:2 Fluorotelomersulfonic acid (8:2FTS A)	ND	1.9		ng/L							
Perfluorodecanoic acid (PFDA)	ND	1.9		ng/L							
Perfluorododecanoic acid (PFDoA)	ND	1.9		ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9		ng/L							

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

**QUALITY CONTROL****Semivolatile Organic Compounds by - LC/MS-MS - Quality Control**

Analyte	Reporting Result	Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit	Notes
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**Batch B343575 - EPA 533**

<b>Blank (B343575-BLK1)</b>	Prepared: 06/20/23 Analyzed: 06/22/23										
Perfluoroheptanesulfonic acid (PFHpS)	ND	1.9		ng/L							
4:2 Fluorotelomersulfonic acid (4:2FTS A)	ND	1.9		ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9		ng/L							
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	1.9		ng/L							
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	1.9		ng/L							
6:2 Fluorotelomersulfonic acid (6:2FTS A)	ND	1.9		ng/L							
Perfluoropentanesulfonic acid (PFPeS)	ND	1.9		ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	1.9		ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9		ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	1.9		ng/L							
Perfluoroctanoic acid (PFOA)	ND	1.9		ng/L							
Perfluoroctanesulfonic acid (PFOS)	ND	1.9		ng/L							
Perfluorononanoic acid (PFNA)	ND	1.9		ng/L							
Surrogate: M2-4:2FTS	32.3			ng/L	35.5		91.0	50-200			
<b>Surrogate: M2-8:2FTS</b>	<i>112</i>			ng/L	36.3	<b>309</b>	*	50-200			PF-17
Surrogate: MPFBA	36.8			ng/L	37.8	97.1	50-200				
Surrogate: M3HFPO-DA	31.6			ng/L	37.8	83.4	50-200				
Surrogate: M6PFDA	38.1			ng/L	37.8	101	50-200				
Surrogate: M3PFBS	31.0			ng/L	35.3	88.0	50-200				
Surrogate: M7PFUnA	36.2			ng/L	37.8	95.6	50-200				
Surrogate: M2-6:2FTS	38.4			ng/L	36.0	107	50-200				
Surrogate: M5PFPeA	40.7			ng/L	37.8	107	50-200				
Surrogate: M5PFHxA	35.2			ng/L	37.8	93.0	50-200				
Surrogate: M3PFHxS	33.9			ng/L	35.9	94.4	50-200				
Surrogate: M4PFHpA	36.3			ng/L	37.8	96.0	50-200				
Surrogate: M8PFOA	37.6			ng/L	37.8	99.4	50-200				
Surrogate: M8PFOS	35.8			ng/L	36.3	98.7	50-200				
Surrogate: M9PFNA	36.6			ng/L	37.8	96.8	50-200				
Surrogate: MPFDoA	34.1			ng/L	37.8	90.1	50-200				
<b>LCS (B343575-BS1)</b>	Prepared: 06/20/23 Analyzed: 06/22/23										
Perfluorobutanoic acid (PFBA)	9.92	1.9		ng/L	9.40		106	70-130			
Perfluorobutanesulfonic acid (PFBS)	8.61	1.9		ng/L	8.32		103	70-130			
Perfluoropentanoic acid (PFPeA)	9.22	1.9		ng/L	9.40		98.0	70-130			
Perfluorohexanoic acid (PFHxA)	9.40	1.9		ng/L	9.40		100	70-130			
11Cl-PF3OUdS (F53B Major)	7.31	1.9		ng/L	8.86		82.5	70-130			
9Cl-PF3ONS (F53B Minor)	8.01	1.9		ng/L	8.76		91.4	70-130			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	9.71	1.9		ng/L	8.86		110	70-130			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.60	1.9		ng/L	9.40		80.8	70-130			
8:2 Fluorotelomersulfonic acid (8:2FTS A)	8.16	1.9		ng/L	9.03		90.4	70-130			
Perfluorodecanoic acid (PFDA)	9.26	1.9		ng/L	9.40		98.4	70-130			
Perfluorododecanoic acid (PFDoA)	9.22	1.9		ng/L	9.40		98.0	70-130			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	10.2	1.9		ng/L	8.37		122	70-130			
Perfluoroheptanesulfonic acid (PFHpS)	9.02	1.9		ng/L	8.98		100	70-130			
4:2 Fluorotelomersulfonic acid (4:2FTS A)	8.44	1.9		ng/L	8.79		96.0	70-130			
Perfluorohexanesulfonic acid (PFHxS)	8.79	1.9		ng/L	8.60		102	70-130			
Perfluoro-4-oxapentanoic acid (PFMPA)	10.4	1.9		ng/L	9.40		110	70-130			
Perfluoro-5-oxahexanoic acid (PFMBA)	9.66	1.9		ng/L	9.40		103	70-130			

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**QUALITY CONTROL****Semivolatile Organic Compounds by - LC/MS-MS - Quality Control**

Analyte	Reporting Result	Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit	Notes
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**Batch B343575 - EPA 533**

LCS (B343575-BS1)							Prepared: 06/20/23 Analyzed: 06/22/23			
6:2 Fluorotelomersulfonic acid (6:2FTS A)	8.94	1.9		ng/L	8.93		100	70-130		
Perfluoropentanesulfonic acid (PFPeS)	8.87	1.9		ng/L	8.84		100	70-130		
Perfluoroundecanoic acid (PFUnA)	9.71	1.9		ng/L	9.40		103	70-130		
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	7.62	1.9		ng/L	9.40		81.0	70-130		
Perfluoroheptanoic acid (PFHpA)	9.71	1.9		ng/L	9.40		103	70-130		
Perfluoroctanoic acid (PFOA)	9.19	1.9		ng/L	9.40		97.8	70-130		
Perfluoroctanesulfonic acid (PFOS)	8.59	1.9		ng/L	8.70		98.7	70-130		
Perfluorononanoic acid (PFNA)	7.78	1.9		ng/L	9.40		82.8	70-130		
Surrogate: M2-4:2FTS	30.6			ng/L	35.3		86.7	50-200		
<b>Surrogate: M2-8:2FTS</b>	<b>104</b>			ng/L	36.1		<b>287</b> *	50-200		S-29
Surrogate: MPFBA	36.4			ng/L	37.6		96.8	50-200		
Surrogate: M3HFPO-DA	31.5			ng/L	37.6		83.7	50-200		
Surrogate: M6PFDA	40.5			ng/L	37.6		108	50-200		
Surrogate: M3PFBS	30.0			ng/L	35.1		85.6	50-200		
Surrogate: M7PFUnA	34.9			ng/L	37.6		92.8	50-200		
Surrogate: M2-6:2FTS	35.0			ng/L	35.8		97.8	50-200		
Surrogate: M5PFPeA	42.6			ng/L	37.6		113	50-200		
Surrogate: M5PFHxA	35.3			ng/L	37.6		94.0	50-200		
Surrogate: M3PFHxS	33.1			ng/L	35.7		92.9	50-200		
Surrogate: M4PFHpA	35.3			ng/L	37.6		93.9	50-200		
Surrogate: M8PFOA	35.2			ng/L	37.6		93.6	50-200		
Surrogate: M8PFOS	34.3			ng/L	36.1		95.1	50-200		
Surrogate: M9PFNA	36.6			ng/L	37.6		97.3	50-200		
Surrogate: MPFDoA	33.1			ng/L	37.6		88.1	50-200		

LCS Dup (B343575-BS1)							Prepared: 06/20/23 Analyzed: 06/22/23			
Perfluorobutanoic acid (PFBA)	9.75	1.9		ng/L	9.48		103	70-130	1.78	30
Perfluorobutanesulfonic acid (PFBS)	8.47	1.9		ng/L	8.39		101	70-130	1.65	30
Perfluoropentanoic acid (PFPeA)	9.19	1.9		ng/L	9.48		96.9	70-130	0.303	30
Perfluorohexanoic acid (PFHxA)	9.44	1.9		ng/L	9.48		99.6	70-130	0.372	30
11Cl-PF3OuDS (F53B Major)	7.41	1.9		ng/L	8.93		82.9	70-130	1.30	30
9Cl-PF3ONS (F53B Minor)	7.79	1.9		ng/L	8.84		88.2	70-130	2.82	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	9.62	1.9		ng/L	8.93		108	70-130	0.884	30
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.75	1.9		ng/L	9.48		81.8	70-130	2.00	30
8:2 Fluorotelomersulfonic acid (8:2FTS A)	8.08	1.9		ng/L	9.10		88.8	70-130	1.00	30
Perfluorodecanoic acid (PFDA)	8.94	1.9		ng/L	9.48		94.3	70-130	3.50	30
Perfluorododecanoic acid (PFDoA)	9.18	1.9		ng/L	9.48		96.9	70-130	0.334	30
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	9.91	1.9		ng/L	8.44		117	70-130	2.78	30
Perfluoroheptanesulfonic acid (PFHpS)	8.95	1.9		ng/L	9.05		98.8	70-130	0.841	30
4:2 Fluorotelomersulfonic acid (4:2FTS A)	8.30	1.9		ng/L	8.86		93.6	70-130	1.75	30
Perfluorohexanesulfonic acid (PFHxS)	7.98	1.9		ng/L	8.67		92.0	70-130	9.66	30
Perfluoro-4-oxapentanoic acid (PFMPA)	9.98	1.9		ng/L	9.48		105	70-130	3.99	30
Perfluoro-5-oxahexanoic acid (PFMBA)	9.32	1.9		ng/L	9.48		98.3	70-130	3.58	30
6:2 Fluorotelomersulfonic acid (6:2FTS A)	8.49	1.9		ng/L	9.01		94.3	70-130	5.11	30
Perfluoropentanesulfonic acid (PFPeS)	8.50	1.9		ng/L	8.91		95.3	70-130	4.24	30
Perfluoroundecanoic acid (PFUnA)	9.29	1.9		ng/L	9.48		98.0	70-130	4.36	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	8.02	1.9		ng/L	9.48		84.6	70-130	5.20	30
Perfluoroheptanoic acid (PFHpA)	9.86	1.9		ng/L	9.48		104	70-130	1.60	30



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**QUALITY CONTROL****Semivolatile Organic Compounds by - LC/MS-MS - Quality Control**

Analyte	Reporting Result	Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit	Notes
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**Batch B343575 - EPA 533**

<b>LCS Dup (B343575-BSD1)</b>	Prepared: 06/20/23 Analyzed: 06/22/23										
Perfluorooctanoic acid (PFOA)	9.44	1.9		ng/L	9.48		99.5	70-130	2.59	30	
Perfluorooctanesulfonic acid (PFOS)	8.76	1.9		ng/L	8.77		99.9	70-130	2.03	30	
Perfluorononanoic acid (PFNA)	7.43	1.9		ng/L	9.48		78.4	70-130	4.66	30	
Surrogate: M2-4:2FTS	31.0			ng/L	35.6		87.1	50-200			
<b>Surrogate: M2-8:2FTS</b>	85.1			ng/L	36.4		234 *	50-200			S-29
Surrogate: MPFBA	36.6			ng/L	37.9		96.4	50-200			
Surrogate: M3HFPO-DA	29.9			ng/L	37.9		78.9	50-200			
Surrogate: M6PFDA	39.4			ng/L	37.9		104	50-200			
Surrogate: M3PFBS	28.2			ng/L	35.3		79.8	50-200			
Surrogate: M7PFUnA	35.3			ng/L	37.9		93.0	50-200			
Surrogate: M2-6:2FTS	35.5			ng/L	36.1		98.6	50-200			
Surrogate: M5PFPeA	40.7			ng/L	37.9		107	50-200			
Surrogate: M5PFHxA	33.8			ng/L	37.9		89.1	50-200			
Surrogate: M3PFHxS	31.7			ng/L	35.9		88.2	50-200			
Surrogate: M4PFHpA	35.5			ng/L	37.9		93.6	50-200			
Surrogate: M8PFOA	35.9			ng/L	37.9		94.7	50-200			
Surrogate: M8PFOS	33.2			ng/L	36.4		91.4	50-200			
Surrogate: M9PFNA	38.0			ng/L	37.9		100	50-200			
Surrogate: MPFDoA	34.0			ng/L	37.9		89.7	50-200			

**FLAG/QUALIFIER SUMMARY**

- \* QC result is outside of established limits.
- † Wide recovery limits established for difficult compound.
- ‡ Wide RPD limits established for difficult compound.
- # Data exceeded client recommended or regulatory level
- ND Not Detected
- RL Reporting Limit
- DL Method Detection Limit
- MCL Maximum Contaminant Level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.

No results have been blank subtracted unless specified in the case narrative section.

- PF-17 Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.
- S-29 Extracted Internal Standard is outside of control limits.



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#### CERTIFICATIONS

##### Certified Analyses included in this Report

Analyte	Certifications
<b>EPA 533 in Drinking Water</b>	
Perfluorobutanoic acid (PFBA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorobutanesulfonic acid (PFBS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoropentanoic acid (PFPeA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorohexanoic acid (PFHxA)	NH,NY,VT-DW,ME,NJ,PA,CT
11Cl-PF3OUdS (F53B Major)	NH,NY,VT-DW,ME,NJ,PA,CT
9Cl-PF3ONS (F53B Minor)	NH,NY,VT-DW,ME,NJ,PA,CT
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH,NY,VT-DW,ME,NJ,PA,CT
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH,NY,VT-DW,ME,NJ,PA,CT
8:2 Fluorotelomersulfonic acid (8:2FTS A)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorodecanoic acid (PFDA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorododecanoic acid (PFDaA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoroheptanesulfonic acid (PFHpS)	NH,NY,VT-DW,ME,NJ,PA,CT
4:2 Fluorotelomersulfonic acid (4:2FTS A)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorohexanesulfonic acid (PFHxS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoro-4-oxapentanoic acid (PFMPA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoro-5-oxahexanoic acid (PFMBA)	NH,NY,VT-DW,ME,NJ,PA,CT
6:2 Fluorotelomersulfonic acid (6:2FTS A)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoropentanesulfonic acid (PFPeS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoroundecanoic acid (PFUnA)	NH,NY,VT-DW,ME,NJ,PA,CT
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoroheptanoic acid (PFHpA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluoroctanoic acid (PFOA)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluorooctanesulfonic acid (PFOS)	NH,NY,VT-DW,ME,NJ,PA,CT
Perfluororononanoic acid (PFNA)	NH,NY,VT-DW,ME,NJ,PA,CT

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2024
ME	State of Maine	MA00100	06/9/2025
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2024





FedEx® Tracking



**DELIVERED**

# Friday

6/2/2023 at 9:55 am

Signature release on file

Package delivered to recipient address

Obtain proof of delivery

**DELIVERY STATUS**

Delivered

**TRACKING ID**

772317400562

**FROM**

Newburgh, NY US

*Label Created*

6/1/2023 12:09 PM

**PACKAGE RECEIVED BY FEDEX**

NEWBURGH, NY

6/1/2023 4:36 PM

**IN TRANSIT**

WINDSOR LOCKS, CT

6/2/2023 7:42 AM

**OUT FOR DELIVERY**

WINDSOR LOCKS, CT

6/2/2023 7:52 AM

**DELIVERED**

EAST LONGMEADOW, MA US

*Delivered*

6/2/2023 at 9:55 AM

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F: 413-525-6405  
[www.pacelabs.com](http://www.pacelabs.com)

## ENV-FRM-ELON-0001 V05 Sample Receiving Checklist



## Log In Back-Sheet

Login Sample Receipt Checklist - (Rejection Criteria Listing  
- Using Acceptance Policy) Any False statement will be  
brought to the attention of the Client - True or False

Client NYSDES/ARCADIS  
Project Stewart ANG-butter hill  
MCP/RCP Required N/A  
Deliverable Package Requirement N/A  
Location New Windsor, NY  
PWSID# (When Applicable) N/A  
Arrival Method:  
Courier  Fed Ex  Walk In  Other   
Received By / Date / Time AAM/6-23/0955  
Back Sheet By / Date / Time AAM/6-23/205  
Temperature Method Temp. Gun # 5  
Temp  < 6°C Actual Temperature 5.4/3.0 °C  
Rush Samples: Yes / No Notify \_\_\_\_\_  
Short Hold: Yes / No Notify \_\_\_\_\_

**Notes regarding Samples/COC outside of SOP:**

SPLIT workorder after the  
first 20 samples

	True	False
<u>Received on Ice</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Received in Cooler</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Custody Seal: DATE</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>TIME</u>		
<u>COC Relinquished</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>COC/Samples Labels Agree</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>All Samples in Good Condition</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Samples Received within Holding Time</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Is there enough Volume</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Proper Media/Container Used</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>Splitting Samples Required</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>MS/MSD</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Trip Blanks</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Lab to Filters</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>COC Legible</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>COC Included: (Check all included)</u>		
Client <input checked="" type="checkbox"/>	Analysis <input type="checkbox"/>	Sampler Name <input checked="" type="checkbox"/>
Project <input type="checkbox"/>	IDs <input type="checkbox"/>	Collection Date/Time <input checked="" type="checkbox"/>
<u>All Samples Proper pH:</u> <u>N/A</u> <input type="checkbox"/> <input type="checkbox"/>		

**Additional Container Notes**

