



Department of  
Environmental  
Conservation

# Algonquin Middle School

**PFAS INVESTIGATION (SPILL NO. 2105197)**

**POESTENKILL, NY**

**FEBRUARY 2022**

Kathy Hochul, Governor | Basil Seggos, Commissioner

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# 1.0 Introduction

On August 26, 2020, NYS established maximum contaminant levels (MCL) in drinking water of 10 parts per trillion (ppt) for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) individually, and 1 part per billion (ppb) for 1,4-dioxane. As required by the State's public water supply regulations, public water systems across NYS began monitoring for PFOA, PFOS, and 1,4-dioxane.

The Algonquin Middle School, located in the Town of Poestenkill, is served by two drinking water supply wells located on the property. In accordance with public water supply regulations, initial sampling for PFOA, PFOS, and 1,4-dioxane was conducted by the Averill Park School District on January 7, 2021. Results showed levels of 13 ppt of PFOA in both wells, exceeding the MCL of 10 ppt. In consultation with Rensselaer County Department of Health (RCDOH), the Averill Park School District shut off the drinking water fountains at the school and provided bottled water to ensure students and staff were not exposed to contamination. Both supply wells were retested on February 1, 2021, which confirmed that PFOA was detected slightly above the MCL at 12 ppt.

Following up on the contamination detected at the Middle School, RCDOH coordinated with New York State Departments of Health (DOH) and Environmental Conservation (DEC) to gather information on private wells and to develop a private well sampling plan to assess and mitigate any potential exposures to contamination. In August 2021, DEC designated the apparent release of PFOA and PFOS as Spill No. 2105197. During the fall of 2021, DEC completed a preliminary investigation at the Middle School where contamination was initially identified. Field activities and subsequent environmental sample results are described herein.

## 2.0 Location

### 2.1 Area of Interest

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The Algonquin Middle School is located in the Town of Poestenkill at the intersection of NYS Route 351 and NYS Route 66. The school property is bounded by NYS Route 66 to the north, NYS Route 351 to the east, and by a tributary of Newfoundland Creek to the south and west. The immediate surrounding area is primarily residential with a few commercial and industrial operations to the north and east: Hass Manufacturing, Waste Management Transfer Station, and the L J Valente Lumber Yard. A car wash and historic car racing speedway were reported to exist southeast and northeast of the intersection of Route 351 and NYS Route 66. A topographic map showing the Middle School and surrounding land features is provided on **Figure 1**.

### 2.2 Geology and Hydrogeology

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According to the digitized (1:250,000) Surficial Geology of New York State – New York State Museum map (New York, 2003), surficial geology in the area consists of glacial till of variable thickness (1-50 meters), kame gravel and sand deposits (10-30 meters), and outwash sands and gravels.

According to the digitized (1: 250,000) Bedrock Geology – New York State Museum map (New York, 1999), bedrock geology underlying the immediate area consists of Cambrian age dark red and green soft shales interbedded with quartzite and sandstone.

A tributary of Newfoundland Creek, which is classified as a Class C stream, flows generally from the south to north along the southern and western extent of the Middle School property. Newfoundland Creek flows into Poesten Kill approximately 2 miles to the north. Poesten Kill flows towards the Hudson River, located approximately 7 miles to the west of the Middle School.

## 2.3 Property Features and Use

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The Middle School property consists of a 52.57-acre parcel identified on Rensselaer County tax maps as parcel number 136.-9-28.1. The parcel consists of the Algonquin Middle School facilities, parking lots, and athletic fields. The main school building and parking lot is located on the northern half of the property. Athletic fields and a smaller parking lot are located on the south side of the school. The Middle School's septic system is located beneath the baseball and soccer fields to the immediate south of the main school building. The school's drinking water supply wells are located on the west side of the school near the main parking lot.

Areas to the west, east, and south on this parcel are wooded. A tributary of Newfoundland Creek, flowing generally south to north, roughly marks the furthest southerly and easterly extent of the parcel. The school property is accessible from two entrances located on the north and east side of the property along NYS Route 66 and NYS Route 351, respectively.

A map showing the Middle School and above-referenced features can be found on **Figure 2**.

## 2.4 Property History and Past Use

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According to historical aerial imagery and from interviews with local and school officials, the Middle School was constructed in 1966. Prior to 1966, the land was undeveloped and was reported to be a low-lying wet area. An addition to the Middle School was constructed in 1997. Between 1994 and 2004, a portion of the forested area behind the school buildings was cleared to create the present-day football field.

During a reconnaissance visit by DEC staff, piles of historic household garbage and automotive debris were identified on the west side of property. The origin of the waste is unknown but consisted generally of empty cans, glass bottles, and two deteriorating car frames.

A spill on the Middle School property was reported to DEC on September 16, 2010, which cited the disposal of four 55-gallon drums with unknown contents. The material was found to be a waste solvent based on sampling results. Drums and impacted soils were removed for offsite disposal.

## 2.5 Topography and Drainage

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The Middle School property generally grades from a topographic high point on the east towards lower elevations to the west. The northern half of the school property, including the front lawn, parking lot, and main school facility, are relatively flat. The baseball and soccer fields to the south of the school are at a higher elevation, comparatively. The adjacent football field is of similar elevation to the northern half of the school property, but grades downward significantly to the tree line where elevations become more gradual towards the adjacent stream which flows along the south and west sides of the property.



## 3.0 Investigation Activities

Investigation field activities described in this section were completed by Aztech Technologies, Inc (Aztech) in November 2021 in accordance with the scope of work (SOW) developed and provided by DEC.

The completed field activities included the following:

- Surface water sampling;
- Sediment sampling;
- Surface soil sampling;
- Direct-push soil borings and subsurface soil sampling;
- Temporary well installations;
- Groundwater sampling;

The SOW and associated field implementation methods are described in **Sections 3.1** through **3.3** below and are consistent with DEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS), June 2021 guidance document (DEC, 2021). Equipment and materials compatible with DEC recommendations for the collection and sampling of PFAS were used for each sampled media (i.e., stainless steel, high-density polyethylene [HDPE], and poly-vinyl chloride [PVC]). Water used for equipment decontamination was verified to be PFAS-free through laboratory analysis completed in October 2021. A copy of the laboratory report has been included in **Appendix A**. A map showing the completed sample locations is presented on **Figure 2**.

Standard chain-of-custody (COC) procedures were followed for all collected samples. Laboratory quality assurance/quality control (QA/QC) samples including field duplicates and matrix spike/matrix spike duplicates (MS/MSDs), were collected where sample volume allowed at a minimum frequency of 1 per 20 samples. Field QA/QC samples including equipment blanks and trip blanks were collected at a frequency of one per day or cooler slated for VOC analysis, respectively. All collected samples were submitted to the DEC contract laboratory, Eurofins TestAmerica of Amherst, New York or South Burlington, Vermont (Eurofins). DEC Category B data deliverable packages were requested for all samples.

### 3.1 Surface Water and Sediment Sampling

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Surface water and sediment sampling activities were completed by Aztech on November 16, 2021. Samples were collected at the most downstream location first and progressed upstream. Surface water samples were collected prior to sediment samples to avoid disturbing sediment which may impact the surface water results.

#### 3.1.1 Surface Water Sampling

A total of 10 surface water samples were collected from the stream adjacent to the school property (SW-01 through SW-07), a ponded surface water feature on the east (SW-10), and from two surface water expressions identified in western forested area (SW-08 and SW-09). Sample locations are displayed on **Figure 2**.

No visual evidence of contamination was observed during the collection of any surface water sample. Surface water samples were collected directly into laboratory supplied sample bottles or by using a

stainless-steel cup depending on field conditions. The stainless-steel cup, where used, was rinsed with stream water prior to the collection of the sample. Water was then transferred directly from the stainless-steel cup into laboratory supplied sample bottles. The stainless-steel cup was decontaminated between sampling locations using Alconox and clean, PFAS-free water. All samples were preserved in a cooler with ice and submitted to Eurofins for the analysis of PFAS (21 compound list) by USEPA Method 537 Modified.

### 3.1.2 Sediment Sampling

Aztech collected a total of 8 sediment samples (SED-1 through SED-7, SED-10), co-located with respective surface water samples. Sample locations are displayed on **Figure 2**.

No visual or olfactory evidence of contamination was observed during the collection of any sediment sample. Sediment samples were collected using a stainless-steel cup or stainless-steel trowel to remove the surficial layer of sediment. Sediment was transferred directly from the sampling device into the laboratory supplied sample bottles. The stainless-steel cup or trowel was decontaminated between sampling locations using detergent (Alconox) and clean, PFAS-free water rinse. All samples were preserved in a cooler with ice and submitted to Eurofins for the analysis of PFAS (21 compound list) by USEPA Method 537 Modified.

## 3.2 Surface and Subsurface Soil Investigation

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### 3.2.1 Private Utility Survey

Prior to the commencement of ground-intrusive activities, Aztech confirmed that the drilling subcontractor, Clean Globe Environmental (CGE), contacted Dig Safely New York, received/reviewed confirmation receipts from each utility, and verified public mark-outs prior to intrusive work.

Between November 3 and November 4, 2021, a private utility survey was conducted by Chazen, a LaBella Company to identify any subsurface utilities or anomalies within a 10-foot radius around each of the proposed soil boring locations, underground utilities within 100 feet of the school building, and identify the septic system extent. Any detected subsurface structure within the investigated radius was identified on the ground surface with paint.

### 3.2.2 Community Air Monitoring Plan

In accordance with the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan (CAMP) (DER-10, Appendix 1A), air monitoring was conducted during all ground intrusive investigation activities. The CAMP included monitoring for both fugitive dust and organic vapors.

Two CAMP enclosures were deployed at the work site on a daily basis; one in the upwind direction and one in the downwind direction of the drill rig. Both enclosures contained a Dust Trak II unit for dust monitoring and MiniRae 3000 photo-ionization detector (PID) for organic vapor monitoring. Additionally, one handheld PID was utilized within the work area to field screen soil samples/drill cuttings and monitor breathing air vapor concentrations.

The action levels were not exceeded (for either fugitive dust or organic vapors) during any of the ground intrusive activities.

### 3.2.3 Surface and Subsurface Soil Investigation

Between November 10 and November 16, 2021, CGE installed 22 soil borings (SB-1 through SB-22) utilizing a Geoprobe® and direct-push techniques to terminal depths ranging from 1.5 to 25 feet below ground surface (bgs), the depth of drilling refusal or encountered groundwater table. As a precaution to ensure that subsurface utilities were not disturbed, each location was hand-cleared to 5 feet bgs using a hand-auger. Continuous soil cores were then collected from each boring location utilizing 2-inch diameter by 5-foot long PVC Macrocores®. The locations of the completed soil borings were targeted around the perimeter of the property and around the existing septic system (**Figure 2**). Soil cores were visually classified and screened for the visual, olfactory, and photo-ionic evidence of contamination by Aztech. The boring logs are provided in **Appendix B**.

Generally, dependent on boring depth and volume of soil recovered, two to three soil samples were collected from each boring location for laboratory analysis. Soil samples consisted of one surface soil sample collected just beneath the vegetative layer, a near surface soil sample collected in the top 12", and a subsurface soil sample just above the observed groundwater table, at evidence of contamination, or at terminal depth if groundwater was not encountered. Elevated PID readings, visual, or olfactory signs of contamination were not identified in any completed soil boring and as a result, soil samples were collected above the water table or at terminal depth. Boreholes that were not selected for temporary well installations were backfilled with soil cuttings and grouted to the surface.

During site reconnaissance, historic dumping piles were encountered in the western wooded portion of the property. Materials consisted of cans (including food, paint, and oil), glassware, and automotive parts, including two deteriorating car frames. An additional surface soil sample (SOIL-23) was collected near the debris for analysis.

From the 22 soil borings, a total of 61 soil samples were collected and transferred directly from the Macrocore® into laboratory-supplied bottles. The stand-alone surface soil sample was collected using a pre-cleaned stainless-steel trowel. Soil was deposited into a stainless-steel bowl and homogenized before placing into the laboratory supplied sampling container. All samples were preserved in a cooler with ice and submitted to Eurofins for the PFAS (21 compound list) by USEPA Method 537 Modified. Additional QA/QC samples collected included 3 duplicate samples, 3 matrix spike samples, and 3 matrix spike duplicate samples.

## 3.3 Groundwater Investigation

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### 3.3.1 Temporary Monitoring Well Installation

Seven temporary groundwater monitoring wells (SB-4/MW-4, SB-5/MW-5, SB-10/MW-10, SB-12/MW-12, SB-18/MW-18, SB-20/MW-20, and SB-22/MW-22) were installed immediately after the respective soil boring was installed, with the exception of SB-18/MW-18 which was installed with a hand auger on November 16, 2021. Temporary wells were constructed utilizing 1-inch ID PVC riser and 10-feet of 0.01-inch slot screen and solid riser to grade, except SB-18/MW-18 which was only installed to a depth of 4 feet below ground surface. The annulus between the well PVC and the borehole wall was backfilled with No. 1 well sand around the well screen, followed by approximately 1-foot of bentonite, and then soil cuttings obtained from that borehole. Final temporary well terminal depths ranged from 4 feet bgs (SB-18/MW-18) to 25 feet bgs (SB-20/MW-20). The locations of temporary monitoring wells can be found on **Figure 2**.

### 3.3.2 Groundwater Sampling

Groundwater grab samples were collected from seven temporary overburden groundwater wells (SB-4/MW-4, SB-5/MW-5, SB-10/MW-10, SB-12/MW-12, SB-18/M-18, SB-20/MW-20, and SB-22/MW-22) and one sample from an existing, abandoned irrigation well (OBS-MW) that was identified during field work. Samples from the temporary well locations were collected utilizing a peristaltic pump equipped with HDPE and silicone tubing. Groundwater parameters (pH, conductivity, ORP, DO, and turbidity) were noted at time of sampling if adequate sample volume was present; however, three-volume purge or purge until parameter stabilization was not conducted for these grab samples.

Groundwater Parameters									
Sample	Sample Date	Sample Time	Parameters						
			Temperature (°C)	pH	pH (mV)	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
SB-4/MW-4*	11/16/2021	1145	-	-	-	-	-	-	-
SB-5/MW-5*	11/15/2021	1330	-	-	-	-	-	-	-
SB-10/MW-10	11/15/2021	1445	13.60	5.77	46	309	0.349	410	18.33
SB-12/MW-12	11/16/2021	1259	13.71	6.06	29	187	0.294	585	47.1
SB-18/MW-18	11/16/2021	1345	10.48	5.87	39	43	2.01	> 1000	11.67
SB-20/MW-20	11/16/2021	1245	10.55	6.34	14	-10	0.191	361	11.71
SB-22/MW-22	11/16/2021	1320	12.89	5.6	55	-17	0.522	> 1000	1.85

\* Location did not yield sufficient water for the collection of groundwater parameters

A grab sample from OBS-MW was collected using a PFAS-free bailer. Samples were collected in laboratory supplied bottles, placed on ice, and submitted to Eurofins for analysis of PFAS (21 compound list) by USEPA Method 537 Modified and for volatile organic compounds (VOCs) by EPA Method 8260C. SB-4/MW-4 was submitted for PFAS analysis only due to low volume yield. Additional QA/QC samples included a field duplicate, a matrix spike, and a matrix spike duplicate. Subsequent to groundwater sampling, temporary wells were removed and backfilled with bentonite to grade.

## 4.0 Discussion of Results

The following subsections discuss the regulatory standards, criteria, and guidance (SCGs) used to evaluate all field observations and sample analytical results. Data collected for this project has not been validated. The complete Category B reports provided by Eurofins TestAmerica are provided in **Appendix C**.

### 4.1 Standards, Criteria, and Guidance

The SCGs used to evaluate the surface water, sediment, soil, and groundwater analytical results are outlined below:

- **Surface Water** – NYSDEC Guidelines for Sampling and Analysis of PFAS, June 2021
- **Sediment** – There currently are no SCGs for PFAS in sediment. Results will be discussed as provided by the laboratory.

- **Soil** – NYSDEC Guidelines for Sampling and Analysis of PFAS, June 2021.
- **Groundwater** – NYSDEC TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, Class GA, June 1998 / NYSDEC Guidelines for Sampling and Analysis of PFAS, June 2021.

## 4.2 Surface Water Results

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A summary of the surface water analytical results is summarized below. PFOA and PFOS results for surface water samples can be found on **Figure 3**. A summary of the surface water sample analytical results can be found in **Table 1**.

Of the seven surface water samples collected from tributary of the Newfoundland Creek, (SW-1/SED-1 through SW-7/SED-7), PFAS compounds were detected in all samples. PFOS was detected in three samples (SW-01/SED-01 through SW-03/SED-03) ranging from 3.7 ppt to 11 ppt, only exceeding the 10 ppt NYS drinking water standard at location SW-02/SED-02. PFOA was detected in all seven surface water samples with detections ranging from 1.9 ppt to 3.3 ppt. Other PFAS compounds that were detected, but do not have corresponding SCGs or MCLs include: PFUnA, PFDA, and PFHxA.

Surface water collected from the ponded area along NYS Route 351 (SW-10/SED-10) showed detections of 6 PFAS compounds: PFOS, PFOA, PFPeA, PFHxA, PFBA, and PFHpA. PFOS and PFOA were detected below 10 ppt at 3.2 ppt and 7.9 ppt, respectively.

Surface water collected from standing water in the western forested area (SW-8, SW-9) showed detections of 6 PFAS compounds at one or both locations: PFOS, PFOA, PFPeA, PFHxA, PFBA, and PFHpA. Detections of PFOA (up to 8.8 ppt) and PFOS (up to 3.6 ppt) were below the 10 ppt drinking water standard.

## 4.3 Sediment Results

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A summary of the sediment analytical results is summarized below. PFOA and PFOS results for sediment samples can be found on **Figure 3**. A summary of the sediment sample analytical results is presented in **Table 2**.

No detections of any PFAS compound analyzed for was detected from samples collected within the tributary of Newfoundland Creek (SW-1/SED-1 through SW-7/SED-7).

PFOS was detected at 1.9 µg/kg in sample SW-10/SED-10 collected from the ponded water along NYS Route 351. No SCGs for PFAS in sediment have been established.

## 4.4 Soil Results

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As observed from the 22 soil borings, soils primarily consisted of sand and silt, with varying amounts of clay and gravel. Overburden thickness was greatest in the central portion of the school property (>25 ft), in the vicinity of the septic system, and becomes more shallow moving to the east and west. On the east side of the property, in the secondary parking lot, there appears to be a depression of overburden material with exposed bedrock to the east and west. Drilling refusal, due to the presence of shallow green to grey shale bedrock, was encountered at 19 soil borings from 1.5 feet bgs (SB-8) to 18 feet bgs (SB-10 and SB-22). Soils and bedrock encountered during this investigation are consistent with regional surficial

and bedrock geology (as described above in **Section 2.2**). Shallow groundwater was detected in 10 borings and ranged from 1 feet bgs (SB-18/MW-18) to 17 feet bgs (SB-20/MW-20).

At all boring locations, screened soils did not exhibit any visual, olfactory, or photo-ionic evidence of contamination. PID measurements were less than 1.0 ppm for all field screened soils.

A summary of the soil analytical results is provided below. PFOA and PFOS soil samples results can be found on **Figure 4**. A summary of the soil sample analytical results is provided in **Table 3**.

Of the 41 surface and near surface soil samples submitted for analysis, 27 sampled intervals across 20 locations had one or more PFAS compounds detected. PFOA was detected at 6 intervals across 5 locations and ranged in concentration from 0.27 µg/kg to 0.37 µg/kg and were all below the Unrestricted Use guidance value of 0.66 µg/kg. PFOS was detected at 26 sampled intervals across 20 locations and ranged in concentration from 0.23 µg/kg to 1.2 µg/kg. PFOS was detected slightly above the Unrestricted Use guidance value of 0.88 µg/kg, but less than the Protection of Groundwater guidance value of 3.7 µg/kg in samples SB-7 3-in, SB-7 12-in, and SB-1 12-in. Other PFAS compounds that were detected, but do not have corresponding guidance values include: PFDS, PFDA, PFDoA, PFNA, and PFUnA.

Of the 21 subsurface soil samples submitted for analysis, detections were limited to PFOA and PFOS. PFOA was detected at 2 locations below the Unrestricted Use guidance value and ranged in concentration from 0.26 µg/kg (SB-14 108-in) to 0.30 µg/kg (SB-13 84-in). PFOS was detected at 1 location (SB-7 96-in) below the Unrestricted Use guidance value with a concentration of 0.48 µg/kg.

## 4.5 Groundwater Results

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A summary of the groundwater analytical results is provided below. PFOA and PFOS results for groundwater samples can be found on **Figure 5**. A summary of the groundwater analytical results is presented in **Table 4 and Table 5**.

Eight groundwater grab samples were collected and of those, the 7 temporary well locations had one or more PFAS compounds detected. PFOS was detected in all 7 temporary wells, below the 10 ppt standard, with concentrations ranging from 1.9 ppt to 6.6 ppt. PFOA was detected in 6 temporary wells with concentrations ranging from 2.3 ppt to 47 ppt. Two locations, SB-4/MW-4 located on the southwestern side of the school property and SB-22/MW-22 located in the parking lot on the east side of the school property, exhibited concentrations above the 10 ppt drinking water standard at 22 ppt and 47 ppt, respectively. Other PFAS compounds that were detected, but do not have corresponding SCGs or MCLs include: PFBS, PFBA, PFHpA, PFHxS, PFHxA, and PFPeA. PFAS were not detected in the abandoned irrigation well (OBS-MW) grab sample.

VOCs were not detected in any samples above their respective laboratory reporting limits.

## 5.0 Findings and Recommendations

Based on the data collected during this preliminary investigation, it is not yet apparent that a highly concentrated or discrete contaminant source or sources exists on the school property which is contributing to levels of PFAS found in the school's drinking water supply wells, or in nearby private drinking water supply wells. Detections of PFAS in soil and groundwater at the Middle School are relatively low, and do not indicate an obvious source on the school property or from an off-site source. More data is needed, both on and off the school property, to determine the origin of PFAS concentrations in the Poestenkill study area.

The evolving conceptual site model indicates localities of exposed fractured and folded shale bedrock. Where bedrock is not exposed it is generally shallow and overlain with unconsolidated glacial sediments. The depth of overburden is not yet fully understood in the vicinity of the septic system. Continued subsurface explorations focused on the overburden and bedrock interface are warranted.

### 5.1 Findings Summary

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#### Surface Water

- No physical evidence of contamination was observed in any surface water sample.
- One of seven samples collected from the adjacent stream exhibited a detection of PFOS above the 10 ppt guideline. PFOA was not detected in any sample from the stream above 10 ppt.
- Three additional surface water samples were collected onsite, none of which detected PFOA or PFOS above 10 ppt.

#### Sediment

- No physical evidence of contamination was observed in any sediment sample.
- PFAS were not detected in any sediment samples collected within the stream.
- PFOS was detected at 1.9 µg/kg in sample SW-10/SED-10 collected from the ponded water along NYS Route 351.

#### Soil

- Subsurface geology within the investigation area primarily consisted of sand and silt, with varying amounts of gravel and clay overlying green-grey shale. Refusal due to the presence bedrock, was encountered at 19 boring locations and ranged from 1.5 feet bgs (SB-8) to 18 feet bgs (SB-10 and SB-22).
- No physical evidence of contamination (visual, olfactory, or photo-ionic) was observed in any screened soil sample.
- Of the 41 surface and near surface soil samples submitted for analysis, PFOA was not detected above Unrestricted Use soil guidance values. PFOS was detected slightly above the Unrestricted Use guidance value of 0.88 µg/kg, but less than the Protection of Groundwater guidance of 3.7 µg/kg in samples SB-7 3-in, SB-7 12-in, and SB-1 12-in.



- Of the 21 subsurface soil samples submitted for analysis, PFOA and PFOS were not detected above Unrestricted Use guidance values of 0.66 µg/kg and 0.88 µg/kg, respectively.

### **Groundwater**

- No physical evidence of contamination was observed in any groundwater sample.
- Of the 8 groundwater samples collected (7 from temporary wells and 1 from an existing well), VOCs were not detected.
- PFOA was detected in two samples above the 10 ppt drinking water standard, SB-4/MW-4 and SB-22/MW-22, at concentrations of 22 ppt and 47 ppt, respectively. The highest detection at SB-22/MW-22 is located on the east side of the school.
- PFOS was detected in all seven temporary well samples; however, concentrations did not exceed 10 ppt.
- Temporary monitoring well results were used to screen potential locations for subsequent permanent monitoring wells.
- PFAS were not detected in the existing, abandoned irrigation well (OBS-MW).

## **5.2 Recommendations**

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Based on the information gathered from this investigation, additional investigation is warranted to better understand local hydrology, geology, and potential sources of contamination. Next steps should include:

- Continued evaluation of overburden depth and composition through soil borings and monitoring well installations.
- Installation of permanent on-site monitoring wells to confirm the presence of PFOA detected in temporary wells points. Permanent wells will also allow for the determination of local overburden groundwater flow.
- Bedrock well drilling, including open borehole geophysics, packer testing, and installation of permanent wells at multiple depths. This work will be used to confirm low level PFAS concentrations found in school supply wells, understand what potential groundwater flow pathways exist between overburden and bedrock, and determine the predominant groundwater flow direction in bedrock fractures.
- Additional surface water and sediment sampling.



## 6.0 References

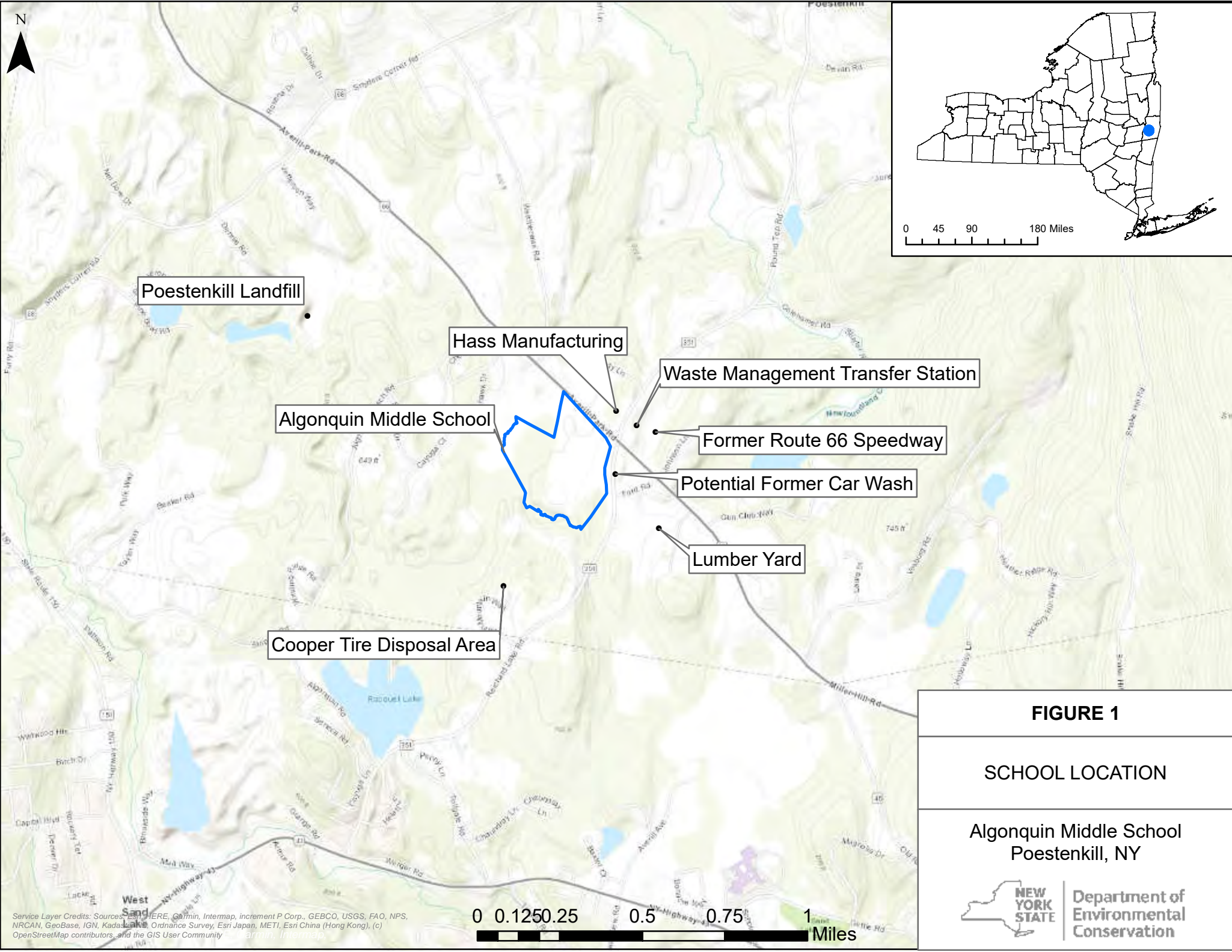
New York State Museum/New York State Geological Survey. Bedrock Geology – New York State [vector digital data]. Scale: 1:250,000. NYS Museum Technology Center, 1999.

New York State Museum/New York State Geological Survey. Surficial Geology of New York State [vector digital data]. Scale: 1:250,000. NYS Museum Technology Center, 2003.

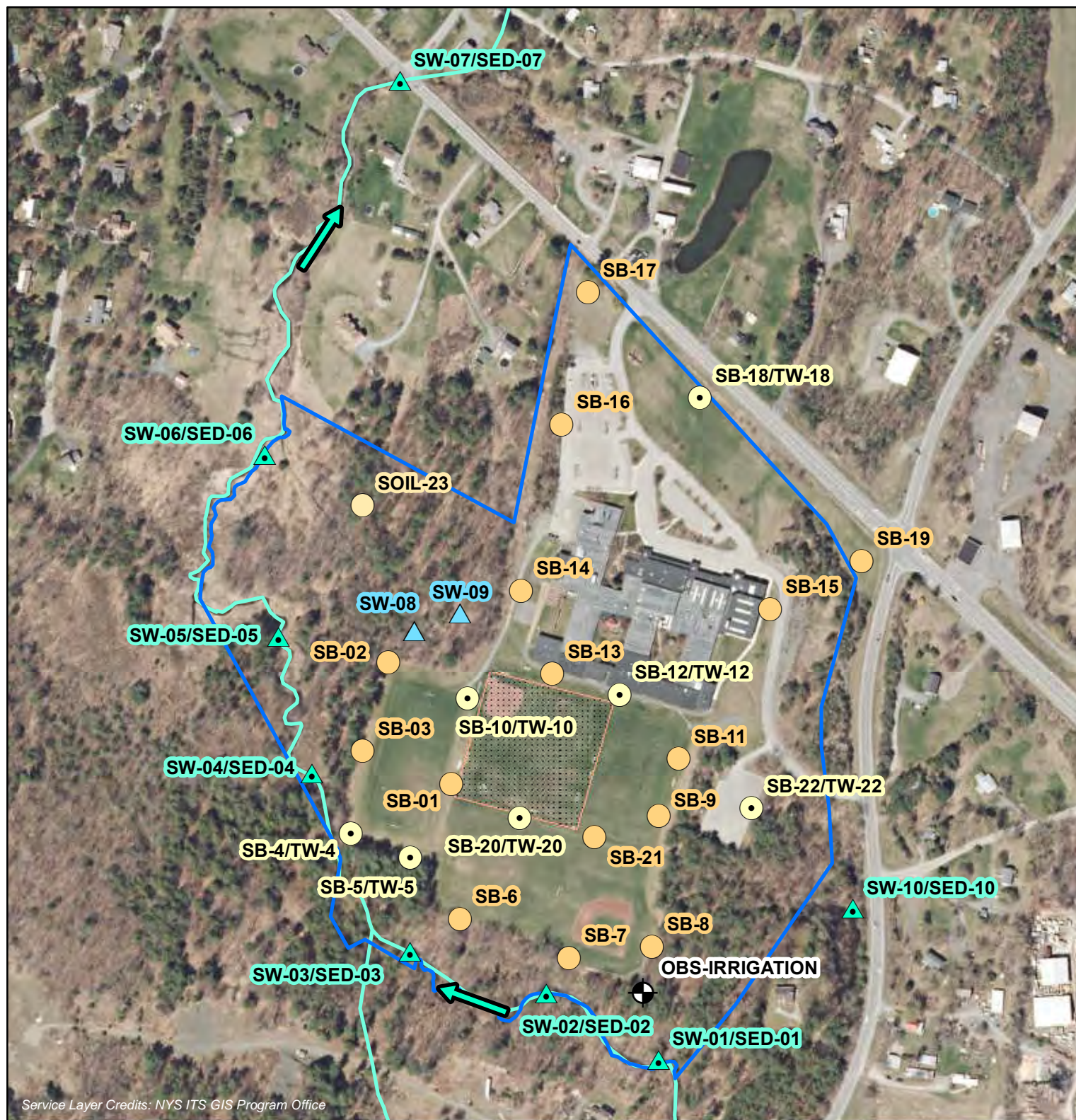
NYSDEC. 1998. Division of Water Technical and Operation Guidance Series (TOGS) – Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Guidelines (TOGS 1.1.1), June 1998.

NYSDEC. 2021. Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS), June 2021.

# FIGURES

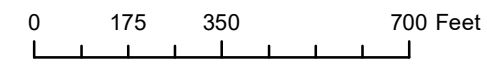






# Legend

- Algonquin Middle School
- Approx. Septic Area
- Stream
- Existing Well
- Soil Boring/Temporary Well
- Soil Boring
- Surface Soil
- ▲ Surface Water
- ▲ Surface Water/Sediment
- ➔ Surface Water Flow Direction



**FIGURE 2**

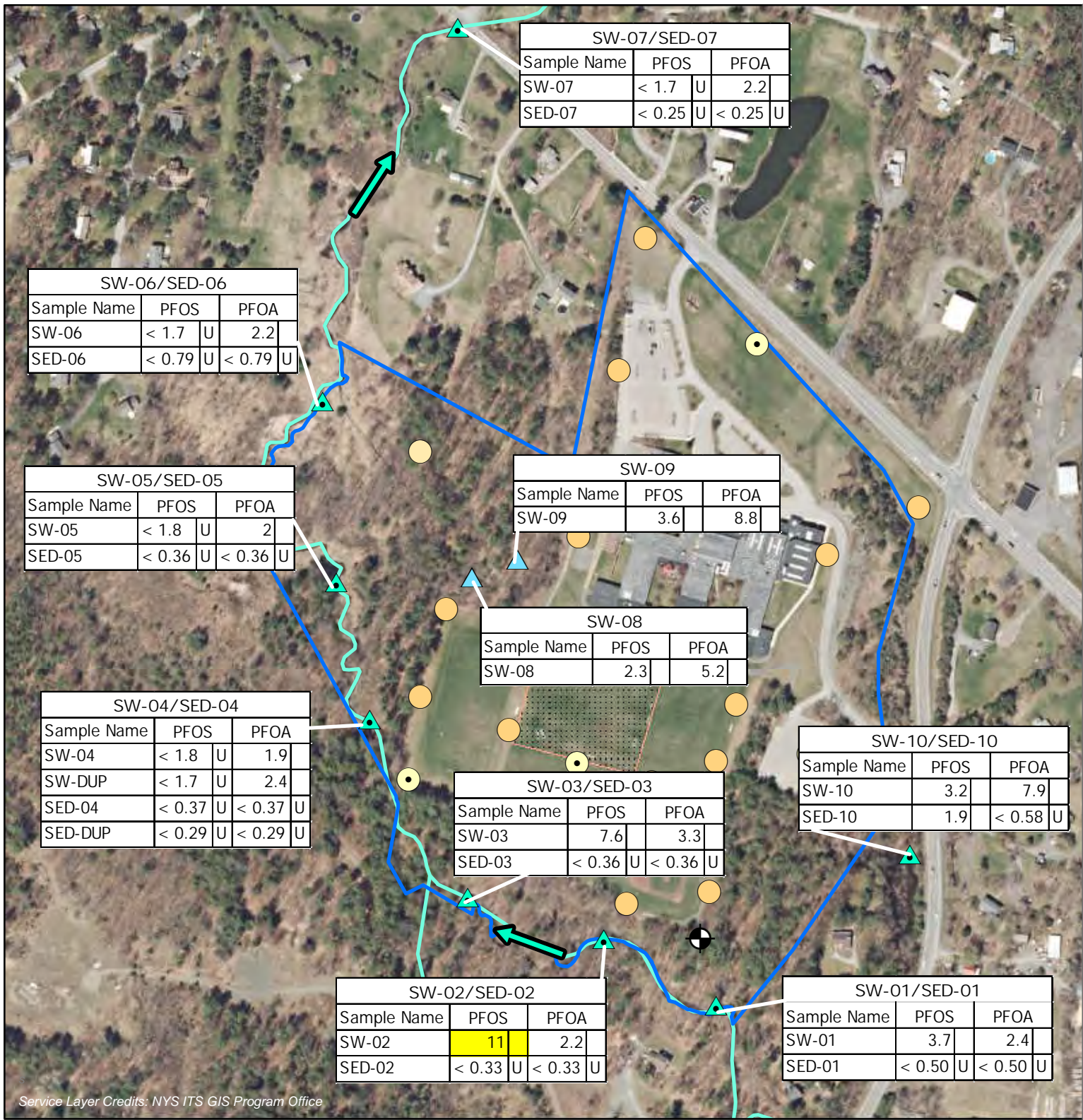
## SAMPLE LOCATIONS

Algonquin Middle School  
Poestenkill, NY



Department of  
Environmental  
Conservation



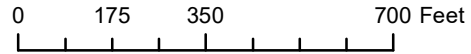


**Legend**

- Algonquin Middle School
- Approx. Septic Area
- Stream

**Sample Location**

- Existing Well
- Soil Boring/Temporary Well
- Soil Boring
- Surface Soil
- Surface Water
- Surface Water/Sediment
- Surface Water Flow Direction



Surface Water		
Compound	Units	NYSDEC Guidelines <sup>1</sup>
PFOA	ng/l	10
PFOS	ng/l	10
Sediment		
PFOA	µg/kg	NC
PFOS	µg/kg	NC

<sup>1</sup> New York State Department of Environmental Conservation, Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS), June 2021.

NC - No Criteria  
U - Compound not detected at the reporting limit shown  
Highlighted - Indicates compound was detected above applicable criteria

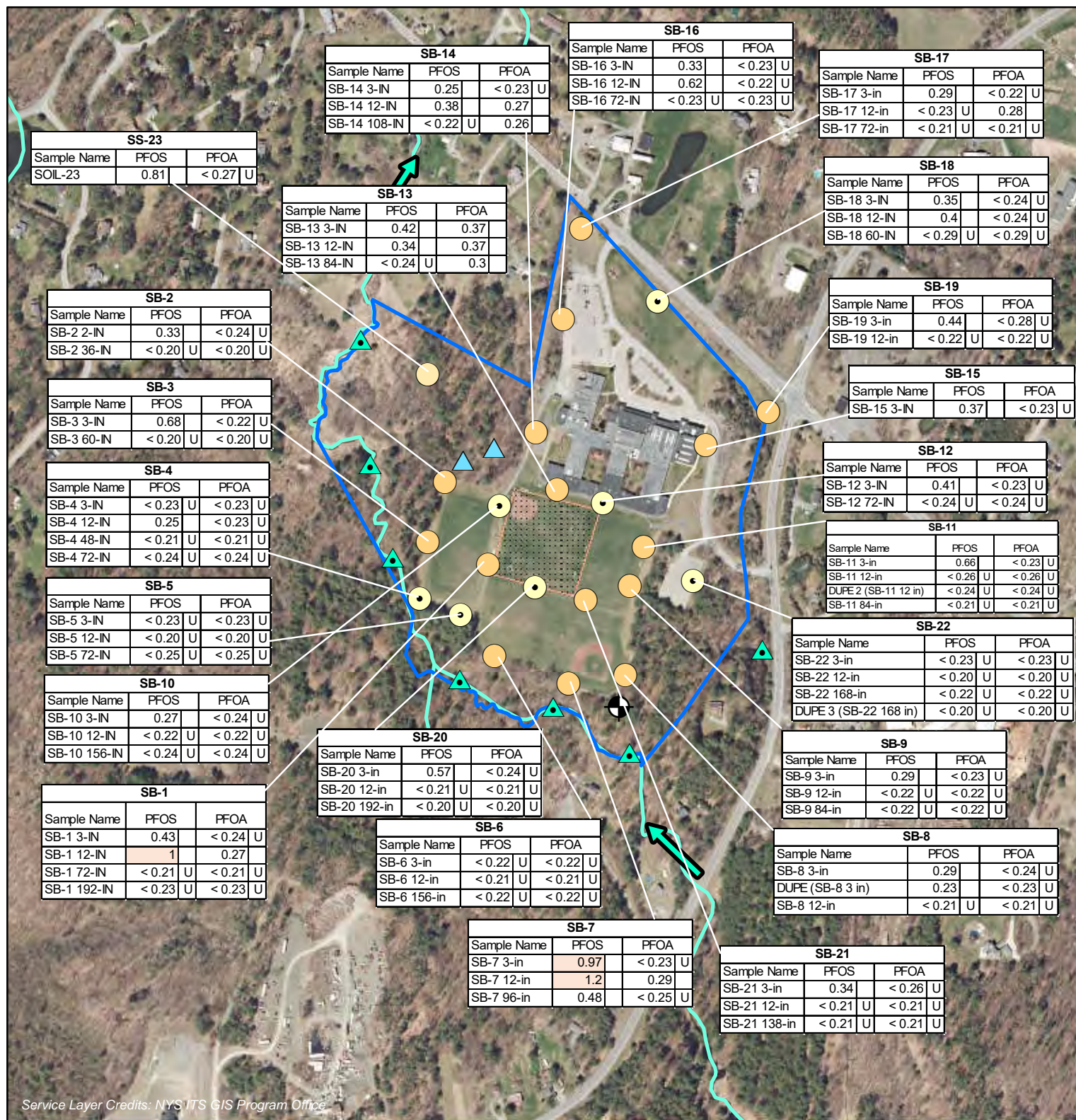
**FIGURE 3**

**SURFACE WATER & SEDIMENT PFOA & PFOS RESULTS**

Algonquin Middle School  
Poestenkill, NY







## Legend

- Algonquin Middle School
- Approx. Septic Area
- Stream

## Sample Location

- Existing Well
- Soil Boring/Temporary Well
- Soil Boring
- Surface Soil
- Surface Water
- Surface Water/Sediment
- Surface Water Flow Direction

0 250 500 1,000 Feet

Soil			
Guidance Value <sup>1</sup>	Unit	PFOA	PFOS
Unrestricted Use	µg/kg	0.66	0.88
Protection of GW	µg/kg	1.1	3.7
Residential Use	µg/kg	6.6	8.8

<sup>1</sup> New York State Department of Environmental Conservation, Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS), June 2021.

NC - No Criteria

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Highlighted - Indicates compound was detected above applicable criteria

FIGURE 4

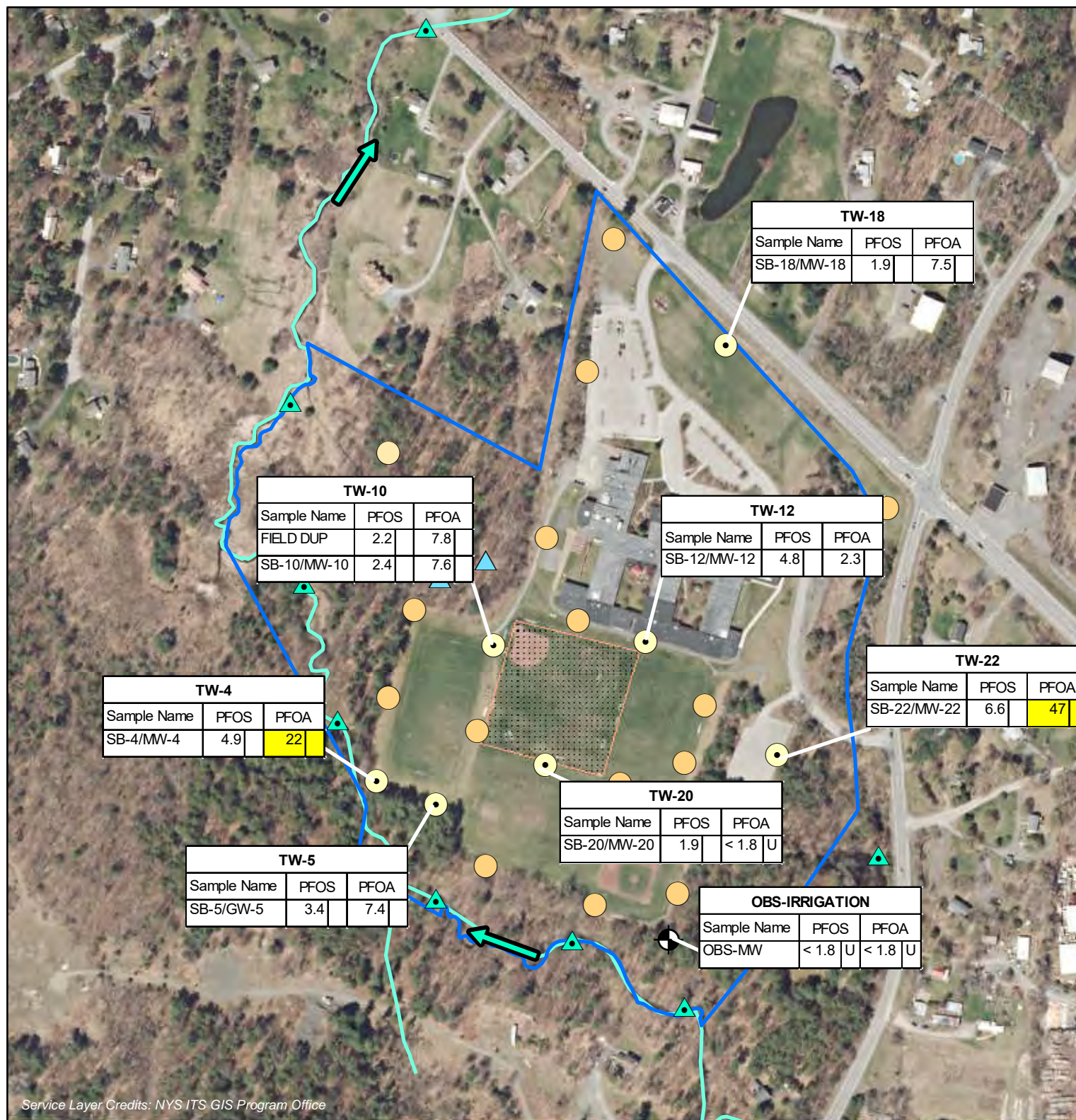
## SOIL PFOA & PFOS RESULTS

Algonquin Middle School  
Poestenkill, NY



Department of  
Environmental  
Conservation





## Legend

- Algonquin Middle School
- Approx. Septic Area
- Stream

## Sample Location

- Existing Well
- Soil Boring/Temporary Well
- Soil Boring
- Surface Soil
- Surface Water
- Surface Water/Sediment
- Surface Water Flow Direction

0 175 350 700 Feet

## Groundwater

Compound	Units	NYSDEC Guidelines <sup>1</sup>
PFOA	ng/l	10
PFOS	ng/l	10

<sup>1</sup> New York State Department of Environmental Conservation, Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS), June 2021.

NC - No Criteria

U - Compound not detected at the reporting limit show n

Highlighted - Indicates compound w as detected above applicable criteria

## FIGURE 5

## GROUNDWATER PFOA & PFOS RESULTS

Algonquin Middle School  
Poestenkill, NY



# TABLES



**Table 1 - Surface Water, PFAS Results**

			Client Sample ID:		SW-01		SW-02		SW-03		SW-04	
			Lab Sample ID:		480-192646-60		480-192646-58		480-192646-56		480-192646-54	
			Location ID:		SW-01		SW-02		SW-03		SW-04	
			Sample Date:		11/16/2021		11/16/2021		11/16/2021		11/16/2021	
			Sample Type Code:		N		N		N		N	
Compound	Unit	NYSDEC Guidelines <sup>1</sup>										
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ng/l	NC	< 1.8	U	< 1.9	U	< 1.9	U	< 1.9	U	< 1.8	U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ng/l	NC	< 4.5	U	< 4.7	U	< 4.6	U	< 4.6	U	< 4.5	U
N-ethyl perfluorooctanesulfonamidoacetic acid	ng/l	NC	< 4.5	U	< 4.7	U	< 4.6	U	< 4.6	U	< 4.5	U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ng/l	NC	< 4.5	U	< 4.7	U	< 4.6	U	< 4.6	U	< 4.5	U
Perfluorobutanesulfonic acid (PFBS)	ng/l	NC	< 1.8	U	< 1.9	U	< 1.9	U	< 1.9	U	< 1.8	U
Perfluorobutanoic Acid	ng/l	NC	< 4.5	U	< 4.7	U	< 4.6	U	< 4.6	U	< 4.5	U
Perfluorodecanesulfonic acid (PFDS)	ng/l	NC	< 1.8	U	< 1.9	U	< 1.9	U	< 1.9	U	< 1.8	U
Perfluorodecanoic acid (PFDA)	ng/l	NC	< 1.8	U	<b>3.3</b>		< 1.9	U	< 1.9	U	< 1.8	U
Perfluorododecanoic acid (PFDoA)	ng/l	NC	< 1.8	U	< 1.9	U	< 1.9	U	< 1.9	U	< 1.8	U
Perfluoroheptanesulfonic acid (PFHpS)	ng/l	NC	< 1.8	U	< 1.9	U	< 1.9	U	< 1.9	U	< 1.8	U
Perfluoroheptanoic acid (PFHpA)	ng/l	NC	< 1.8	U	< 1.9	U	< 1.9	U	< 1.9	U	< 1.8	U
Perfluorohexanesulfonic acid (PFHxS)	ng/l	NC	< 1.8	U	< 1.9	U	< 1.9	U	< 1.9	U	< 1.8	U
Perfluorohexanoic acid (PFHxA)	ng/l	NC	< 1.8	U	< 1.9	U	< 1.9	U	< 1.9	U	< 1.8	U
Perfluorononanoic acid (PFNA)	ng/l	NC	< 1.8	U	< 1.9	U	< 1.9	U	< 1.9	U	< 1.8	U
Perfluorooctane Sulfonamide (FOSA)	ng/l	NC	< 1.8	U	< 1.9	U	< 1.9	U	< 1.9	U	< 1.8	U
Perfluorooctanesulfonic acid (PFOS)	ng/l	10	<b>3.7</b>		<b>11</b>		<b>7.6</b>		<b>7.6</b>		< 1.8	U
Perfluorooctanoic acid (PFOA)	ng/l	10	<b>2.4</b>		<b>2.2</b>		<b>3.3</b>		<b>3.3</b>		<b>1.9</b>	
Perfluoropentanoic Acid (PFPeA)	ng/l	NC	< 1.8	U	< 1.9	U	< 1.9	U	< 1.9	U	< 1.8	U
Perfluorotetradecanoic acid (PFTA)	ng/l	NC	< 1.8	U	< 1.9	U	< 1.9	U	< 1.9	U	< 1.8	U
Perfluorotridecanoic Acid (PFTriA/PFTrDA)	ng/l	NC	< 1.8	U	< 1.9	U	< 1.9	U	< 1.9	U	< 1.8	U
Perfluoroundecanoic Acid (PFUnA)	ng/l	NC	< 1.8	U	<b>1.9</b>		< 1.9	U	< 1.9	U	< 1.8	U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

Sample Type Code: N - Normal, FD - Field Duplicate

NC - No criteria currently exists

U - Compound not detected at the reporting limit shown

**Bold** - Indicates compound was detected

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**Table 1 - Surface Water, PFAS Results**

			Client Sample ID:		SW-DUP		SW-05		SW-06		SW-07	
			Lab Sample ID:		480-192646-49		480-192646-52		480-192646-45		480-192646-43	
			Location ID:		SW-04		SW-05		SW-06		SW-07	
			Sample Date:		11/16/2021		11/16/2021		11/16/2021		11/16/2021	
			Sample Type Code:		FD		N		N		N	
Compound	Unit	NYSDEC Guidelines <sup>1</sup>										
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ng/l	NC	< 1.7	U	< 1.8	U	< 1.7	U	< 1.7	U	< 1.7	U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ng/l	NC	< 4.4	U	< 4.4	U	< 4.3	U	< 4.3	U	< 4.3	U
N-ethyl perfluorooctanesulfonamidoacetic acid	ng/l	NC	< 4.4	U	< 4.4	U	< 4.3	U	< 4.3	U	< 4.3	U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ng/l	NC	< 4.4	U	< 4.4	U	< 4.3	U	< 4.3	U	< 4.3	U
Perfluorobutanesulfonic acid (PFBS)	ng/l	NC	< 1.7	U	< 1.8	U	< 1.7	U	< 1.7	U	< 1.7	U
Perfluorobutanoic Acid	ng/l	NC	< 4.4	U	< 4.4	U	< 4.3	U	< 4.3	U	< 4.3	U
Perfluorodecanesulfonic acid (PFDS)	ng/l	NC	< 1.7	U	< 1.8	U	< 1.7	U	< 1.7	U	< 1.7	U
Perfluorodecanoic acid (PFDA)	ng/l	NC	< 1.7	U	< 1.8	U	< 1.7	U	< 1.7	U	< 1.7	U
Perfluorododecanoic acid (PFDoA)	ng/l	NC	< 1.7	U	< 1.8	U	< 1.7	U	< 1.7	U	< 1.7	U
Perfluoroheptanesulfonic acid (PFHpS)	ng/l	NC	< 1.7	U	< 1.8	U	< 1.7	U	< 1.7	U	< 1.7	U
Perfluoroheptanoic acid (PFHpA)	ng/l	NC	< 1.7	U	< 1.8	U	< 1.7	U	< 1.7	U	< 1.7	U
Perfluorohexanesulfonic acid (PFHxS)	ng/l	NC	< 1.7	U	< 1.8	U	< 1.7	U	< 1.7	U	< 1.7	U
Perfluorohexanoic acid (PFHxA)	ng/l	NC	< 1.7	U	< 1.8	U	< 1.7	U	< 1.7	U	<b>1.7</b>	
Perfluorononanoic acid (PFNA)	ng/l	NC	< 1.7	U	< 1.8	U	< 1.7	U	< 1.7	U	< 1.7	U
Perfluorooctane Sulfonamide (FOSA)	ng/l	NC	< 1.7	U	< 1.8	U	< 1.7	U	< 1.7	U	< 1.7	U
Perfluorooctanesulfonic acid (PFOS)	ng/l	10	< 1.7	U	< 1.8	U	< 1.7	U	< 1.7	U	< 1.7	U
Perfluorooctanoic acid (PFOA)	ng/l	10	<b>2.4</b>		<b>2.0</b>		<b>2.2</b>		<b>2.2</b>		<b>2.2</b>	
Perfluoropentanoic Acid (PFPeA)	ng/l	NC	< 1.7	U	< 1.8	U	< 1.7	U	< 1.7	U	< 1.7	U
Perfluorotetradecanoic acid (PFTA)	ng/l	NC	< 1.7	U	< 1.8	U	< 1.7	U	< 1.7	U	< 1.7	U
Perfluorotridecanoic Acid (PFTriA/PFTTrDA)	ng/l	NC	< 1.7	U	< 1.8	U	< 1.7	U	< 1.7	U	< 1.7	U
Perfluoroundecanoic Acid (PFUnA)	ng/l	NC	< 1.7	U	< 1.8	U	< 1.7	U	< 1.7	U	< 1.7	U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

Sample Type Code: N - Normal, FD - Field Duplicate

NC - No criteria currently exists

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**Table 1 - Surface Water, PFAS Results**

			Client Sample ID:	SW-08	SW-09	SW-10
			Lab Sample ID:	480-192646-48	480-192646-51	480-192646-62
			Location ID:	SW-08	SW-09	SW-10
			Sample Date:	11/16/2021	11/16/2021	11/16/2021
			Sample Type Code:	N	N	N
Compound	Unit	NYSDEC Guidelines <sup>1</sup>				
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ng/l	NC	< 1.9 U	< 1.7 U	< 1.9 U	< 1.9 U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ng/l	NC	< 4.7 U	< 4.2 U	< 4.8 U	< 4.8 U
N-ethyl perfluorooctanesulfonamidoacetic acid	ng/l	NC	< 4.7 U	< 4.2 U	< 4.8 U	< 4.8 U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ng/l	NC	< 4.7 U	< 4.2 U	< 4.8 U	< 4.8 U
Perfluorobutanesulfonic acid (PFBS)	ng/l	NC	< 1.9 U	< 1.7 U	< 1.9 U	< 1.9 U
Perfluorobutanoic Acid	ng/l	NC	< 4.7 U	<b>7.1</b>	<b>5.1</b>	
Perfluorodecanesulfonic acid (PFDS)	ng/l	NC	< 1.9 U	< 1.7 U	< 1.9 U	< 1.9 U
Perfluorodecanoic acid (PFDA)	ng/l	NC	< 1.9 U	< 1.7 U	< 1.9 U	< 1.9 U
Perfluorododecanoic acid (PFDoA)	ng/l	NC	< 1.9 U	< 1.7 U	< 1.9 U	< 1.9 U
Perfluoroheptanesulfonic acid (PFHpS)	ng/l	NC	< 1.9 U	< 1.7 U	< 1.9 U	< 1.9 U
Perfluoroheptanoic acid (PFHpA)	ng/l	NC	< 1.9 U	<b>2.8</b>	<b>2.4</b>	
Perfluorohexanesulfonic acid (PFHxS)	ng/l	NC	< 1.9 U	< 1.7 U	< 1.9 U	< 1.9 U
Perfluorohexanoic acid (PFHxA)	ng/l	NC	<b>6.4</b>	<b>18</b>	<b>2.1</b>	
Perfluorononanoic acid (PFNA)	ng/l	NC	< 1.9 U	< 1.7 U	< 1.9 U	< 1.9 U
Perfluorooctane Sulfonamide (FOSA)	ng/l	NC	< 1.9 U	< 1.7 U	< 1.9 U	< 1.9 U
Perfluorooctanesulfonic acid (PFOS)	ng/l	10	<b>2.3</b>	<b>3.6</b>	<b>3.2</b>	
Perfluorooctanoic acid (PFOA)	ng/l	10	<b>5.2</b>	<b>8.8</b>	<b>7.9</b>	
Perfluoropentanoic Acid (PFPeA)	ng/l	NC	<b>4.1</b>	<b>21</b>	<b>2.0</b>	
Perfluorotetradecanoic acid (PFTA)	ng/l	NC	< 1.9 U	< 1.7 U	< 1.9 U	< 1.9 U
Perfluorotridecanoic Acid (PFTrIA/PFTrDA)	ng/l	NC	< 1.9 U	< 1.7 U	< 1.9 U	< 1.9 U
Perfluoroundecanoic Acid (PFUnA)	ng/l	NC	< 1.9 U	< 1.7 U	< 1.9 U	< 1.9 U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

Sample Type Code: N - Normal, FD - Field Duplicate

NC - No criteria currently exists

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**Highlighted** - Indicates compound was detected above applicable criteria

**Table 2 - Sediment, PFAS Results**

			Client Sample ID:	SED-01	SED-02	SED-03	SED-04
			Lab Sample ID:	480-192646-61	480-192646-59	480-192646-57	480-192646-55
			Location ID:	SED-01	SED-02	SED-03	SED-04
			Sample Date:	11/16/2021	11/16/2021	11/16/2021	11/16/2021
			Sample Type Code:	N	N	N	N
Compound	Unit	NYSDEC Guidelines¹					
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ug/kg	NC	< 5.0 U	< 3.3 U	< 3.6 U	< 3.7 U	
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ug/kg	NC	< 5.0 U	< 3.3 U	< 3.6 U	< 3.7 U	
N-ethyl perfluorooctanesulfonamidoacetic acid	ug/kg	NC	< 5.0 U	< 3.3 U	< 3.6 U	< 3.7 U	
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg	NC	< 5.0 U	< 3.3 U	< 3.6 U	< 3.7 U	
Perfluorobutanesulfonic acid (PFBS)	ug/kg	NC	< 0.50 U	< 0.33 U	< 0.36 U	< 0.37 U	
Perfluorobutanoic Acid	ug/kg	NC	< 1.3 U	< 0.83 U	< 0.91 U	< 0.92 U	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	NC	< 0.50 U	< 0.33 U	< 0.36 U	< 0.37 U	
Perfluorodecanoic acid (PFDA)	ug/kg	NC	< 0.50 U	< 0.33 U	< 0.36 U	< 0.37 U	
Perfluorododecanoic acid (PFDoA)	ug/kg	NC	< 0.50 U	< 0.33 U	< 0.36 U	< 0.37 U	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	NC	< 0.50 U	< 0.33 U	< 0.36 U	< 0.37 U	
Perfluoroheptanoic acid (PFHpA)	ug/kg	NC	< 0.50 U	< 0.33 U	< 0.36 U	< 0.37 U	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	NC	< 0.50 U	< 0.33 U	< 0.36 U	< 0.37 U	
Perfluorohexanoic acid (PFHxA)	ug/kg	NC	< 0.50 U	< 0.33 U	< 0.36 U	< 0.37 U	
Perfluorononanoic acid (PFNA)	ug/kg	NC	< 0.50 U	< 0.33 U	< 0.36 U	< 0.37 U	
Perfluorooctane Sulfonamide (FOSA)	ug/kg	NC	< 0.50 U	< 0.33 U	< 0.36 U	< 0.37 U	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	NC	< 0.50 U	< 0.33 U	< 0.36 U	< 0.37 U	
Perfluorooctanoic acid (PFOA)	ug/kg	NC	< 0.50 U	< 0.33 U	< 0.36 U	< 0.37 U	
Perfluoropentanoic Acid (PFPeA)	ug/kg	NC	< 0.50 U	< 0.33 U	< 0.36 U	< 0.37 U	
Perfluorotetradecanoic acid (PFTA)	ug/kg	NC	< 0.50 U	< 0.33 U	< 0.36 U	< 0.37 U	
Perfluorotridecanoic acid (PFTriA/PFTrDA)	ug/kg	NC	< 0.50 U	< 0.33 U	< 0.36 U	< 0.37 U	
Perfluoroundecanoic Acid (PFUnA)	ug/kg	NC	< 0.50 U	< 0.33 U	< 0.36 U	< 0.37 U	

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

Sample Type Code: N - Normal, FD - Field Duplicate

NC - No criteria currently exists

U - Compound not detected at the reporting limit shown

**Bold** - Indicates compound was detected

**Table 2 - Sediment, PFAS Results**

			Client Sample ID:	SED-DUP	SED-05	SED-06	SED-07
			Lab Sample ID:	480-192646-50	480-192646-53	480-192646-46	480-192646-44
			Location ID:	SED-04	SED-05	SED-06	SED-07
			Sample Date:	11/16/2021	11/16/2021	11/16/2021	11/16/2021
			Sample Type Code:	FD	N	N	N
Compound	Unit	NYSDEC Guidelines¹					
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ug/kg	NC	< 2.9 U	< 3.6 U	< 7.9 U	< 2.5 U	
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ug/kg	NC	< 2.9 U	< 3.6 U	< 7.9 U	< 2.5 U	
N-ethyl perfluorooctanesulfonamidoacetic acid	ug/kg	NC	< 2.9 U	< 3.6 U	< 7.9 U	< 2.5 U	
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg	NC	< 2.9 U	< 3.6 U	< 7.9 U	< 2.5 U	
Perfluorobutanesulfonic acid (PFBS)	ug/kg	NC	< 0.29 U	< 0.36 U	< 0.79 U	< 0.25 U	
Perfluorobutanoic Acid	ug/kg	NC	< 0.73 U	< 0.89 U	< 2.0 U	< 0.64 U	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	NC	< 0.29 U	< 0.36 U	< 0.79 U	< 0.25 U	
Perfluorodecanoic acid (PFDA)	ug/kg	NC	< 0.29 U	< 0.36 U	< 0.79 U	< 0.25 U	
Perfluorododecanoic acid (PFDoA)	ug/kg	NC	< 0.29 U	< 0.36 U	< 0.79 U	< 0.25 U	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	NC	< 0.29 U	< 0.36 U	< 0.79 U	< 0.25 U	
Perfluoroheptanoic acid (PFHpA)	ug/kg	NC	< 0.29 U	< 0.36 U	< 0.79 U	< 0.25 U	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	NC	< 0.29 U	< 0.36 U	< 0.79 U	< 0.25 U	
Perfluorohexanoic acid (PFHxA)	ug/kg	NC	< 0.29 U	< 0.36 U	< 0.79 U	< 0.25 U	
Perfluorononanoic acid (PFNA)	ug/kg	NC	< 0.29 U	< 0.36 U	< 0.79 U	< 0.25 U	
Perfluorooctane Sulfonamide (FOSA)	ug/kg	NC	< 0.29 U	< 0.36 U	< 0.79 U	< 0.25 U	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	NC	< 0.29 U	< 0.36 U	< 0.79 U	< 0.25 U	
Perfluorooctanoic acid (PFOA)	ug/kg	NC	< 0.29 U	< 0.36 U	< 0.79 U	< 0.25 U	
Perfluoropentanoic Acid (PFPeA)	ug/kg	NC	< 0.29 U	< 0.36 U	< 0.79 U	< 0.25 U	
Perfluorotetradecanoic acid (PFTA)	ug/kg	NC	< 0.29 U	< 0.36 U	< 0.79 U	< 0.25 U	
Perfluorotridecanoic Acid (PFTriA/PFTrDA)	ug/kg	NC	< 0.29 U	< 0.36 U	< 0.79 U	< 0.25 U	
Perfluoroundecanoic Acid (PFUnA)	ug/kg	NC	< 0.29 U	< 0.36 U	< 0.79 U	< 0.25 U	

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

Sample Type Code: N - Normal, FD - Field Duplicate

NC - No criteria currently exists

U - Compound not detected at the reporting limit shown

**Bold** - Indicates compound was detected

**Table 2 - Sediment, PFAS Results**

			Client Sample ID:	SED-10
			Lab Sample ID:	480-192646-63
			Location ID:	SED-10
			Sample Date:	11/16/2021
			Sample Type Code:	N
Compound	Unit	NYSDEC Guidelines <sup>1</sup>		
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ug/kg	NC	< 5.8	U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ug/kg	NC	< 5.8	U
N-ethyl perfluorooctanesulfonamidoacetic acid	ug/kg	NC	< 5.8	U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg	NC	< 5.8	U
Perfluorobutanesulfonic acid (PFBS)	ug/kg	NC	< 0.58	U
Perfluorobutanoic Acid	ug/kg	NC	< 1.4	U
Perfluorodecanesulfonic acid (PFDS)	ug/kg	NC	< 0.58	U
Perfluorodecanoic acid (PFDA)	ug/kg	NC	< 0.58	U
Perfluorododecanoic acid (PFDoA)	ug/kg	NC	< 0.58	U
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	NC	< 0.58	U
Perfluoroheptanoic acid (PFHpA)	ug/kg	NC	< 0.58	U
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	NC	< 0.58	U
Perfluorohexanoic acid (PFHxA)	ug/kg	NC	< 0.62	U
Perfluorononanoic acid (PFNA)	ug/kg	NC	< 0.58	U
Perfluorooctane Sulfonamide (FOSA)	ug/kg	NC	< 0.58	U
Perfluorooctanesulfonic acid (PFOS)	ug/kg	NC	<b>1.9</b>	
Perfluorooctanoic acid (PFOA)	ug/kg	NC	< 0.58	U
Perfluoropentanoic Acid (PFPeA)	ug/kg	NC	< 0.58	U
Perfluorotetradecanoic acid (PFTA)	ug/kg	NC	< 0.58	U
Perfluorotridecanoic Acid (PFTriA/PFTTrDA)	ug/kg	NC	< 0.58	U
Perfluoroundecanoic Acid (PFUnA)	ug/kg	NC	< 0.58	U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

Sample Type Code: N - Normal, FD - Field Duplicate

NC - No criteria currently exists

U - Compound not detected at the reporting limit shown

**Bold** - Indicates compound was detected

**Table 3 - Soil, PFAS Results**

Client Sample ID: SB-1 12-IN Lab Sample ID: 200-60972-29 Location ID: SB-1 Sample Date: 11/10/2021 Sample Type Code: N					SB-1 12-IN	SB-1 192-IN	SB-1 3-IN	SB-1 72-IN	SB-10 12-IN	SB-10 156-IN
					200-60972-29	200-60972-13	200-60972-11	200-60972-12	200-60972-26	200-60972-28
					SB-1	SB-1	SB-1	SB-1	SB-10	SB-10
					11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/11/2021	11/11/2021
					N	N	N	N	N	N
Compound	Unit	Unrestricted Use GV <sup>1</sup>	Protection of Groundwater GV <sup>1</sup>	Residential Use GV <sup>1</sup>						
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ug/kg	NC	NC	NC	< 2.2 U	< 2.3 U	< 2.4 U	< 2.1 U	< 2.2 U	< 2.4 U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ug/kg	NC	NC	NC	< 2.2 U	< 2.3 U	< 2.4 U	< 2.1 U	< 2.2 U	< 2.4 U
N-ethyl perfluorooctanesulfonamidoacetic acid	ug/kg	NC	NC	NC	< 2.2 U	< 2.3 U	< 2.4 U	< 2.1 U	< 2.2 U	< 2.4 U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg	NC	NC	NC	< 2.2 U	< 2.3 U	< 2.4 U	< 2.1 U	< 2.2 U	< 2.4 U
Perfluorobutanesulfonic acid (PFBS)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.24 U	< 0.21 U	< 0.22 U	< 0.24 U
Perfluorobutanoic Acid	ug/kg	NC	NC	NC	< 0.55 U	< 0.57 U	< 0.60 U	< 0.53 U	< 0.56 U	< 0.60 U
Perfluorodecanesulfonic acid (PFDS)	ug/kg	NC	NC	NC	<b>0.31</b>	< 0.23 U	< 0.24 U	< 0.21 U	< 0.22 U	< 0.24 U
Perfluorodecanoic acid (PFDA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.24 U	< 0.21 U	< 0.22 U	< 0.24 U
Perfluorododecanoic acid (PFDoA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.24 U	< 0.21 U	< 0.22 U	< 0.24 U
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.24 U	< 0.21 U	< 0.22 U	< 0.24 U
Perfluoroheptanoic acid (PFHpA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.24 U	< 0.21 U	< 0.22 U	< 0.24 U
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.24 U	< 0.21 U	< 0.22 U	< 0.24 U
Perfluorohexanoic acid (PFHxA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.24 U	< 0.21 U	< 0.22 U	< 0.24 U
Perfluorononanoic acid (PFNA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.24 U	< 0.21 U	< 0.22 U	< 0.24 U
Perfluorooctane Sulfonamide (FOSA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.24 U	< 0.21 U	< 0.22 U	< 0.24 U
Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	3.7	8.8	<b>1.0</b>	< 0.23 U	<b>0.43</b>	< 0.21 U	< 0.22 U	< 0.24 U
Perfluorooctanoic acid (PFOA)	ug/kg	0.66	1.1	6.6	<b>0.27</b>	< 0.23 U	< 0.24 U	< 0.21 U	< 0.22 U	< 0.24 U
Perfluoropentanoic Acid (PFPeA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.24 U	< 0.21 U	< 0.22 U	< 0.24 U
Perfluorotetradecanoic acid (PFTA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.24 U	< 0.21 U	< 0.22 U	< 0.24 U
Perfluorotridecanoic Acid (PFTriA/PFTTrDA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.24 U	< 0.21 U	< 0.22 U	< 0.24 U
Perfluoroundecanoic Acid (PFUnA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.24 U	< 0.21 U	< 0.22 U	< 0.24 U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

Sample Type Code: N - Normal, FD - Field Duplicate

NC - No criteria currently exists

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**Bold** - Indicates compound was detected

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Highlighting - Exceeds Protection of Groundwater guidance value

Highlighting - Exceeds Residential guidance value

**Table 3 - Soil, PFAS Results**

Client Sample ID: SB-10 3-IN Lab Sample ID: 200-60972-25 Location ID: SB-10 Sample Date: 11/11/2021 Sample Type Code: N					SB-10 3-IN	DUPE 2	SB-11 12-in	SB-11 3-in	SB-11 84-in	SB-12 3-IN
					200-60972-25	480-192646-25	480-192646-24	480-192646-21	480-192646-26	200-60972-16
					SB-10	SB-11	SB-11	SB-11	SB-11	SB-12
					11/11/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/11/2021
					N	FD	N	N	N	N
Compound	Unit	Unrestricted Use GV <sup>1</sup>	Protection of Groundwater GV <sup>1</sup>	Residential Use GV <sup>1</sup>						
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ug/kg	NC	NC	NC	< 2.4 U	< 2.4 U	< 2.6 U	< 2.3 U	< 2.1 U	< 2.3 U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ug/kg	NC	NC	NC	< 2.4 U	< 2.4 U	< 2.6 U	< 2.3 U	< 2.1 U	< 2.3 U
N-ethyl perfluorooctanesulfonamidoacetic acid	ug/kg	NC	NC	NC	< 2.4 U	< 2.4 U	< 2.6 U	< 2.3 U	< 2.1 U	< 2.3 U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg	NC	NC	NC	< 2.4 U	< 2.4 U	< 2.6 U	< 2.3 U	< 2.1 U	< 2.3 U
Perfluorobutanesulfonic acid (PFBS)	ug/kg	NC	NC	NC	< 0.24 U	< 0.24 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.23 U
Perfluorobutanoic Acid	ug/kg	NC	NC	NC	< 0.60 U	< 0.60 U	< 0.64 U	< 0.58 U	< 0.54 U	< 0.56 U
Perfluorodecanesulfonic acid (PFDS)	ug/kg	NC	NC	NC	< 0.24 U	< 0.24 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.23 U
Perfluorodecanoic acid (PFDA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.24 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.23 U
Perfluorododecanoic acid (PFDoA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.24 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.23 U
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	NC	NC	NC	< 0.24 U	< 0.24 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.23 U
Perfluoroheptanoic acid (PFHpA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.24 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.23 U
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	NC	NC	NC	< 0.24 U	< 0.24 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.23 U
Perfluorohexanoic acid (PFHxA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.24 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.23 U
Perfluorononanoic acid (PFNA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.24 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.23 U
Perfluorooctane Sulfonamide (FOSA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.24 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.23 U
Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	3.7	8.8	<b>0.27</b>	< 0.24 U	< 0.26 U	<b>0.66</b>	< 0.21 U	<b>0.41</b>
Perfluorooctanoic acid (PFOA)	ug/kg	0.66	1.1	6.6	< 0.24 U	< 0.24 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.23 U
Perfluoropentanoic Acid (PFPeA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.24 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.23 U
Perfluorotetradecanoic acid (PFTA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.24 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.23 U
Perfluorotridecanoic Acid (PFTriA/PFTTrDA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.24 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.23 U
Perfluoroundecanoic Acid (PFUnA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.24 U	< 0.26 U	< 0.23 U	< 0.21 U	< 0.23 U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

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NC - No criteria currently exists

U - Compound not detected at the reporting limit shown

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Highlighting - Exceeds Protection of Groundwater guidance value

Highlighting - Exceeds Residential guidance value



**Table 3 - Soil, PFAS Results**

Client Sample ID: SB-12 72-IN Lab Sample ID: 200-60972-17 Location ID: SB-12 Sample Date: 11/11/2021 Sample Type Code: N					SB-12 72-IN	SB-13 12-IN	SB-13 3-IN	SB-13 84-IN	SB-14 108-IN	SB-14 12-IN
					200-60972-17	200-60972-19	200-60972-18	200-60972-23	200-60972-22	200-60972-21
					SB-12	SB-13	SB-13	SB-13	SB-14	SB-14
					11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021
					N	N	N	N	N	N
Compound	Unit	Unrestricted Use GV <sup>1</sup>	Protection of Groundwater GV <sup>1</sup>	Residential Use GV <sup>1</sup>						
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ug/kg	NC	NC	NC	< 2.4 U	< 2.1 U	< 2.3 U	< 2.4 U	< 2.2 U	< 2.3 U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ug/kg	NC	NC	NC	< 2.4 U	< 2.1 U	< 2.3 U	< 2.4 U	< 2.2 U	< 2.3 U
N-ethyl perfluorooctanesulfonamidoacetic acid	ug/kg	NC	NC	NC	< 2.4 U	< 2.1 U	< 2.3 U	< 2.4 U	< 2.2 U	< 2.3 U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg	NC	NC	NC	< 2.4 U	< 2.1 U	< 2.3 U	< 2.4 U	< 2.2 U	< 2.3 U
Perfluorobutanesulfonic acid (PFBS)	ug/kg	NC	NC	NC	< 0.24 U	< 0.21 U	< 0.23 U	< 0.24 U	< 0.22 U	< 0.23 U
Perfluorobutanoic Acid	ug/kg	NC	NC	NC	< 0.60 U	< 0.51 U	< 0.58 U	< 0.59 U	< 0.55 U	< 0.57 U
Perfluorodecanesulfonic acid (PFDS)	ug/kg	NC	NC	NC	< 0.24 U	< 0.21 U	< 0.23 U	< 0.24 U	< 0.22 U	< 0.23 U
Perfluorodecanoic acid (PFDA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.21 U	<b>1.2</b>	< 0.24 U	< 0.22 U	< 0.23 U
Perfluorododecanoic acid (PFDoA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.21 U	<b>0.23</b>	< 0.24 U	< 0.22 U	< 0.23 U
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	NC	NC	NC	< 0.24 U	< 0.21 U	< 0.23 U	< 0.24 U	< 0.22 U	< 0.23 U
Perfluoroheptanoic acid (PFHpA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.21 U	< 0.23 U	< 0.24 U	< 0.22 U	< 0.23 U
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	NC	NC	NC	< 0.24 U	< 0.21 U	< 0.23 U	< 0.24 U	< 0.22 U	< 0.23 U
Perfluorohexanoic acid (PFHxA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.21 U	< 0.23 U	< 0.24 U	< 0.22 U	< 0.23 U
Perfluorononanoic acid (PFNA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.21 U	<b>0.47</b>	< 0.24 U	< 0.22 U	< 0.23 U
Perfluorooctane Sulfonamide (FOSA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.21 U	< 0.23 U	< 0.24 U	< 0.22 U	< 0.23 U
Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	3.7	8.8	< 0.24 U	<b>0.34</b>	<b>0.42</b>	< 0.24 U	< 0.22 U	<b>0.38</b>
Perfluorooctanoic acid (PFOA)	ug/kg	0.66	1.1	6.6	< 0.24 U	<b>0.37</b>	<b>0.37</b>	<b>0.30</b>	<b>0.26</b>	<b>0.27</b>
Perfluoropentanoic Acid (PFPeA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.21 U	< 0.23 U	< 0.24 U	< 0.22 U	< 0.23 U
Perfluorotetradecanoic acid (PFTA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.21 U	< 0.23 U	< 0.24 U	< 0.22 U	< 0.23 U
Perfluorotridecanoic Acid (PFTriA/PFTTrDA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.21 U	< 0.23 U	< 0.24 U	< 0.22 U	< 0.23 U
Perfluoroundecanoic Acid (PFUnA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.21 U	< 0.23 U	< 0.24 U	< 0.22 U	< 0.23 U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

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Highlighting - Exceeds Protection of Groundwater guidance value

Highlighting - Exceeds Residential guidance value

**Table 3 - Soil, PFAS Results**

					Client Sample ID:	SB-14 3-IN	SB-15 3-IN	SB-16 12-IN	SB-16 3-IN	SB-16 72-IN	SB-17 12-in
					Lab Sample ID:	200-60972-20	200-60972-15	200-60972-34	200-60972-33	200-60972-35	480-192646-29
					Location ID:	SB-14	SB-15	SB-16	SB-16	SB-16	SB-17
					Sample Date:	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/16/2021
					Sample Type Code:	N	N	N	N	N	N
Compound	Unit	Unrestricted Use GV <sup>1</sup>	Protection of Groundwater GV <sup>1</sup>	Residential Use GV <sup>1</sup>							
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ug/kg	NC	NC	NC	< 2.3 U	< 2.3 U	< 2.2 U	< 2.3 U	< 2.3 U	< 2.3 U	< 2.3 U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ug/kg	NC	NC	NC	< 2.3 U	< 2.3 U	< 2.2 U	< 2.3 U	< 2.3 U	< 2.3 U	< 2.3 U
N-ethyl perfluorooctanesulfonamidoacetic acid	ug/kg	NC	NC	NC	< 2.3 U	< 2.3 U	< 2.2 U	< 2.3 U	< 2.3 U	< 2.3 U	< 2.3 U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg	NC	NC	NC	< 2.3 U	< 2.3 U	< 2.2 U	< 2.3 U	< 2.3 U	< 2.3 U	< 2.3 U
Perfluorobutanesulfonic acid (PFBS)	ug/kg	NC	NC	NC	< 0.23 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U
Perfluorobutanoic Acid	ug/kg	NC	NC	NC	< 0.57 U	< 0.59 U	< 0.55 U	< 0.58 U	< 0.57 U	< 0.57 U	< 0.57 U
Perfluorodecanesulfonic acid (PFDS)	ug/kg	NC	NC	NC	< 0.23 U	< 0.23 U	< 0.22 U	<b>0.39</b>	< 0.23 U	< 0.23 U	< 0.23 U
Perfluorodecanoic acid (PFDA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.23 U	< 0.22 U	<b>0.30</b>	< 0.23 U	< 0.23 U	< 0.23 U
Perfluorododecanoic acid (PFDoA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.23 U	< 0.22 U	<b>0.26</b>	< 0.23 U	< 0.23 U	< 0.23 U
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	NC	NC	NC	< 0.23 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U
Perfluoroheptanoic acid (PFHpA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	NC	NC	NC	< 0.23 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U
Perfluorohexanoic acid (PFHxA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U
Perfluorononanoic acid (PFNA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U
Perfluorooctane Sulfonamide (FOSA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U
Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	3.7	8.8	<b>0.25</b>	<b>0.37</b>	<b>0.62</b>	<b>0.33</b>	< 0.23 U	< 0.23 U	< 0.23 U
Perfluorooctanoic acid (PFOA)	ug/kg	0.66	1.1	6.6	< 0.23 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	<b>0.28</b>
Perfluoropentanoic Acid (PFPeA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U
Perfluorotetradecanoic acid (PFTA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U
Perfluorotridecanoic Acid (PFTriA/PFTTrDA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.23 U	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.23 U
Perfluoroundecanoic Acid (PFUnA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.23 U	< 0.22 U	<b>0.37</b>	< 0.23 U	< 0.23 U	< 0.23 U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

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Highlighting - Exceeds Residential guidance value

**Table 3 - Soil, PFAS Results**

					Client Sample ID:	SB-17 3-in	SB-17 72-in	SB-18 12-IN	SB-18 3-IN	SB-18 60-IN	SB-19 12-in
					Lab Sample ID:	480-192646-28	480-192646-30	200-60972-31	200-60972-30	200-60972-32	480-192646-32
					Location ID:	SB-17	SB-17	SB-18	SB-18	SB-18	SB-19
					Sample Date:	11/16/2021	11/16/2021	11/11/2021	11/11/2021	11/11/2021	11/16/2021
					Sample Type Code:	N	N	N	N	N	N
Compound	Unit	Unrestricted Use GV <sup>1</sup>	Protection of Groundwater GV <sup>1</sup>	Residential Use GV <sup>1</sup>							
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ug/kg	NC	NC	NC	< 2.2 U	< 2.1 U	< 2.4 U	< 2.4 U	< 2.4 U	< 2.9 U	< 2.2 U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ug/kg	NC	NC	NC	< 2.2 U	< 2.1 U	< 2.4 U	< 2.4 U	< 2.4 U	< 2.9 U	< 2.2 U
N-ethyl perfluorooctanesulfonamidoacetic acid	ug/kg	NC	NC	NC	< 2.2 U	< 2.1 U	< 2.4 U	< 2.4 U	< 2.4 U	< 2.9 U	< 2.2 U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg	NC	NC	NC	< 2.2 U	< 2.1 U	< 2.4 U	< 2.4 U	< 2.4 U	< 2.9 U	< 2.2 U
Perfluorobutanesulfonic acid (PFBS)	ug/kg	NC	NC	NC	< 0.22 U	< 0.21 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.29 U	< 0.22 U
Perfluorobutanoic Acid	ug/kg	NC	NC	NC	< 0.56 U	< 0.53 U	< 0.60 U	< 0.59 U	< 0.59 U	< 0.71 U	< 0.54 U
Perfluorodecanesulfonic acid (PFDS)	ug/kg	NC	NC	NC	< 0.22 U	< 0.21 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.29 U	< 0.22 U
Perfluorodecanoic acid (PFDA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.21 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.29 U	< 0.22 U
Perfluorododecanoic acid (PFDoA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.21 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.29 U	< 0.22 U
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	NC	NC	NC	< 0.22 U	< 0.21 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.29 U	< 0.22 U
Perfluoroheptanoic acid (PFHpA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.21 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.29 U	< 0.22 U
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	NC	NC	NC	< 0.22 U	< 0.21 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.29 U	< 0.22 U
Perfluorohexanoic acid (PFHxA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.21 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.29 U	< 0.22 U
Perfluorononanoic acid (PFNA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.21 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.29 U	< 0.22 U
Perfluorooctane Sulfonamide (FOSA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.21 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.29 U	< 0.22 U
Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	3.7	8.8	<b>0.29</b>	< 0.21 U	<b>0.40</b>		<b>0.35</b>	< 0.29 U	< 0.22 U
Perfluorooctanoic acid (PFOA)	ug/kg	0.66	1.1	6.6	< 0.22 U	< 0.21 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.29 U	< 0.22 U
Perfluoropentanoic Acid (PFPeA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.21 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.29 U	< 0.22 U
Perfluorotetradecanoic acid (PFTA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.21 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.29 U	< 0.22 U
Perfluorotridecanoic Acid (PFTriA/PFTTrDA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.21 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.29 U	< 0.22 U
Perfluoroundecanoic Acid (PFUnA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.21 U	< 0.24 U	< 0.24 U	< 0.24 U	< 0.29 U	< 0.22 U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

Sample Type Code: N - Normal, FD - Field Duplicate

NC - No criteria currently exists

U - Compound not detected at the reporting limit shown

**Bold** - Indicates compound was detected

Highlighting - Exceeds Unrestricted Use guidance value

Highlighting - Exceeds Protection of Groundwater guidance value

Highlighting - Exceeds Residential guidance value

**Table 3 - Soil, PFAS Results**

					Client Sample ID:	SB-19 3-in	SB-2 2-IN	SB-2 36-IN	SB-20 12-in	SB-20 192-in	SB-20 3-in
					Lab Sample ID:	480-192646-31	200-60972-2	200-60972-3	480-192646-3	480-192646-4	480-192646-2
					Location ID:	SB-19	SB-2	SB-2	SB-20	SB-20	SB-20
					Sample Date:	11/16/2021	11/10/2021	11/10/2021	11/15/2021	11/15/2021	11/15/2021
					Sample Type Code:	N	N	N	N	N	N
Compound	Unit	Unrestricted Use GV <sup>1</sup>	Protection of Groundwater GV <sup>1</sup>	Residential Use GV <sup>1</sup>							
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ug/kg	NC	NC	NC	< 2.8 U	< 2.4 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.4 U	< 2.4 U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ug/kg	NC	NC	NC	< 2.8 U	< 2.4 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.4 U	< 2.4 U
N-ethyl perfluorooctanesulfonamidoacetic acid	ug/kg	NC	NC	NC	< 2.8 U	< 2.4 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.4 U	< 2.4 U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg	NC	NC	NC	< 2.8 U	< 2.4 U	< 2.0 U	< 2.1 U	< 2.0 U	< 2.4 U	< 2.4 U
Perfluorobutanesulfonic acid (PFBS)	ug/kg	NC	NC	NC	< 0.28 U	< 0.24 U	< 0.20 U	< 0.21 U	< 0.20 U	< 0.24 U	< 0.24 U
Perfluorobutanoic Acid	ug/kg	NC	NC	NC	< 0.69 U	< 0.60 U	< 0.49 U	< 0.53 U	< 0.51 U	< 0.59 U	< 0.59 U
Perfluorodecanesulfonic acid (PFDS)	ug/kg	NC	NC	NC	< 0.28 U	< 0.24 U	< 0.20 U	< 0.21 U	< 0.20 U	< 0.24 U	< 0.24 U
Perfluorodecanoic acid (PFDA)	ug/kg	NC	NC	NC	< 0.28 U	< 0.24 U	< 0.20 U	< 0.21 U	< 0.20 U	< 0.24 U	< 0.24 U
Perfluorododecanoic acid (PFDoA)	ug/kg	NC	NC	NC	< 0.28 U	< 0.24 U	< 0.20 U	< 0.21 U	< 0.20 U	< 0.24 U	< 0.24 U
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	NC	NC	NC	< 0.28 U	< 0.24 U	< 0.20 U	< 0.21 U	< 0.20 U	< 0.24 U	< 0.24 U
Perfluoroheptanoic acid (PFHpA)	ug/kg	NC	NC	NC	< 0.28 U	< 0.24 U	< 0.20 U	< 0.21 U	< 0.20 U	< 0.24 U	< 0.24 U
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	NC	NC	NC	< 0.28 U	< 0.24 U	< 0.20 U	< 0.21 U	< 0.20 U	< 0.24 U	< 0.24 U
Perfluorohexanoic acid (PFHxA)	ug/kg	NC	NC	NC	< 0.31 U	< 0.24 U	< 0.20 U	< 0.21 U	< 0.20 U	< 0.24 U	< 0.24 U
Perfluorononanoic acid (PFNA)	ug/kg	NC	NC	NC	< 0.28 U	< 0.24 U	< 0.20 U	< 0.21 U	< 0.20 U	< 0.24 U	< 0.24 U
Perfluorooctane Sulfonamide (FOSA)	ug/kg	NC	NC	NC	< 0.28 U	< 0.24 U	< 0.20 U	< 0.21 U	< 0.20 U	< 0.24 U	< 0.24 U
Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	3.7	8.8	<b>0.44</b>	<b>0.33</b>	< 0.20 U	< 0.21 U	< 0.20 U	<b>0.57</b>	
Perfluorooctanoic acid (PFOA)	ug/kg	0.66	1.1	6.6	< 0.28 U	< 0.24 U	< 0.20 U	< 0.21 U	< 0.20 U	< 0.24 U	< 0.24 U
Perfluoropentanoic Acid (PFPeA)	ug/kg	NC	NC	NC	< 0.28 U	< 0.24 U	< 0.20 U	< 0.21 U	< 0.20 U	< 0.24 U	< 0.24 U
Perfluorotetradecanoic acid (PFTA)	ug/kg	NC	NC	NC	< 0.28 U	< 0.24 U	< 0.20 U	< 0.21 U	< 0.20 U	< 0.24 U	< 0.24 U
Perfluorotridecanoic Acid (PFTriA/PFTTrDA)	ug/kg	NC	NC	NC	< 0.28 U	< 0.24 U	< 0.20 U	< 0.21 U	< 0.20 U	< 0.24 U	< 0.24 U
Perfluoroundecanoic Acid (PFUnA)	ug/kg	NC	NC	NC	< 0.28 U	< 0.24 U	< 0.20 U	< 0.21 U	< 0.20 U	< 0.24 U	< 0.24 U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

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NC - No criteria currently exists

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Highlighting - Exceeds Protection of Groundwater guidance value

Highlighting - Exceeds Residential guidance value

**Table 3 - Soil, PFAS Results**

					Client Sample ID:	SB-21 12-in	SB-21 138-in	SB-21 3-in	DUPE 3	SB-22 12-in	SB-22 168-in
					Lab Sample ID:	480-192646-6	480-192646-7	480-192646-5	480-192646-36	480-192646-34	480-192646-35
					Location ID:	SB-21	SB-21	SB-21	SB-22	SB-22	SB-22
					Sample Date:	11/15/2021	11/15/2021	11/15/2021	11/16/2021	11/16/2021	11/16/2021
					Sample Type Code:	N	N	N	FD	N	N
Compound	Unit	Unrestricted Use GV <sup>1</sup>	Protection of Groundwater GV <sup>1</sup>	Residential Use GV <sup>1</sup>							
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ug/kg	NC	NC	NC	< 2.1 U	< 2.1 U	< 2.6 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.2 U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ug/kg	NC	NC	NC	< 2.1 U	< 2.1 U	< 2.6 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.2 U
N-ethyl perfluorooctanesulfonamidoacetic acid	ug/kg	NC	NC	NC	< 2.1 U	< 2.1 U	< 2.6 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.2 U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg	NC	NC	NC	< 2.1 U	< 2.1 U	< 2.6 U	< 2.0 U	< 2.0 U	< 2.2 U	< 2.2 U
Perfluorobutanesulfonic acid (PFBS)	ug/kg	NC	NC	NC	< 0.21 U	< 0.21 U	< 0.26 U	< 0.20 U	< 0.20 U	< 0.22 U	< 0.22 U
Perfluorobutanoic Acid	ug/kg	NC	NC	NC	< 0.52 U	< 0.53 U	< 0.66 U	< 0.51 U	< 0.51 U	< 0.55 U	< 0.55 U
Perfluorodecanesulfonic acid (PFDS)	ug/kg	NC	NC	NC	< 0.21 U	< 0.21 U	< 0.26 U	< 0.20 U	< 0.20 U	< 0.22 U	< 0.22 U
Perfluorodecanoic acid (PFDA)	ug/kg	NC	NC	NC	< 0.21 U	< 0.21 U	< 0.26 U	< 0.20 U	< 0.20 U	< 0.22 U	< 0.22 U
Perfluorododecanoic acid (PFDoA)	ug/kg	NC	NC	NC	< 0.21 U	< 0.21 U	< 0.26 U	< 0.20 U	< 0.20 U	< 0.22 U	< 0.22 U
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	NC	NC	NC	< 0.21 U	< 0.21 U	< 0.26 U	< 0.20 U	< 0.20 U	< 0.22 U	< 0.22 U
Perfluoroheptanoic acid (PFHpA)	ug/kg	NC	NC	NC	< 0.21 U	< 0.21 U	< 0.26 U	< 0.20 U	< 0.20 U	< 0.22 U	< 0.22 U
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	NC	NC	NC	< 0.21 U	< 0.21 U	< 0.26 U	< 0.20 U	< 0.20 U	< 0.22 U	< 0.22 U
Perfluorohexanoic acid (PFHxA)	ug/kg	NC	NC	NC	< 0.21 U	< 0.21 U	< 0.26 U	< 0.20 U	< 0.20 U	< 0.22 U	< 0.22 U
Perfluorononanoic acid (PFNA)	ug/kg	NC	NC	NC	< 0.21 U	< 0.21 U	< 0.26 U	< 0.20 U	< 0.20 U	< 0.22 U	< 0.22 U
Perfluorooctane Sulfonamide (FOSA)	ug/kg	NC	NC	NC	< 0.21 U	< 0.21 U	< 0.26 U	< 0.20 U	< 0.20 U	< 0.22 U	< 0.22 U
Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	3.7	8.8	< 0.21 U	< 0.21 U	<b>0.34</b>	< 0.20 U	< 0.20 U	< 0.22 U	< 0.22 U
Perfluorooctanoic acid (PFOA)	ug/kg	0.66	1.1	6.6	< 0.21 U	< 0.21 U	< 0.26 U	< 0.20 U	< 0.20 U	< 0.22 U	< 0.22 U
Perfluoropentanoic Acid (PFPeA)	ug/kg	NC	NC	NC	< 0.21 U	< 0.21 U	< 0.26 U	< 0.20 U	< 0.20 U	< 0.22 U	< 0.22 U
Perfluorotetradecanoic acid (PFTA)	ug/kg	NC	NC	NC	< 0.21 U	< 0.21 U	< 0.26 U	< 0.20 U	< 0.20 U	< 0.22 U	< 0.22 U
Perfluorotridecanoic Acid (PFTriA/PFTTrDA)	ug/kg	NC	NC	NC	< 0.21 U	< 0.21 U	< 0.26 U	< 0.20 U	< 0.20 U	< 0.22 U	< 0.22 U
Perfluoroundecanoic Acid (PFUnA)	ug/kg	NC	NC	NC	< 0.21 U	< 0.21 U	< 0.26 U	< 0.20 U	< 0.20 U	< 0.22 U	< 0.22 U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

Sample Type Code: N - Normal, FD - Field Duplicate

NC - No criteria currently exists

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**Bold** - Indicates compound was detected

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Highlighting - Exceeds Protection of Groundwater guidance value

Highlighting - Exceeds Residential guidance value

**Table 3 - Soil, PFAS Results**

					Client Sample ID:	SB-22 3-in	SB-3 3-IN	SB-3 60-IN	SB-4 12-IN	SB-4 3-IN	SB-4 48-IN
					Lab Sample ID:	480-192646-33	200-60972-4	200-60972-5	200-60972-24	200-60972-6	200-60972-7
					Location ID:	SB-22	SB-3	SB-3	SB-4	SB-4	SB-4
					Sample Date:	11/16/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021
					Sample Type Code:	N	N	N	N	N	N
Compound	Unit	Unrestricted Use GV <sup>1</sup>	Protection of Groundwater GV <sup>1</sup>	Residential Use GV <sup>1</sup>							
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ug/kg	NC	NC	NC	< 2.3 U	< 2.2 U	< 2.0 U	< 2.3 U	< 2.3 U	< 2.1 U	< 2.1 U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ug/kg	NC	NC	NC	< 2.3 U	< 2.2 U	< 2.0 U	< 2.3 U	< 2.3 U	< 2.1 U	< 2.1 U
N-ethyl perfluorooctanesulfonamidoacetic acid	ug/kg	NC	NC	NC	< 2.3 U	< 2.2 U	< 2.0 U	< 2.3 U	< 2.3 U	< 2.1 U	< 2.1 U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg	NC	NC	NC	< 2.3 U	< 2.2 U	< 2.0 U	< 2.3 U	< 2.3 U	< 2.1 U	< 2.1 U
Perfluorobutanesulfonic acid (PFBS)	ug/kg	NC	NC	NC	< 0.23 U	< 0.22 U	< 0.20 U	< 0.23 U	< 0.23 U	< 0.21 U	< 0.21 U
Perfluorobutanoic Acid	ug/kg	NC	NC	NC	< 0.57 U	< 0.55 U	< 0.51 U	< 0.56 U	< 0.57 U	< 0.54 U	< 0.54 U
Perfluorodecanesulfonic acid (PFDS)	ug/kg	NC	NC	NC	< 0.23 U	< 0.22 U	< 0.20 U	< 0.23 U	< 0.23 U	< 0.21 U	< 0.21 U
Perfluorodecanoic acid (PFDA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.22 U	< 0.20 U	< 0.23 U	< 0.23 U	< 0.21 U	< 0.21 U
Perfluorododecanoic acid (PFDoA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.22 U	< 0.20 U	< 0.23 U	< 0.23 U	< 0.21 U	< 0.21 U
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	NC	NC	NC	< 0.23 U	< 0.22 U	< 0.20 U	< 0.23 U	< 0.23 U	< 0.21 U	< 0.21 U
Perfluoroheptanoic acid (PFHpA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.22 U	< 0.20 U	< 0.23 U	< 0.23 U	< 0.21 U	< 0.21 U
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	NC	NC	NC	< 0.23 U	< 0.22 U	< 0.20 U	< 0.23 U	< 0.23 U	< 0.21 U	< 0.21 U
Perfluorohexanoic acid (PFHxA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.22 U	< 0.20 U	< 0.23 U	< 0.23 U	< 0.21 U	< 0.21 U
Perfluorononanoic acid (PFNA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.22 U	< 0.20 U	< 0.23 U	< 0.23 U	< 0.21 U	< 0.21 U
Perfluorooctane Sulfonamide (FOSA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.22 U	< 0.20 U	< 0.23 U	< 0.23 U	< 0.21 U	< 0.21 U
Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	3.7	8.8	< 0.23 U	<b>0.68</b>	< 0.20 U	<b>0.25</b>	< 0.23 U	< 0.21 U	< 0.21 U
Perfluorooctanoic acid (PFOA)	ug/kg	0.66	1.1	6.6	< 0.23 U	< 0.22 U	< 0.20 U	< 0.23 U	< 0.23 U	< 0.21 U	< 0.21 U
Perfluoropentanoic Acid (PFPeA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.22 U	< 0.20 U	< 0.23 U	< 0.23 U	< 0.21 U	< 0.21 U
Perfluorotetradecanoic acid (PFTA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.22 U	< 0.20 U	< 0.23 U	< 0.23 U	< 0.21 U	< 0.21 U
Perfluorotridecanoic Acid (PFTriA/PFTTrDA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.22 U	< 0.20 U	< 0.23 U	< 0.23 U	< 0.21 U	< 0.21 U
Perfluoroundecanoic Acid (PFUnA)	ug/kg	NC	NC	NC	< 0.23 U	< 0.22 U	< 0.20 U	< 0.23 U	< 0.23 U	< 0.21 U	< 0.21 U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

Sample Type Code: N - Normal, FD - Field Duplicate

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Highlighting - Exceeds Protection of Groundwater guidance value

Highlighting - Exceeds Residential guidance value

**Table 3 - Soil, PFAS Results**

					Client Sample ID:	SB-4 72-IN	SB-5 12-IN	SB-5 3-IN	SB-5 72-IN	SB-6 12-in	SB-6 156-in
					Lab Sample ID:	200-60972-8	200-60972-27	200-60972-9	200-60972-10	480-192646-9	480-192646-10
					Location ID:	SB-4	SB-5	SB-5	SB-5	SB-6	SB-6
					Sample Date:	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/15/2021	11/15/2021
					Sample Type Code:	N	N	N	N	N	N
Compound	Unit	Unrestricted Use GV <sup>1</sup>	Protection of Groundwater GV <sup>1</sup>	Residential Use GV <sup>1</sup>							
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ug/kg	NC	NC	NC	< 2.4 U	< 2.0 U	< 2.3 U	< 2.5 U	< 2.1 U	< 2.2 U	< 2.2 U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ug/kg	NC	NC	NC	< 2.4 U	< 2.0 U	< 2.3 U	< 2.5 U	< 2.1 U	< 2.2 U	< 2.2 U
N-ethyl perfluorooctanesulfonamidoacetic acid	ug/kg	NC	NC	NC	< 2.4 U	< 2.0 U	< 2.3 U	< 2.5 U	< 2.1 U	< 2.2 U	< 2.2 U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg	NC	NC	NC	< 2.4 U	< 2.0 U	< 2.3 U	< 2.5 U	< 2.1 U	< 2.2 U	< 2.2 U
Perfluorobutanesulfonic acid (PFBS)	ug/kg	NC	NC	NC	< 0.24 U	< 0.20 U	< 0.23 U	< 0.25 U	< 0.21 U	< 0.22 U	< 0.22 U
Perfluorobutanoic Acid	ug/kg	NC	NC	NC	< 0.61 U	< 0.51 U	< 0.57 U	< 0.62 U	< 0.53 U	< 0.56 U	< 0.56 U
Perfluorodecanesulfonic acid (PFDS)	ug/kg	NC	NC	NC	< 0.24 U	< 0.20 U	< 0.23 U	< 0.25 U	< 0.21 U	< 0.22 U	< 0.22 U
Perfluorodecanoic acid (PFDA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.20 U	< 0.23 U	< 0.25 U	< 0.21 U	< 0.22 U	< 0.22 U
Perfluorododecanoic acid (PFDoA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.20 U	< 0.23 U	< 0.25 U	< 0.21 U	< 0.22 U	< 0.22 U
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	NC	NC	NC	< 0.24 U	< 0.20 U	< 0.23 U	< 0.25 U	< 0.21 U	< 0.22 U	< 0.22 U
Perfluoroheptanoic acid (PFHpA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.20 U	< 0.23 U	< 0.25 U	< 0.21 U	< 0.22 U	< 0.22 U
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	NC	NC	NC	< 0.24 U	< 0.20 U	< 0.23 U	< 0.25 U	< 0.21 U	< 0.22 U	< 0.22 U
Perfluorohexanoic acid (PFHxA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.20 U	< 0.23 U	< 0.25 U	< 0.21 U	< 0.22 U	< 0.22 U
Perfluorononanoic acid (PFNA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.20 U	< 0.23 U	< 0.25 U	< 0.21 U	< 0.22 U	< 0.22 U
Perfluorooctane Sulfonamide (FOSA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.20 U	< 0.23 U	< 0.25 U	< 0.21 U	< 0.22 U	< 0.22 U
Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	3.7	8.8	< 0.24 U	< 0.20 U	< 0.23 U	< 0.25 U	< 0.21 U	< 0.22 U	< 0.22 U
Perfluorooctanoic acid (PFOA)	ug/kg	0.66	1.1	6.6	< 0.24 U	< 0.20 U	< 0.23 U	< 0.25 U	< 0.21 U	< 0.22 U	< 0.22 U
Perfluoropentanoic Acid (PFPeA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.20 U	< 0.23 U	< 0.25 U	< 0.21 U	< 0.22 U	< 0.22 U
Perfluorotetradecanoic acid (PFTA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.20 U	< 0.23 U	< 0.25 U	< 0.21 U	< 0.22 U	< 0.22 U
Perfluorotridecanoic Acid (PFTriA/PFTTrDA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.20 U	< 0.23 U	< 0.25 U	< 0.21 U	< 0.22 U	< 0.22 U
Perfluoroundecanoic Acid (PFUnA)	ug/kg	NC	NC	NC	< 0.24 U	< 0.20 U	< 0.23 U	< 0.25 U	< 0.21 U	< 0.22 U	< 0.22 U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

Sample Type Code: N - Normal, FD - Field Duplicate

NC - No criteria currently exists

U - Compound not detected at the reporting limit shown

**Bold** - Indicates compound was detected

Highlighting - Exceeds Unrestricted Use guidance value

Highlighting - Exceeds Protection of Groundwater guidance value

Highlighting - Exceeds Residential guidance value

**Table 3 - Soil, PFAS Results**

					Client Sample ID:	SB-6 3-in	SB-7 12-in	SB-7 3-in	SB-7 96-in	DUPE	SB-8 12-in
					Lab Sample ID:	480-192646-8	480-192646-13	480-192646-12	480-192646-14	480-192646-18	480-192646-16
					Location ID:	SB-6	SB-7	SB-7	SB-7	SB-8	SB-8
					Sample Date:	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021
					Sample Type Code:	N	N	N	N	FD	N
Compound	Unit	Unrestricted Use GV <sup>1</sup>	Protection of Groundwater GV <sup>1</sup>	Residential Use GV <sup>1</sup>							
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ug/kg	NC	NC	NC	< 2.2 U	< 2.3 U	< 2.3 U	< 2.3 U	< 2.5 U	< 2.3 U	< 2.1 U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ug/kg	NC	NC	NC	< 2.2 U	< 2.3 U	< 2.3 U	< 2.3 U	< 2.5 U	< 2.3 U	< 2.1 U
N-ethyl perfluorooctanesulfonamidoacetic acid	ug/kg	NC	NC	NC	< 2.2 U	< 2.3 U	< 2.3 U	< 2.3 U	< 2.5 U	< 2.3 U	< 2.1 U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ug/kg	NC	NC	NC	< 2.2 U	< 2.3 U	< 2.3 U	< 2.3 U	< 2.5 U	< 2.3 U	< 2.1 U
Perfluorobutanesulfonic acid (PFBS)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.25 U	< 0.23 U	< 0.21 U
Perfluorobutanoic Acid	ug/kg	NC	NC	NC	< 0.56 U	< 0.58 U	< 0.57 U	< 0.57 U	< 0.63 U	< 0.58 U	< 0.52 U
Perfluorodecanesulfonic acid (PFDS)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.25 U	< 0.23 U	< 0.21 U
Perfluorodecanoic acid (PFDA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.25 U	< 0.23 U	< 0.21 U
Perfluorododecanoic acid (PFDoA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.25 U	< 0.23 U	< 0.21 U
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.25 U	< 0.23 U	< 0.21 U
Perfluoroheptanoic acid (PFHpA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.25 U	< 0.23 U	< 0.21 U
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.25 U	< 0.23 U	< 0.21 U
Perfluorohexanoic acid (PFHxA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.25 U	< 0.23 U	< 0.21 U
Perfluorononanoic acid (PFNA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.25 U	< 0.23 U	< 0.21 U
Perfluorooctane Sulfonamide (FOSA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.25 U	< 0.23 U	< 0.21 U
Perfluorooctanesulfonic acid (PFOS)	ug/kg	0.88	3.7	8.8	< 0.22 U	<b>1.2</b>	<b>0.97</b>	<b>0.48</b>	<b>0.23</b>		< 0.21 U
Perfluorooctanoic acid (PFOA)	ug/kg	0.66	1.1	6.6	< 0.22 U	<b>0.29</b>	< 0.23 U	< 0.23 U	< 0.25 U	< 0.23 U	< 0.21 U
Perfluoropentanoic Acid (PFPeA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.25 U	< 0.23 U	< 0.21 U
Perfluorotetradecanoic acid (PFTA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.25 U	< 0.23 U	< 0.21 U
Perfluorotridecanoic Acid (PFTriA/PFTTrDA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.25 U	< 0.23 U	< 0.21 U
Perfluoroundecanoic Acid (PFUnA)	ug/kg	NC	NC	NC	< 0.22 U	< 0.23 U	< 0.23 U	< 0.23 U	< 0.25 U	< 0.23 U	< 0.21 U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

Sample Type Code: N - Normal, FD - Field Duplicate

NC - No criteria currently exists

U - Compound not detected at the reporting limit shown

**Bold** - Indicates compound was detected

Highlighting - Exceeds Unrestricted Use guidance value

Highlighting - Exceeds Protection of Groundwater guidance value

Highlighting - Exceeds Residential guidance value



**Table 4 - Groundwater, PFAS Results**

			Client Sample ID:	OBS-MW	FIELD DUP	SB-10 MW-10	SB-12 MW-12
			Lab Sample ID:	480-192646-42	480-192646-23	480-192646-22	480-192646-39
			Location ID:	OBS-IRRIGATION	TW-10	TW-10	TW-12
			Sample Date:	11/16/2021	11/15/2021	11/15/2021	11/16/2021
			Sample Type Code:	N	FD	N	N
Compound	Unit	NYSDEC Guidelines¹					
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ng/l	NC	< 1.8 U	< 1.9 U	< 1.9 U	< 1.7 U	
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ng/l	NC	< 4.4 U	< 4.8 U	< 4.7 U	< 4.3 U	
N-ethyl perfluorooctanesulfonamidoacetic acid	ng/l	NC	< 4.4 U	< 4.8 U	< 4.7 U	< 4.3 U	
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ng/l	NC	< 4.4 U	< 4.8 U	< 4.7 U	< 4.3 U	
Perfluorobutanesulfonic acid (PFBS)	ng/l	NC	< 1.8 U	< 1.9 U	< 1.9 U	< 1.7 U	
Perfluorobutanoic Acid	ng/l	NC	< 4.4 U	6.2	6.2	< 4.3 U	
Perfluorodecanesulfonic acid (PFDS)	ng/l	NC	< 1.8 U	< 1.9 U	< 1.9 U	< 1.7 U	
Perfluorodecanoic acid (PFDA)	ng/l	NC	< 1.8 U	< 1.9 U	< 1.9 U	< 1.7 U	
Perfluorododecanoic acid (PFDoA)	ng/l	NC	< 1.8 U	< 1.9 U	< 1.9 U	< 1.7 U	
Perfluoroheptanesulfonic acid (PFHpS)	ng/l	NC	< 1.8 U	< 1.9 U	< 1.9 U	< 1.7 U	
Perfluoroheptanoic acid (PFHpA)	ng/l	NC	< 1.8 U	2.4	2.2	< 1.7 U	
Perfluorohexanesulfonic acid (PFHxS)	ng/l	NC	< 1.8 U	< 1.9 U	< 1.9 U	< 1.7 U	
Perfluorohexanoic acid (PFHxA)	ng/l	NC	< 1.8 U	23	21	4.9	
Perfluorononanoic acid (PFNA)	ng/l	NC	< 1.8 U	< 1.9 U	< 1.9 U	< 1.7 U	
Perfluorooctane Sulfonamide (FOSA)	ng/l	NC	< 1.8 U	< 1.9 U	< 1.9 U	< 1.7 U	
Perfluorooctanesulfonic acid (PFOS)	ng/l	10	< 1.8 U	2.2	2.4	4.8	
Perfluorooctanoic acid (PFOA)	ng/l	10	< 1.8 U	7.8	7.6	2.3	
Perfluoropentanoic Acid (PFPeA)	ng/l	NC	< 1.8 U	16	16	6.6	
Perfluorotetradecanoic acid (PFTA)	ng/l	NC	< 1.8 U	< 1.9 U	< 1.9 U	< 1.7 U	
Perfluorotridecanoic Acid (PFTriA/PFTTrDA)	ng/l	NC	< 1.8 U	< 1.9 U	< 1.9 U	< 1.7 U	
Perfluoroundecanoic Acid (PFUnA)	ng/l	NC	< 1.8 U	< 1.9 U	< 1.9 U	< 1.7 U	

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

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**Table 4 - Groundwater, PFAS Results**

			Client Sample ID:	SB-18 MW-18	SB-20 MW-20	SB-22 WM-22	SB-4 MW-4
			Lab Sample ID:	480-192646-41	480-192646-38	480-192646-40	480-192646-37
			Location ID:	TW-18	TW-20	TW-22	TW-4
			Sample Date:	11/16/2021	11/16/2021	11/16/2021	11/16/2021
			Sample Type Code:	N	N	N	N
Compound	Unit	NYSDEC Guidelines <sup>1</sup>					
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ng/l	NC	< 1.7 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ng/l	NC	< 4.2 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
N-ethyl perfluorooctanesulfonamidoacetic acid	ng/l	NC	< 4.2 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ng/l	NC	< 4.2 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Perfluorobutanesulfonic acid (PFBS)	ng/l	NC	< 1.7 U	< 1.8 U	<b>5.0</b>	< 1.8 U	< 1.8 U
Perfluorobutanoic Acid	ng/l	NC	< 4.2 U	< 4.4 U	<b>28</b>	< 4.4 U	< 4.4 U
Perfluorodecanesulfonic acid (PFDS)	ng/l	NC	< 1.7 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U
Perfluorodecanoic acid (PFDA)	ng/l	NC	< 1.7 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U
Perfluorododecanoic acid (PFDoA)	ng/l	NC	< 1.7 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U
Perfluoroheptanesulfonic acid (PFHpS)	ng/l	NC	< 1.7 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U
Perfluoroheptanoic acid (PFHpA)	ng/l	NC	< 1.7 U	< 1.8 U	<b>13</b>	<b>6.6</b>	< 1.8 U
Perfluorohexanesulfonic acid (PFHxS)	ng/l	NC	< 1.7 U	< 1.8 U	<b>4.1</b>	< 1.8 U	< 1.8 U
Perfluorohexanoic acid (PFHxA)	ng/l	NC	<b>1.9</b>	< 1.8 U	<b>15</b>	<b>2.6</b>	< 1.8 U
Perfluorononanoic acid (PFNA)	ng/l	NC	< 1.7 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U
Perfluorooctane Sulfonamide (FOSA)	ng/l	NC	< 1.7 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U
Perfluorooctanesulfonic acid (PFOS)	ng/l	10	<b>1.9</b>	<b>1.9</b>	<b>6.6</b>	<b>4.9</b>	< 1.8 U
Perfluorooctanoic acid (PFOA)	ng/l	10	<b>7.5</b>	< 1.8 U	<b>47</b>	<b>22</b>	< 1.8 U
Perfluoropentanoic Acid (PFPeA)	ng/l	NC	<b>3.3</b>	< 1.8 U	<b>17</b>	<b>3.1</b>	< 1.8 U
Perfluorotetradecanoic acid (PFTA)	ng/l	NC	< 1.7 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U
Perfluorotridecanoic Acid (PFTriA/PFTTrDA)	ng/l	NC	< 1.7 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U
Perfluoroundecanoic Acid (PFUnA)	ng/l	NC	< 1.7 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

Sample Type Code: N - Normal, FD - Field Duplicate

NC - No criteria currently exists

U - Compound not detected at the reporting limit shown

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**Table 4 - Groundwater, PFAS Results**

			Client Sample ID:	SB-5/GW-5
			Lab Sample ID:	480-192646-11
			Location ID:	TW-5
			Sample Date:	11/15/2021
			Sample Type Code:	N
Compound	Unit	NYSDEC Guidelines <sup>1</sup>		
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	ng/l	NC	< 2.0	U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	ng/l	NC	< 5.1	U
N-ethyl perfluorooctanesulfonamidoacetic acid	ng/l	NC	< 5.1	U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ng/l	NC	< 5.1	U
Perfluorobutanesulfonic acid (PFBS)	ng/l	NC	< 2.0	U
Perfluorobutanoic Acid	ng/l	NC	<b>7.9</b>	
Perfluorodecanesulfonic acid (PFDS)	ng/l	NC	< 2.0	U
Perfluorodecanoic acid (PFDA)	ng/l	NC	< 2.0	U
Perfluorododecanoic acid (PFDoA)	ng/l	NC	< 2.0	U
Perfluoroheptanesulfonic acid (PFHpS)	ng/l	NC	< 2.0	U
Perfluoroheptanoic acid (PFHpA)	ng/l	NC	<b>2.4</b>	
Perfluorohexanesulfonic acid (PFHxS)	ng/l	NC	< 2.0	U
Perfluorohexanoic acid (PFHxA)	ng/l	NC	< 2.0	U
Perfluorononanoic acid (PFNA)	ng/l	NC	< 2.0	U
Perfluorooctane Sulfonamide (FOSA)	ng/l	NC	< 2.0	U
Perfluorooctanesulfonic acid (PFOS)	ng/l	10	<b>3.4</b>	
Perfluorooctanoic acid (PFOA)	ng/l	10	<b>7.4</b>	
Perfluoropentanoic Acid (PFPeA)	ng/l	NC	< 2.0	U
Perfluorotetradecanoic acid (PFTA)	ng/l	NC	< 2.0	U
Perfluorotridecanoic Acid (PFTriA/PFTTrDA)	ng/l	NC	< 2.0	U
Perfluoroundecanoic Acid (PFUnA)	ng/l	NC	< 2.0	U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)*, June 2021.

Sample Type Code: N - Normal, FD - Field Duplicate

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**Highlighted** - Indicates compound was detected above applicable criteria

**Table 5 - Groundwater, Volatile Organic Compounds (VOCs) Results**

Client Sample ID:			FIELD DUP		OBS-MW		SB-10 MW-10		SB-12 MW-12	
Lab Sample ID:			480-192646-23		480-192646-42		480-192646-22		480-192646-39	
Location ID:			TW-10		OBS-IRRIGATION		TW-10		TW-12	
Sample Date:			15 Nov 2021		16 Nov 2021		15 Nov 2021		16 Nov 2021	
Sample Type Code:			FD		N		N		N	
Compound	Unit	NYS CLASS GA <sup>1</sup>								
1,1,1-Trichloroethane (TCA)	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	UT	< 1.0	U
1,1,2,2-Tetrachloroethane	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,1,2-Trichloroethane	ug/l	1	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,1-Dichloroethane	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,1-Dichloroethene	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2,4-Trichlorobenzene	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2-Dibromo-3-Chloropropane	ug/l	0.04	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2-Dibromoethane (Ethylene Dibromide)	ug/l	0.0006	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2-Dichlorobenzene	ug/l	3	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2-Dichloroethane	ug/l	0.6	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2-Dichloropropane	ug/l	1	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,3-Dichlorobenzene	ug/l	3	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,4-Dichlorobenzene	ug/l	3	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
2-Hexanone	ug/l	50	< 5.0	U	< 5.0	U	< 5.0	U	< 5.0	U
Acetone	ug/l	50	< 10	U	< 10	U	< 10	U	< 10	U
Benzene	ug/l	1	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Bromodichloromethane	ug/l	50	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Bromoform	ug/l	50	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Bromomethane	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Carbon Disulfide	ug/l	60	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Carbon Tetrachloride	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	UT	< 1.0	U
Chlorobenzene	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Chloroethane	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Chloroform	ug/l	7	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Chloromethane	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Cis-1,2-Dichloroethylene	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Cis-1,3-Dichloropropene	ug/l	0.4	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Cyclohexane	ug/l	NC	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Dibromochloromethane	ug/l	50	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Dichlorodifluoromethane	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Ethylbenzene	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Isopropylbenzene (Cumene)	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	UT	< 1.0	U
Methyl Acetate	ug/l	NC	< 2.5	U	< 2.5	U	< 2.5	U	< 2.5	U
Methyl Ethyl Ketone (2-Butanone)	ug/l	50	< 10	U	< 10	U	< 10	U	< 10	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	ug/l	NC	< 5.0	U	< 5.0	U	< 5.0	U	< 5.0	U
Methylcyclohexane	ug/l	NC	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Methylene Chloride	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	UT	< 1.0	U
Styrene	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Tert-Butyl Methyl Ether	ug/l	10	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Tetrachloroethylene (PCE)	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	UT	< 1.0	U
Toluene	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Trans-1,2-Dichloroethene	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Trans-1,3-Dichloropropene	ug/l	0.4	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Trichloroethylene (TCE)	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Trichlorofluoromethane	ug/l	5	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Vinyl Chloride	ug/l	2	< 1.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Xylenes	ug/l	5	< 2.0	U	< 2.0	U	< 2.0	U	< 2.0	U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, Technical and Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised June 1998.

NC - No criteria currently exists

U - Compound not detected at the reporting limit shown

T - Indicates that a quality control parameter has exceeded laboratory limits

**Table 5 - Groundwater, Volatile Organic Compounds**

Client Sample ID:			SB-18 MW-18		SB-20 MW-20		SB-22 WM-22		SB-5/GW-5	
Lab Sample ID:			480-192646-41		480-192646-38		480-192646-40		480-192646-11	
Location ID:			TW-18		TW-20		TW-22		TW-5	
Sample Date:			16 Nov 2021		16 Nov 2021		16 Nov 2021		15 Nov 2021	
Sample Type Code:			N		N		N		N	
Compound	Unit	NYS CLASS GA <sup>1</sup>								
1,1,1-Trichloroethane (TCA)	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,1,2,2-Tetrachloroethane	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,1,2-Trichloroethane	ug/l	1	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,1-Dichloroethane	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,1-Dichloroethene	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2,4-Trichlorobenzene	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2-Dibromo-3-Chloropropane	ug/l	0.04	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2-Dibromoethane (Ethylene Dibromide)	ug/l	0.0006	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2-Dichlorobenzene	ug/l	3	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2-Dichloroethane	ug/l	0.6	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,2-Dichloropropane	ug/l	1	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,3-Dichlorobenzene	ug/l	3	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
1,4-Dichlorobenzene	ug/l	3	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
2-Hexanone	ug/l	50	< 10	U	< 5.0	U	< 5.0	U	< 5.0	U
Acetone	ug/l	50	< 20	U	< 10	U	< 10	U	< 10	U
Benzene	ug/l	1	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Bromodichloromethane	ug/l	50	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Bromoform	ug/l	50	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Bromomethane	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Carbon Disulfide	ug/l	60	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Carbon Tetrachloride	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Chlorobenzene	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Chloroethane	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Chloroform	ug/l	7	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Chloromethane	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Cis-1,2-Dichloroethylene	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Cis-1,3-Dichloropropene	ug/l	0.4	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Cyclohexane	ug/l	NC	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Dibromochloromethane	ug/l	50	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Dichlorodifluoromethane	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Ethylbenzene	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Isopropylbenzene (Cumene)	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Methyl Acetate	ug/l	NC	< 5.0	U	< 2.5	U	< 2.5	U	< 2.5	U
Methyl Ethyl Ketone (2-Butanone)	ug/l	50	< 20	U	< 10	U	< 10	U	< 10	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	ug/l	NC	< 10	U	< 5.0	U	< 5.0	U	< 5.0	U
Methylcyclohexane	ug/l	NC	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Methylene Chloride	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Styrene	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Tert-Butyl Methyl Ether	ug/l	10	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Tetrachloroethylene (PCE)	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Toluene	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Trans-1,2-Dichloroethene	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Trans-1,3-Dichloropropene	ug/l	0.4	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Trichloroethylene (TCE)	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Trichlorofluoromethane	ug/l	5	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Vinyl Chloride	ug/l	2	< 2.0	U	< 1.0	U	< 1.0	U	< 1.0	U
Xylenes	ug/l	5	< 4.0	U	< 2.0	U	< 2.0	U	< 2.0	U

Notes:

<sup>1</sup> New York State Department of Environmental Conservation, Technical and Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised June 1998.

NC - No criteria currently exists

U - Compound not detected at the reporting limit shown

T - Indicates that a quality control parameter has exceeded laboratory limit

# APPENDIX A

October 18, 2021

Tom Fox  
Dvirka & Bartilucci  
330 Crossways Park Drive  
Woodbury, NY 11797

RE: Project: SOUTH HAMPTON DAMASCAS 10/11  
Pace Project No.: 70190658

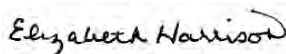
Dear Tom Fox:

Enclosed are the analytical results for sample(s) received by the laboratory on October 11, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Elizabeth Harrison  
betty.harrison@pacelabs.com  
(631)694-3040  
Project Manager

Enclosures

cc: Donna Brown, Dvirka & Bartilucci



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## PROJECT NARRATIVE

Project:

Pace Project No.:

---

**Method:**

**Description:**

**Client:**

**Date:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
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# CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Billing Information:

Company: DBB Engineers and Architects

Address: 370 Crossings Park Drive, Westbury, NY

Report To: Tom Fox, Keitha Robins

Copy To: Lebedata@dbb-eng.com

Customer Project Name/Number: South Hamilton Damages

Site/Facility ID # 5642 SC / Benthonia

Phone: 516-364-9890

Email: Tom Fox, Keitha Robins

Collected By (print): John Legosides

Collected By (signature): [Signature]

Sample Disposal: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day [ ] Hold:

Turnaround Date Required:

Purchase Order #: 5642

Quote #:

Turnaround Date Required:

Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day [ ] Hold:

Site/Facility ID # 5642 SC / Benthonia

Phone: 516-364-9890

Email: Tom Fox, Keitha Robins

Collected By (print): John Legosides

Collected By (signature): [Signature]

Sample Disposal: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day [ ] Hold:

Turnaround Date Required:

Purchase Order #: 5642

Quote #:

Turnaround Date Required:

Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day [ ] Hold:

Site/Facility ID # 5642 SC / Benthonia

Phone: 516-364-9890

Email: Tom Fox, Keitha Robins

Collected By (print): John Legosides

LAB USE ONLY- Affi

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\*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact Y N NA  
Custody Signatures Present Y N NA  
Collector Signatures Present Y N NA  
Bottles Intact Y N NA  
Correct Bottles Y N NA  
Sufficient Volume Y N NA  
Samples Received on Ice Y N NA  
VOA - Headspace Acceptable Y N NA  
USDA Regulated Soils Y N NA  
Samples in Holding Time Y N NA  
Residual Chlorine Present Y N NA  
C1 Strips: Y N NA  
Sample pH Acceptable Y N NA  
pH Strips: Y N NA  
Sulfide Present Y N NA  
Lead Acetate Strips: Y N NA

LAB USE ONLY:  
Lab Sample # / Comments:

Lab Sample Temperature Info:

Temp Blank Received: Y N NA  
Therm ID#: 2412144  
Cooler 1 Temp Upon Receipt: 3.2°C  
Cooler 1 Therm Corr. Factor: 0.0°C  
Cooler 1 Corrected Temp: 3.2°C

Comments:

Trip Blank Received: Y N NA  
HCL MeOH TSP Other

Non Conformance(s):  
YES / NO  
Page: 1 of 1

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2412144

Samples received via:  
FEDEX UPS Client Courier Pace Courier

Date/Time: 10/14/21 14:46

Table #: MTJL LAB USE ONLY

Acctnum:

Template:

Prelogin:

PM:

PB:

Customer Remarks / Special Conditions / Possible Hazards:

Faucet sample collected at Clean Globe Environment - Potable Water faucet located 34 Cain Drive, Benthonia, NY

Date/Time: 10-11-21 14:45

Received by/Company: (Signature)

Date/Time:

Received by/Company: (Signature)

Date/Time:

Received by/Company: (Signature)

Date/Time:

Relinquished by/Company: (Signature)

Date/Time:

Relinquished by/Company: (Signature)

October 18, 2021

Elizabeth Harrison  
Pace Analytical Services - Long Island, NY  
575 Broad Hollow Road  
Melville, NY 11747

Project Location: South Hampton Damascas 10/11  
Client Job Number:  
Project Number: 70190658  
Laboratory Work Order Number: 21J0702

Enclosed are results of analyses for samples as received by the laboratory on October 13, 2021. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kaitlyn A. Feliciano  
Project Manager

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Pace Analytical Services - Long Island, NY  
575 Broad Hollow Road  
Melville, NY 11747  
ATTN: Elizabeth Harrison

REPORT DATE: 10/18/2021

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 70190658

**ANALYTICAL SUMMARY**

WORK ORDER NUMBER: 21J0702

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

PROJECT LOCATION: South Hampton Damascas 10/11

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Faucet-1	21J0702-01	Drinking Water		EPA 537.1	

#### CASE NARRATIVE SUMMARY

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

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: South Hampton Damascas 10/11

Sample Description:

Work Order: 21J0702

Date Received: 10/13/2021

Field Sample #: Faucet-1

Sampled: 10/11/2021 14:15

Sample ID: 21J0702-01

Sample Matrix: Drinking Water

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

Analyte	Results	RL	DL	MCL/SMCL MA ORSG	Units	DF	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	1.9	0.72		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH
Perfluorohexanoic acid (PFHxA)	ND	1.9	0.84		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9	0.61		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH
Perfluoroheptanoic acid (PFHpA)	ND	1.9	0.64		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH
Perfluorooctanoic acid (PFOA)	ND	1.9	0.88		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH
Perfluorooctanesulfonic acid (PFOS)	ND	1.9	0.81		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH
Perfluorononanoic acid (PFNA)	ND	1.9	0.83		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH
Perfluorodecanoic acid (PFDA)	ND	1.9	0.69		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH
N-EtFOSAA	ND	1.9	0.65		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH
Perfluoroundecanoic acid (PFUnA)	ND	1.9	0.64		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH
N-MeFOSAA	ND	1.9	0.61		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH
Perfluorododecanoic acid (PFDoA)	ND	1.9	0.59		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH
Perfluorotridecanoic acid (PFTrDA)	ND	1.9	0.56		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH
Perfluorotetradecanoic acid (PFTA)	ND	1.9	0.48		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9	0.83		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH
11Cl-PF3OUdS (F53B Minor)	ND	1.9	0.72		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH
9Cl-PF3ONS (F53B Major)	ND	1.9	0.86		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9	0.77		ng/L	1		EPA 537.1	10/14/21	10/18/21 14:12	BLH

Surrogates	% Recovery	Recovery Limits	Flag/Qual
13C-PFHxA	91.0	70-130	10/18/21 14:12
M3HFPO-DA	98.9	70-130	10/18/21 14:12
13C-PFDA	85.7	70-130	10/18/21 14:12
d5-NEtFOSAA	88.5	70-130	10/18/21 14:12

**Sample Extraction Data**

**Prep Method:** EPA 537.1-EPA 537.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
21J0702-01 [Faucet-1]	B292345	266	1.00	10/14/21



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

Analyte	Result	Reporting Limit	DL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	----	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B292345 - EPA 537.1**
**Blank (B292345-BLK1)**

Prepared: 10/14/21 Analyzed: 10/18/21

Perfluorobutanesulfonic acid (PFBS)	ND	1.9	0.74	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	1.9	0.86	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	1.9	0.63	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	1.9	0.65	ng/L							
Perfluorooctanoic acid (PFOA)	ND	1.9	0.91	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	1.9	0.84	ng/L							
Perfluorononanoic acid (PFNA)	ND	1.9	0.85	ng/L							
Perfluorodecanoic acid (PFDA)	ND	1.9	0.71	ng/L							
N-EtFOSAA	ND	1.9	0.67	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	1.9	0.65	ng/L							
N-MeFOSAA	ND	1.9	0.63	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	1.9	0.60	ng/L							
Perfluorotridecanoic acid (PFTTrDA)	ND	1.9	0.57	ng/L							
Perfluorotetradecanoic acid (PFTA)	ND	1.9	0.50	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.9	0.85	ng/L							
11Cl-PF3OUdS (F53B Minor)	ND	1.9	0.74	ng/L							
9Cl-PF3ONS (F53B Major)	ND	1.9	0.88	ng/L							
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.9	0.79	ng/L							
Surrogate: 13C-PFHxA	36.1			ng/L	38.6		93.5	70-130			
Surrogate: M3HFPO-DA	39.2			ng/L	38.6		102	70-130			
Surrogate: 13C-PFDA	33.7			ng/L	38.6		87.3	70-130			
Surrogate: d5-NEtFOSAA	146			ng/L	154		94.6	70-130			

**LCS (B292345-BS1)**

Prepared: 10/14/21 Analyzed: 10/18/21

Perfluorobutanesulfonic acid (PFBS)	2.37	1.9	0.74	ng/L	1.70		139	50-150			
Perfluorohexanoic acid (PFHxA)	2.53	1.9	0.85	ng/L	1.92		132	50-150			
Perfluorohexanesulfonic acid (PFHxS)	2.48	1.9	0.62	ng/L	1.75		141	50-150			
Perfluoroheptanoic acid (PFHpA)	2.41	1.9	0.65	ng/L	1.92		126	50-150			
Perfluorooctanoic acid (PFOA)	2.37	1.9	0.90	ng/L	1.92		124	50-150			
Perfluorooctanesulfonic acid (PFOS)	2.39	1.9	0.83	ng/L	1.78		135	50-150			
Perfluorononanoic acid (PFNA)	2.11	1.9	0.85	ng/L	1.92		110	50-150			
Perfluorodecanoic acid (PFDA)	2.40	1.9	0.70	ng/L	1.92		125	50-150			
N-EtFOSAA	2.30	1.9	0.67	ng/L	1.92		120	50-150			
Perfluoroundecanoic acid (PFUnA)	2.07	1.9	0.65	ng/L	1.92		108	50-150			
N-MeFOSAA	2.27	1.9	0.62	ng/L	1.92		118	50-150			
Perfluorododecanoic acid (PFDoA)	2.22	1.9	0.60	ng/L	1.92		116	50-150			
Perfluorotridecanoic acid (PFTTrDA)	1.96	1.9	0.57	ng/L	1.92		102	50-150			
Perfluorotetradecanoic acid (PFTA)	2.06	1.9	0.49	ng/L	1.92		107	50-150			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	2.48	1.9	0.85	ng/L	1.92		129	50-150			
11Cl-PF3OUdS (F53B Minor)	2.21	1.9	0.73	ng/L	1.81		122	50-150			
9Cl-PF3ONS (F53B Major)	2.26	1.9	0.87	ng/L	1.79		126	50-150			
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	2.16	1.9	0.79	ng/L	1.81		119	50-150			
Surrogate: 13C-PFHxA	41.4			ng/L	38.3		108	70-130			
Surrogate: M3HFPO-DA	45.3			ng/L	38.3		118	70-130			
Surrogate: 13C-PFDA	36.9			ng/L	38.3		96.3	70-130			
Surrogate: d5-NEtFOSAA	152			ng/L	153		98.9	70-130			



**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.

**CERTIFICATIONS**
**Certified Analyses included in this Report**

Analyte	Certifications
<b><i>EPA 537.1 in Drinking Water</i></b>	
Perfluorobutanesulfonic acid (PFBS)	NH-P,VT-DW,NJ,CT,ME,PA,MI,MA
Perfluorohexanoic acid (PFHxA)	NH-P,VT-DW,NJ,CT,ME,PA,MI,MA
Perfluorohexanesulfonic acid (PFHxS)	NH-P,VT-DW,NJ,CT,ME,PA,MI,MA
Perfluoroheptanoic acid (PFHpA)	NH-P,VT-DW,NJ,CT,ME,PA,MI,MA
Perfluorooctanoic acid (PFOA)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH
Perfluorooctanesulfonic acid (PFOS)	VT-DW,NJ,CT,ME,PA,MI,MA,NY,NH
Perfluorononanoic acid (PFNA)	NH-P,VT-DW,NJ,CT,ME,PA,MI,MA
Perfluorodecanoic acid (PFDA)	NH-P,VT-DW,NJ,CT,ME,PA,MI,MA
N-EtFOSAA	NH-P,VT-DW,NJ,CT,ME,PA,MI,MA
Perfluoroundecanoic acid (PFUnA)	NH-P,VT-DW,NJ,CT,ME,PA,MI,MA
N-MeFOSAA	NH-P,VT-DW,NJ,CT,ME,PA,MI,MA
Perfluorododecanoic acid (PFDoA)	NH-P,VT-DW,NJ,CT,ME,PA,MI,MA
Perfluorotridecanoic acid (PFTrDA)	NH-P,VT-DW,NJ,CT,ME,PA,MI,MA
Perfluorotetradecanoic acid (PFTA)	NH-P,VT-DW,NJ,CT,ME,PA,MI,MA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,VT-DW,NJ,CT,ME,PA,MI,MA
11Cl-PF3OUdS (F53B Minor)	NH-P,VT-DW,NJ,CT,ME,PA,MI,MA
9Cl-PF3ONS (F53B Major)	NH-P,VT-DW,NJ,CT,ME,PA,MI,MA
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,VT-DW,NJ,CT,ME,PA,MI,MA

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Public Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00112	12/30/2021
NC	North Carolina Div. of Water Quality	652	12/31/2021
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2021
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

# Internal Transfer Chain of Custody



☐ Samples Pre-Logged into eCOC.

State Of Origin: NY

Cert. Needed: ☒ Yes ☐ No

Workorder: 70190658    Workorder Name: SOUTH HAMPTON DAMSACAS 10/11    Owner Received Date: 10/11/2021    Results Requested By: 10/15/2021

Report To		Subcontract To		Requested Analysis														
Elizabeth Harrison Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040		Pace New England 39 Spruce St. East Longmeadow, MA 01028 Phone (413)525-2332																
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	LAB USE ONLY											
1	FAUCET-1	PS	10/11/2021 14:15	70190658001	Drinking	1												
2																		
3																		
4																		
5																		

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	<i>[Signature]</i>	10/12/21 15:00	<i>[Signature]</i>	0959 10/13/21	Please report PFAS 21-compound NYSDEC list.
2					
3					

Cooler Temperature on Receipt 2.4 °C    Custody Seal Y or N    Received on Ice Y or N    Samples Intact Y or N

\*\*\*In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.  
This chain of custody is considered complete as is since this information is available in the owner laboratory.



TRACK ANOTHER SHIPMENT

541547018020

ADD NICKNAME



Delivered  
Wednesday, October 13, 2021 at 9:59 am

**DELIVERED**

Signed for by: R.PIETRIAS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

**FROM**

MELVILLE, NY US

**TO**

EAST LONGMEADOW, MA US

## Travel History

**TIME ZONE**

Local Scan Time

**Wednesday, October 13, 2021**

9:59 AM	EAST LONGMEADOW, MA	Delivered
8:07 AM	WINDSOR LOCKS, CT	On FedEx vehicle for delivery
7:56 AM	WINDSOR LOCKS, CT	At local FedEx facility
3:14 AM	NEWARK, NJ	Departed FedEx hub

**Tuesday, October 12, 2021**

10:14 PM	NEWARK, NJ	Departed FedEx hub
10:13 PM	NEWARK, NJ	Arrived at FedEx hub
9:13 PM	MELVILLE, NY	Left FedEx origin facility
5:56 PM	MELVILLE, NY	Picked up
4:30 PM		Shipment information sent to FedEx

## Shipment Facts

I Have Not Confirmed Sample Container Numbers With Lab Staff Before Relinquishing Over Samples \_\_\_\_\_



**con-test®**  
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

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

Client Pace - NY

Received By RLT Date 10/13/21 Time 959

How were the samples received? In Cooler T No Cooler        On Ice T No Ice         
Direct from Sampling        Ambient        Melted Ice       

Were samples within Temperature? 2-6°C T By Gun # 3 Actual Temp - 2.4°C  
By Blank #        Actual Temp -       

Was Custody Seal Intact? NA Were Samples Tampered with? NA  
Was COC Relinquished? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name T  
Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F

Are there Rushes? T

Are there Short Holds? F

Is there enough Volume? T

Is there Headspace where applicable? NA

Proper Media/Containers Used? T

Were trip blanks received? F

Do all samples have the proper pH?       

Who was notified?       

Who was notified? Brie

Who was notified?       

MS/MSD? F

Is splitting samples required? F

On COC? F

Acid NA Base NA

Vials	#	Containers	#	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic	<u>2</u>	4oz Amb/Clear
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear
DI-		Other Glass		Other Plastic		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:
Sulfuric-		Perchlorate		Ziplock		

**Unused Media**

Vials	#	Containers:	#	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear
DI-		Other Plastic		Other Glass		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:
Sulfuric-		Perchlorate		Ziplock		

Comments:

## **APPENDIX B**



# MONITORING WELL / BORING NO. **SB-1**

Site Name: NYSDEC - Algonquin Middle School Date Drilled: November 10, 2021

Location: 333 RT 351, Poestenkill, NY Drilling Co.: Clean Globe Environmental

Client: NYSDEC Driller: Mario Pineda

Phone No.: N/A Logged by: T. Rollend

Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"

Drilled TD: 20' (Dia): 2" Sampled TD: 20' (Dia):

Well TD:  (Dia):  Well Type: No Well Installed

Screen Interval:  Slot Size:  Diameter:

Cased Interval:  Type:  Diameter:

Sand Pack Interval:  Type:  Wellhead Prot:

Bentonite Seal Interval:  Type:  Grouted Interval:



## Soil Samples Collected:

**SB-1 @ 3-IN**

**SB-1 @ 12-IN**

**SB-1 @ 72-IN**

**SB-1 @ 192-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0				
5		S-1: 0 - 5.0' Rec: 3.0'/5.0'	< 1.0	0" - 8" Brown, dry, organics, fine SAND and SILT (topsoil) 8" - 11" Gray, dry, small - medium angular GRAVEL (shale fragments) 11" - 20' Brown, dry, fine SAND and SILT
10		S-2: 5.0' - 10' Rec: 5.0'/5.0'	< 1.0	
15		S-3: 10' - 15' Rec: 5.0'/5.0'	< 1.0	
20		S-4: 15' - 20' Rec: 5.0'/5.0'	< 1.0	15' - 20' Brown, wet at 17', fine SAND, increasing silt with depth, trace clay ▼ (f SAND and silt)
25				End of Boring @ 20' No monitoring well installed
30				
35				

MONITORING WELL / BORING NO. **SB-2**

Site Name: NYSDEC - Algonquin Middle School Date Drilled: November 10, 2021

Location: 333 RT 351, Poestenkill, NY Drilling Co.: Clean Globe Environmental

Client: NYSDEC Driller: Mario Pineda

Phone No.: N/A Logged by: T. Rollend

Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"

Drilled TD: 3.0' (Dia): 2" Sampled TD: 3.0' (Dia):

Well TD:  (Dia):  Well Type: No Well Installed

Screen Interval:  Slot Size:  Diameter:

Cased Interval:  Type:  Diameter:

Sand Pack Interval:  Type:  Wellhead Prot:

Bentonite Seal Interval:  Type:  Grouted Interval:



Soil Samples Collected:

**SB-2 @ 2-IN**

**SB-2 @ 36-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0				
		S-1: 0 - 3.0' Rec: 3.0'/5.0'	< 1.0	0" - 1.0' Brown, dry, organics, coarse to fine SAND and SILT (topsoil) 1.0' - 3.0' Brown, dry, coarse - fine SAND and silt to refusal at 3.0'. Gray shale fragments in sampler shoe
5				End of Boring @ 3.0' No monitoring well installed 3.0'
10				
15				
20				
25				
30				
35				

MONITORING WELL / BORING NO. **SB-3**

Site Name: NYSDEC - Algonquin Middle School Date Drilled: November 10, 2021

Location: 333 RT 351, Poestenkill, NY Drilling Co.: Clean Globe Environmental

Client: NYSDEC Driller: Mario Pineda

Phone No.: N/A Logged by: T. Rollend

Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"

Drilled TD: 5.0' (Dia): 2" Sampled TD: 5.0' (Dia):

Well TD:  (Dia):  Well Type: No Well Installed

Screen Interval:  Slot Size:  Diameter:

Cased Interval:  Type:  Diameter:

Sand Pack Interval:  Type:  Wellhead Prot:

Bentonite Seal Interval:  Type:  Grouted Interval:



**Soil Samples Collected:**

**SB-3 @ 3-IN**

**SB-3 @ 60-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0				
		S-1: 0 - 3.0' Rec: 3.0'/5.0'	< 1.0	0" - 1.0' Black, dry, organics, coarse to fine SAND and SILT (topsoil) 1.0' - 5.0' Becomes brown, dry, coarse - fine SAND and silt to refusal at 5.0'. Gray and green shale fragments in sampler shoe
5				End of Boring @ 5.0' No monitoring well installed 5.0'
10				
15				
20				
25				
30				
35				

# MONITORING WELL / BORING NO. **SB- 4 / MW-4**

Site Name: Algonquin Middle School Date Drilled: November 10, 2021  
 Location: 333 RT. 351 Poestenkill, NY Drilling Co.: Clean Globe Environmental  
 Client: NYSDEC Driller: Mario Pineda  
 Phone No.: N/A Logged by: T. Rollend  
 Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"  
 Drilled TD: 12' (Dia): 2" Sampled TD: 12' (Dia):         
 Well TD: 12' (Dia): 1" Well Type: Temporary  
 Screen Interval: 12' - 2' Slot Size: 0.010 Slot Diameter: 1.0"  
 Cased Interval: 0' - 2' Type: Sch 40 PVC Diameter: 1.0"  
 Sand Pack Interval: 2'-12' Type: #1 Well Sand Wellhead Prot: N/A  
 Bentonite Seal Interval: 0'-1' Type: Benchips Grouted Interval: NA



## Soil Samples Collected:

**SB-4 @ 3-IN**  
**SB-4 @ 12-IN**  
**SB-4 @ 48-IN**  
**SB-4 @ 72-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0		S-1: 0 - 5.0' Rec: 2.5'/5.0'	< 1.0	0.0' - 0.5' Black, dry, organics, fine SAND and SILT (topsoil)
				0.5' - 2.0' Gray, dry, fine to coarse SAND, fine gravel, silt
				2.0' - 11' Brown, dry to wet at 7.0', coarse to fine SAND and silt
5		S-2: 5.0' - 10' Rec: 4.0'/5.0'	< 1.0	▼ Wet at 7.0'
10		S-3: 10' - 12' Rec: 2.0'/5.0'	< 1.0	(f-c SAND and silt)
12				11' - 12' Gray, dry, shale fragments to sampler refusal at 12'
15				End of Boring @ 12' Advanced 3.0" flush casing with expendable drive point to 12' below grade. Installed 10' of 1.0" ID screen (#10-slot) from 2' to 12' and solid riser to grade. Well removed and abandoned 11/16/2021.
20				
25				
30				
35				

# MONITORING WELL / BORING NO. **SB-5 / MW-5**

Site Name: Algonquin Middle School Date Drilled: November 10, 2021  
 Location: 333 RT. 351 Poestenkill, NY Drilling Co.: Clean Globe Environmental  
 Client: NYSDEC Driller: Mario Pineda  
 Phone No.: N/A Logged by: T. Rollend  
 Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"  
 Drilled TD: 15' (Dia): 2" Sampled TD: 15' (Dia):           
 Well TD: 15' (Dia): 1" Well Type: Temporary  
 Screen Interval: 15'-5.0' Slot Size: 0.010 Slot Diameter: 1.0"  
 Cased Interval: 0' - 5.0' Type: Sch 40 PVC Diameter: 1.0"  
 Sand Pack Interval: 5.0' - 15.0' Type: #1 Well Sand Wellhead Prot: N/A  
 Bentonite Seal Interval: 5.0' - 4.0' Type: Benchips Grouted Interval: NA



## Soil Samples Collected:

**SB-5 @ 3-IN**  
**SB-5 @ 12-IN**  
**SB-5 @ 72-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0	1" cap			
	Native Soil & Well Sand			0.0' - 0.5' Brown, dry, organics, fine SAND and SILT (topsoil)
	1" PVC Riser	S-1: 0 - 5.0' Rec: 5.0'/5.0'	< 1.0	0.5' - 14' Brown, dry, wet at 7.0', fine SAND and SILT
5	Bentonite			
	10 Slot PVC Screen	S-2: 5.0' - 10' Rec: 5.0'/5.0'	< 1.0	▼ Wet at 7.0'
10	#1 Well Sand	S-3: 10' - 15' Rec: 5.0'/5.0'	< 1.0	(f SAND and silt)
15				14' - 15' Gray, dry, shale fragments to sampler refusal at 15'
				End of Boring @ 15' Advanced 3.0" flush casing with expendable drive point to 15' below grade. Installed 10' of 1.0" ID screen (#10-slot) from 5' to 15' and solid riser to grade. Well removed and abandoned 11/16/2021.
20				
25				
30				
35				

# MONITORING WELL / BORING NO. **SB-6**

Site Name: NYSDEC - Algonquin Middle School Date Drilled: November 15, 2021

Location: 333 RT 351, Poestenkill, NY Drilling Co.: Clean Globe Environmental

Client: NYSDEC Driller: Mario Pineda

Phone No.: N/A Logged by: T. Rollend

Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"

Drilled TD: 13' (Dia): 2" Sampled TD: 13' (Dia):

Well TD:  (Dia):  Well Type: No Well Installed

Screen Interval:  Slot Size:  Diameter:

Cased Interval:  Type:  Diameter:

Sand Pack Interval:  Type:  Wellhead Prot:

Bentonite Seal Interval:  Type:  Grouted Interval:



## Soil Samples Collected:

**SB-6 @ 3-IN**

**SB-6 @ 12-IN**

**SB-6 @ 156-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0		S-1: 0 - 3.0' Rec: 3.0'/5.0'	< 1.0	0" - 1.0' Black, Dry, organics, coarse to fine SAND and SILT (topsoil)
5		S-2: 5.0' - 10' Rec: 5.0'/5.0'	< 1.0	1.0' - 13' Brown, dry, coarse - fine SAND, silt, some fine angular gravel some fine rounded gravel, poorly sorted (fill) to sampler refusal at 13'
10		S-3: 10'-13' Rec: 1.0'/5.0'	< 1.0	Moist at 8.0'
15				Gray and green shale fragments in sampler shoe (f Sand and silt)
20				End of Boring @ 13' No monitoring well installed
25				
30				
35				



# MONITORING WELL / BORING NO. **SB-7**

Site Name: NYSDEC - Algonquin Middle School Date Drilled: November 15, 2021

Location: 333 RT 351, Poestenkill, NY Drilling Co.: Clean Globe Environmental

Client: NYSDEC Driller: Mario Pineda

Phone No.: N/A Logged by: T. Rollend

Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"

Drilled TD: 10' (Dia): 2" Sampled TD: 10' (Dia):

Well TD: N/A (Dia): 1" Well Type: No Well Installed

Screen Interval: N/A Slot Size: 0.010 Slot Diameter: 1.0"

Cased Interval: N/A Type: Sch 40 PVC Diameter: 1.0"

Sand Pack Interval: N/A Type: #1 Well Sand Wellhead Prot: N/A

Bentonite Seal Interval: N/A Type: Benchips Grouted Interval: NA



## Soil Samples Collected:

**SB-7 @ 3-IN**

**SB-7 @ 12-IN**

**SB-7 @ 96-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0				
		S-1: 0 - 3.0' Rec: 3.0'/5.0'	< 1.0	0" - 1.0' Black, dry, organics, coarse to fine SAND and SILT (topsoil)
				1.0' - 10' Brown, dry, coarse - fine SAND, silt, some fine angular gravel some fine rounded gravel, poorly sorted (fill) to sampler refusal at 10'
5		S-2: 5.0' - 10' Rec: 3.0'/5.0'	< 1.0	Moist at 9.0' Gray and green shale fragments in sampler shoe (f Sand and silt)
10				End of Boring @ 10' No monitoring well installed 10'
15				
20				
25				
30				
35				

# MONITORING WELL / BORING NO. **SB-8**

Site Name: NYSDEC - Algonquin Middle School Date Drilled: November 15, 2021

Location: 333 RT 351, Poestenkill, NY Drilling Co.: Clean Globe Environmental

Client: NYSDEC Driller: Mario Pineda

Phone No.: N/A Logged by: T. Rollend

Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"

Drilled TD: 1.5' (Dia): 2" Sampled TD: 1.5' (Dia):

Well TD:  (Dia): 1" Well Type: No Well Installed

Screen Interval:  Slot Size:  Diameter:

Cased Interval:  Type:  Diameter:

Sand Pack Interval:  Type:  Wellhead Prot:

Bentonite Seal Interval:  Type:  Grouted Interval:



## Soil Samples Collected:

**SB-8 @ 3-IN**

**SB-8 @ 12-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0				
		S-1: 0 - 1.5' Rec: 1.0'/5.0'	< 1.0	0" - 1.0' <u>Black, Dry, organics, coarse to fine SAND and SILT (topsoil)</u> 1.0' - 1.5' <u>Gray, dry, shale bedrock (refusal)</u>
5				End of Boring @ 1.5' No monitoring well installed
10				
15				
20				
25				
30				
35				

# MONITORING WELL / BORING NO. **SB-9**

Site Name: NYSDEC - Algonquin Middle School Date Drilled: November 15, 2021

Location: 333 RT 351, Poestenkill, NY Drilling Co.: Clean Globe Environmental

Client: NYSDEC Driller: Mario Pineda

Phone No.: N/A Logged by: T. Rollend

Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"

Drilled TD: 7.0' (Dia): 2" Sampled TD: 7.0' (Dia):

Well TD: N/A (Dia): 1" Well Type: No Well Installed

Screen Interval:  Slot Size:  Diameter:

Cased Interval:  Type:  Diameter:

Sand Pack Interval:  Type:  Wellhead Prot:

Bentonite Seal Interval:  Type:  Grouted Interval:



## Soil Samples Collected:

**SB-9 @ 3-IN**

**SB-9 @ 12-IN**

**SB-9 @ 84-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0				
		S-1: 0 - 5.0' Rec: 3.0'/5.0'	< 1.0	0" - 1.0' Black, dry, organics, coarse to fine SAND and SILT (topsoil)
5		S-2: 5.0' - 7.0' Rec: 2.0'/5.0'	< 1.0	1.0' - 7.0' Brown, dry, coarse to fine SAND, shale fragments, some fine rounded gravel (fill material), poorly sorted
				7.0' End of boring (refusal), gray shale fragments in sampler shoe @ 7.0' No monitoring well installed
10				
15				
20				
25				
30				
35				

# MONITORING WELL / BORING NO. **SB-10 / MW-10**

Site Name: Algonquin Middle School Date Drilled: November 11, 2021  
 Location: 333 RT. 351 Poestenkill, NY Drilling Co.: Clean Globe Environmental  
 Client: NYSDEC Driller: Mario Pineda  
 Phone No.: N/A Logged by: T. Rollend  
 Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"  
 Drilled TD: 18' (Dia): 2" Sampled TD: 18' (Dia):           
 Well TD: 18' (Dia): 1" Well Type: Temporary  
 Screen Interval: 18'-8.0' Slot Size: 0.010 Slot Diameter: 1.0"  
 Cased Interval: 0' - 8.0' Type: Sch 40 PVC Diameter: 1.0"  
 Sand Pack Interval: 8.0' - 18.0' Type: #1 Well Sand Wellhead Prot: N/A  
 Bentonite Seal Interval: 7.0' - 8.0' Type: Benchips Grouted Interval: NA



## Soil Samples Collected:

**SB-10 @ 3-IN**  
**SB-10 @ 12-IN**  
**SB-10 @ 156-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0	1" cap			
	Native Soil & Well Sand			0.0' - 0.2' Brown, dry, organics, fine SAND and SILT (topsoil)
	1" PVC Riser	S-1: 0 - 5.0' Rec: 5.0'/5.0'	< 1.0	0.2' - 18' Brown, dry, fine SAND and SILT
5	Bentonite	S-2: 5.0' - 10' Rec: 5.0'/5.0'	< 1.0	
10	10 Slot PVC Screen	S-3: 10' - 15' Rec: 4.0'/5.0'	< 1.0	10' - 15' Brown, dry, wet at 14', fine SAND and SILT trace clay with depth
	#1 Well Sand			▼ Wet at 14'
15		S-2: 15' - 18' Rec: 3.0'/5.0'	< 1.0	(f SAND and silt)
				18' Gray, dry, shale fragments to sampler refusal at 18'
20				End of Boring @ 18' Advanced 3.0" flush casing with expendable drive point to 18' below grade. Installed 10' of 1.0" ID screen (#10-slot) from 8' to 18' and solid riser to grade. Well removed and abandoned 11/16/2021.
25				
30				
35				

# MONITORING WELL / BORING NO. **SB-11**

Site Name: NYSDEC - Algonquin Middle School Date Drilled: November 15, 2021  
 Location: 333 RT 351, Poestenkill, NY Drilling Co.: Clean Globe Environmental  
 Client: NYSDEC Driller: Mario Pineda  
 Phone No.: N/A Logged by: T. Rollend  
 Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"  
 Drilled TD: 7.0' (Dia): 2" Sampled TD: 7.0' (Dia):         
 Well TD:        (Dia):        Well Type: No Well Installed  
 Screen Interval:        Slot Size:        Diameter:         
 Cased Interval:        Type:        Diameter:         
 Sand Pack Interval:        Type:        Wellhead Prot:         
 Bentonite Seal Interval:        Type:        Grouted Interval:       



## Soil Samples Collected:

**SB-11 @ 3-IN**

**SB-11 @ 12-IN**

**SB-11 @ 84-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0				
		S-1: 0 - 5.0' Rec: 3.0'/5.0'	< 1.0	0" - 1.0' Black, dry, organics, coarse to fine SAND and SILT (topsoil)
5		S-2: 5.0' - 7.0' Rec: 2.0'/5.0'	< 1.0	1.0' - 7.0' Brown, dry, coarse to fine SAND, shale fragments, some fine rounded gravel (fill material), poorly sorted
				7.0' End of boring (refusal), gray shale fragments in sampler shoe @ 7.0' No monitoring well installed
10				7.0'
15				
20				
25				
30				
35				

# MONITORING WELL / BORING NO. **SB-12 / MW-12**

Site Name: Algonquin Middle School Date Drilled: November 12, 2021  
 Location: 333 RT. 351 Poestenkill, NY Drilling Co.: Clean Globe Environmental  
 Client: NYSDEC Driller: Mario Pineda  
 Phone No.: N/A Logged by: T. Rollend  
 Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"  
 Drilled TD: 17' (Dia): 2" Sampled TD: 17' (Dia): 2"  
 Well TD: 15' (Dia): 1" Well Type: Temporary  
 Screen Interval: 5.0' - 15' Slot Size: 0.010 Slot Diameter: 1.0"  
 Cased Interval: 0' - 5.0' Type: Sch 40 PVC Diameter: 1.0"  
 Sand Pack Interval: 5.0' - 15.0' Type: #1 Well Sand Wellhead Prot: N/A  
 Bentonite Seal Interval: 5.0' - 4.0' Type: Benchips Grouted Interval: NA



## Soil Samples Collected:

**SB-12 @ 3-IN**

**SB-12 @ 72-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0	1" cap			
	Native Soil & Well Sand			0.0' - 0.5' Brown, dry, organics, fine SAND and SILT (topsoil)
	1" PVC Riser	S-1: 0 - 5.0' Rec: 5.0'/5.0'	< 1.0	0.5' - 17' Brown, dry, wet at 7.0', fine SAND and silt, trace fine gravel
5	Bentonite			
	10 Slot PVC Screen	S-2: 5.0' - 10' Rec: 5.0'/5.0'	< 1.0	▼ Wet at 7.0'
10	#1 Well Sand	S-3: 10' - 15' Rec: 5.0'/5.0'	< 1.0	As above, fine SAND and increasing silt, trace clay
15		S-4: 15' - 17' Rec: 2.0'/5.0'	< 1.0	(f SAND and silt)
				17' End of boring at refusal. Gray, dry, shale fragments to sampler refusal at 17'
20				End of Boring @ 17' Advanced 3.0" flush casing with expendable drive point to 15' below grade. Installed 10' of 1.0" ID screen (#10-slot) from 5' to 15' and solid riser to grade. Well removed and abandoned 11/16/2021.
25				
30				
35				



# MONITORING WELL / BORING NO. **SB-13**

Site Name: NYSDEC - Algonquin Middle School Date Drilled: November 11, 2021

Location: 333 RT 351, Poestenkill, NY Drilling Co.: Clean Globe Environmental

Client: NYSDEC Driller: Mario Pineda

Phone No.: N/A Logged by: T. Rollend

Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"

Drilled TD: 13' (Dia): 2" Sampled TD: 13' (Dia):

Well TD:  (Dia):  Well Type: No Well Installed

Screen Interval:  Slot Size:  Diameter:

Cased Interval:  Type:  Diameter:

Sand Pack Interval:  Type:  Wellhead Prot:

Bentonite Seal Interval:  Type:  Grouted Interval:



## Soil Samples Collected:

**SB-13 @ 3-IN**

**SB-13 @ 12-IN**

**SB-13 @ 84-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0				0" - 1.0' Black, dry, organics, coarse to fine SAND and SILT (topsoil)
		S-1: 0 - 5.0' Rec: 3.0'/5.0'	< 1.0	1.0' - 13' Brown, moist, fine SAND and silt. Silt increasing with depth, trace clay
5		S-2: 5.0' - 10' Rec: 2.0'/5.0'	< 1.0	▼ Wet at 8.0'
10		S-3: 10' - 13' Rec: 3.0'/5.0'	< 1.0	13' End of boring (refusal), gray shale fragments in sampler shoe @ 13' No monitoring well installed
15				
20				
25				
30				
35				

13'

# MONITORING WELL / BORING NO. **SB-14**

Site Name: NYSDEC - Algonquin Middle School Date Drilled: November 11, 2021

Location: 333 RT 351, Poestenkill, NY Drilling Co.: Clean Globe Environmental

Client: NYSDEC Driller: Mario Pinedao

Phone No.: N/A Logged by: T. Rollend

Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"

Drilled TD: 10' (Dia): 2" Sampled TD: 10' (Dia):

Well TD:  (Dia):  Well Type: No Well Installed

Screen Interval:  Slot Size:  Diameter:

Cased Interval:  Type:  Diameter:

Sand Pack Interval:  Type:  Wellhead Prot:

Bentonite Seal Interval:  Type:  Grouted Interval:



## Soil Samples Collected:

**SB-14 @ 3-IN**

**SB-14 @ 12-IN**

**SB-14 @ 108-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0				
		S-1: 0 - 5.0' Rec: 5.0'/5.0'	< 1.0	<div>0' - 1.0' Black, dry, organics, coarse to fine SAND and SILT (topsoil)</div> <div>1.0' - 3.0' Brown, dry, coarse to fine SAND, fine to medium GRAVEL, SILT, trace brick fragments (fill material)</div> <div>3.0' - 10' Brown, dry, moist at 9', fine SAND and silt</div>
5		S-2: 5.0' - 10' Rec: 5.0'/5.0'	< 1.0	<div>Moist at 9'</div> <div>10' End of boring (refusal), gray shale fragments in sampler shoe @ 10'</div> <div>No monitoring well installed</div>
10				
15				
20				
25				
30				
35				

# MONITORING WELL / BORING NO. **SB-15**

Site Name: NYSDEC - Algonquin Middle School Date Drilled: November 11, 2021

Location: 333 RT 351, Poestenkill, NY Drilling Co.: Clean Globe Environmental

Client: NYSDEC Driller: Mario Pineda

Phone No.: N/A Logged by: T. Rollend

Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"

Drilled TD: 2.5' (Dia): 2" Sampled TD: 2.5' (Dia):

Well TD:  (Dia):  Well Type: No Well Installed

Screen Interval:  Slot Size:  Diameter:

Cased Interval:  Type:  Diameter:

Sand Pack Interval:  Type:  Wellhead Prot:

Bentonite Seal Interval:  Type:  Grouted Interval:



Soil Samples Collected:

**SB-15 @ 3-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0				
		S-1: 0 - 5.0' Rec: 1.0'/5.0'	< 1.0	0' - 0.9' Black, dry, organics, coarse to fine SAND and SILT (topsoil) 0.9' - 2.5' Black, dry, fine SAND and SILT 2.5' End of boring (refusal), gray shale fragments in sampler shoe @ 2.5' No monitoring well installed
5				
10				
15				
20				
25				
30				
35				

# MONITORING WELL / BORING NO. **SB-16**

Site Name: NYSDEC - Algonquin Middle School Date Drilled: November 11, 2021

Location: 333 RT 351, Poestenkill, NY Drilling Co.: Clean Globe Environmental

Client: NYSDEC Driller: Mario Pineda

Phone No.: N/A Logged by: T. Rollend

Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"

Drilled TD: 6.0' (Dia): 2" Sampled TD: 6.0' (Dia):

Well TD:  (Dia):  Well Type: No Well Installed

Screen Interval:  Slot Size:  Diameter:

Cased Interval:  Type:  Diameter:

Sand Pack Interval:  Type:  Wellhead Prot:

Bentonite Seal Interval:  Type:  Grouted Interval:



## Soil Samples Collected:

**SB-16 @ 3-IN**

**SB-16 @ 12-IN**

**SB-16 @ 72-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0				
		S-1: 0 - 5.0' Rec: 1.0'/5.0'	< 1.0	0' - 0.5' Dark brown, moist, organics, coarse to fine SAND, trace fine gravel, silt, trace clay (topsoil) 0.5' - 6.0' Brown to gray, dry, coarse to fine SAND, trace fine gravel, unsorted silt and clay (fill material)
5		S-2: 5.0' - 6.0' Rec: 1.0'/5.0'	< 1.0	
				6.0' End of boring (refusal), gray shale fragments in sampler shoe @ 6.0' No monitoring well installed
10				
15				
20				
25				
30				
35				

6.0'

# MONITORING WELL / BORING NO. **SB-17**

Site Name: NYSDEC - Algonquin Middle School Date Drilled: November 16, 2021

Location: 333 RT 351, Poestenkill, NY Drilling Co.: Clean Globe Environmental

Client: NYSDEC Driller: Mario Pineda

Phone No.: N/A Logged by: Eric Orlowski

Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"

Drilled TD: 14' (Dia): 2" Sampled TD: 14' (Dia):

Well TD:  (Dia):  Well Type: No Well Installed

Screen Interval:  Slot Size:  Diameter:

Cased Interval:  Type:  Diameter:

Sand Pack Interval:  Type:  Wellhead Prot:

Bentonite Seal Interval:  Type:  Grouted Interval:



## Soil Samples Collected:

**SB-17 @ 3-IN**  
**SB-17 @ 12-IN**  
**SB-17 @ 72-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0				0" - 1.0' Brown, dry to moist, organics, coarse to fine SAND and SILT (topsoil)
		S-1: 0 - 5.0' Rec: 4.5'/5.0'	< 1.0	1.0' - 14' Brown, dry to moist, fine SAND and SILT, silt increasing with depth angular fine to coarse gravel, some shale fragments
5		S-2: 5.0' - 10' Rec: 5.0'/5.0'	< 1.0	
10		S-3: 10' - 14' Rec: 3.0'/5.0'	< 1.0	
15				14' End of boring (refusal), gray shale fragments in sampler shoe @ 14' No monitoring well installed
20				
25				
30				
35				

14'

# MONITORING WELL / BORING NO. **SB-18**

Site Name: NYSDEC - Algonquin Middle School Date Drilled: November 11, 2021  
 Location: 333 RT 351, Poestenkill, NY Drilling Co.: Clean Globe Environmental  
 Client: NYSDEC Driller: Mario Pineda  
 Phone No.: N/A Logged by: T. Rollend  
 Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"  
 Drilled TD: 14' (Dia): 2" Sampled TD: 14' (Dia): 2"  
 Well TD: 4' (Dia): 2" Well Type: Temporary  
 Screen Interval: 4' Slot Size: 0.10 Slot Diameter: 1.0"  
 Cased Interval: N/A Type: N/A Diameter: N/A  
 Sand Pack Interval: 4' Type: #1 Well Sand Wellhead Prot: N/A  
 Bentonite Seal Interval: N/A Type: N/A Grouted Interval: N/A



## Soil Samples Collected:

**SB-18 @ 3-IN**

**SB-18 @ 12-IN**

**SB-18 @ 60-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0				
		S-1: 0 - 5.0' Rec: 4.5/5.0'	< 1.0	0" - 1.0' Brown, moist, organics, coarse to fine SAND and silt (topsoil), some shale fragments, some fine rounded gravel (fill material)
5		S-2: 5.0' - 10' Rec: 5.0/5.0'	< 1.0	4.5' - 11' Gray, moist, CLAY, some silt
10		S-3: 10' - 14' Rec: 3.0/5.0'	< 1.0	
14				14' End of boring (refusal), gray shale fragments in sampler shoe @ 14' No monitoring well installed November 11, 2021*
15				
20				
25				
30				
35				

\*Note: At the request of the NYSDEC on November 16, 2021 a hand auger was advanced adjacent to the previous borehole and to a depth of four (4) feet below grade. A five-foot section of well screen was installed and a groundwater sample obtained.



# MONITORING WELL / BORING NO. **SB-19**

Site Name: NYSDEC - Algonquin Middle School Date Drilled: November 16, 2021

Location: 333 RT 351, Poestenkill, NY Drilling Co.: Clean Globe Environmental

Client: NYSDEC Driller: Mario Pineda

Phone No.: N/A Logged by: Eric Orlowski

Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"

Drilled TD: 2.5' (Dia): 2" Sampled TD: 2.5' (Dia):

Well TD:  (Dia):  Well Type: No Well Installed

Screen Interval:  Slot Size:  Diameter:

Cased Interval:  Type:  Diameter:

Sand Pack Interval:  Type:  Wellhead Prot:

Bentonite Seal Interval:  Type:  Grouted Interval:



## Soil Samples Collected:

**SB-19 @ 3-IN**

**SB-19 @ 12-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0				
		S-1: 0 - 5.0' Rec: 1.0'/5.0'	< 1.0	<div>0' - 0.3' Dark brown, moist, organics, coarse to fine SAND and silt, trace fine gravel (topsoil)</div> <div>0.3' - 2.0' Gray - brown, wet, fine SAND, some silt and shale fragments</div> <div>2.5' End of boring (refusal), gray shale fragments in sampler shoe @ 2.5'</div> <div>No monitoring well installed</div>
5				2.5'
10				
15				
20				
25				
30				
35				

# MONITORING WELL / BORING NO. **SB-20 MW-20**

Site Name: Algonquin Middle School Date Drilled: November 16, 2021  
 Location: 333 RT. 351 Poestenkill, NY Drilling Co.: Clean Globe Environmental  
 Client: NYSDEC Driller: Mario Pineda  
 Phone No.: N/A Logged by: T. Rollend  
 Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"  
 Drilled TD: 25' (Dia): 2" Sampled TD: 25' (Dia): 2"  
 Well TD: 25' (Dia): 1" Well Type: Temporary  
 Screen Interval: 15' - 25' Slot Size: 0.010 Slot Diameter: 1.0"  
 Cased Interval: 0' - 15' Type: Sch 40 PVC Diameter: 1.0"  
 Sand Pack Interval: 15' - 25' Type: #1 Well Sand Wellhead Prot: N/A  
 Bentonite Seal Interval: 14' - 15' Type: Benchips Grouted Interval: NA



## Soil Samples Collected:

**SB-20 @ 3-IN**  
**SB-20 @ 12-IN**  
**SB-20 @ 192-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0	1" cap			
0 - 5	Native Soil & Well Sand	S-1: 0 - 5.0' Rec: 5.0'/5.0'	< 1.0	0.0' - 1.0' Brown, dry, organics, fine SAND and SILT (topsoil) 1.0' - 12' Brown, dry, medium to fine SAND and SILT
5 - 10	1" PVC Riser	S-2: 5.0' - 10' Rec: 5.0'/5.0'	< 1.0	
10 - 15	Bentonite	S-3: 10' - 15' Rec: 4.0'/5.0'	< 1.0	(f SAND and SILT) 12' - 13' Brown, dry, coarse to fine SAND, silt, fine gravel 13' - 25' Brown, dry, wet at 17', interbedded coarse to fine SAND and SILT lamina,
15 - 20	#1 Well Sand	S-4: 15' - 20' Rec: 5.0'/5.0'	< 1.0	▼ wet at 17'
20 - 25	10 Slot PVC Screen	S-5: 20' - 25' Rec: 5.0'/5.0'	< 1.0	(cmf SAND and SILT) 20' - 25' Brown, wet, fine SAND, silt, trace to some clay
25 - 35				End of Boring @ 25' Advanced 3.0" flush casing with expendable drive point to 25' below grade. Installed 10' of 1.0" ID screen (#10-slot) from 15' to 25' and solid riser to grade. Well removed and abandoned 11/16/2021

# MONITORING WELL / BORING NO. **SB-21**

Site Name: NYSDEC - Algonquin Middle School Date Drilled: November 15, 2021  
 Location: 333 RT 351, Poestenkill, NY Drilling Co.: Clean Globe Environmental  
 Client: NYSDEC Driller: Mario Pineda  
 Phone No.: N/A Logged by: T. Rollend  
 Drilling Method: Geoprobe 7822 DT (Dia): 2" Sampling Method: Macro Core (Dia): 2"  
 Drilled TD: 20' (Dia): 2" Sampled TD: 20' (Dia): 2"  
 Well TD: 20' (Dia): 2" Well Type: No Well Installed  
 Screen Interval:            Slot Size:            Diameter:             
 Cased Interval:            Type:            Diameter:             
 Sand Pack Interval:            Type:            Wellhead Prot:             
 Bentonite Seal Interval:            Type:            Grouted Interval:           



## Soil Samples Collected:

**SB-21 @ 3-IN**  
**SB-21 @ 12-IN**  
**SB-21 @ 138-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0				
		S-1: 0 - 5.0' Rec: 5.0'/5.0'	< 1.0	0' - 1.0' Brown, dry, organics, coarse to fine SAND and silt (topsoil), 1.0' - 20' Brown, dry, medium to fine unsorted SAND and SILT
5		S-2: 5.0' - 10' Rec: 5.0'/5.0'	< 1.0	
10		S-3: 10' - 15' Rec: 5.0'/5.0'	< 1.0	▼ wet at 12.5'
15		S-2: 15' - 20' Rec: 5.0'/5.0'	< 1.0	20' End of boring at 20' No monitoring well installed
20				20'
25				
30				
35				

# MONITORING WELL / BORING NO. **SB-22 / MW-22**

Site Name: Algonquin Middle School Date Drilled: November 16, 2021  
 Location: 333 RT. 351 Poestenkill, NY Drilling Co.: Clean Globe Environmental  
 Client: NYSDEC Driller: Mario Pineda  
 Phone No.: N/A Logged by: Eric Orlowski  
 Drilling Method: Geoprobe 7822 DT (Dia): 3" Sampling Method: Macro Core (Dia): 2"  
 Drilled TD: 18' (Dia): 3" Sampled TD: 18' (Dia):   
 Well TD: 18' (Dia): 1" Well Type: Temporary  
 Screen Interval: 8.0' - 18' Slot Size: 0.010 Slot Diameter: 1.0"  
 Cased Interval: 0' - 8.0' Type: Sch 40 PVC Diameter: 1.0"  
 Sand Pack Interval: 8.0' - 18' Type: #1 Well Sand Wellhead Prot: N/A  
 Bentonite Seal Interval: 7.0' - 8.0' Type: Benchips Grouted Interval: NA



## Soil Samples Collected:

**SB-22 @ 3-IN**  
**SB-22 @ 12-IN**  
**SB-22 @ 168-IN**

Depth (Feet)	Monitoring Well Construction	Recovery;	PID (ppm):	Description / Soil Classification
0	1" cap			
0	Native Soil & Well Sand	S-1: 0 - 5.0' Rec: 2.0'/5.0'	< 1.0	0.0' - 4.0' Dark Brown to Gray-brown, moist, organics, coarse to fine SAND and fine GRAVEL (angular shale fragments), some Silt
5	1" PVC Riser			
5	Bentonite	S-2: 5.0' - 10' Rec: 5.0'/5.0'	< 1.0	4.0' - 17' Light Brown, moist to wet at 14', fine SAND and SILT, little angular shale fragments
10	10 Slot PVC Screen			
10	#1 Well Sand	S-3: 10' - 15' Rec: 5.0'/5.0'	< 1.0	14.5' - 17' Brown, wet, coarse to fine SAND and SILT, some rounded fine gravel
15		S-4: 15' - 18' Rec: 3.0'/5.0'	< 1.0	17' - 18' Gray, wet, fine SAND and SILT some weathered gray shale to refusal
20				End of Boring @ 18' Advanced 3.0" flush casing with expendable drive point to 15' below grade. Installed 10' of 1.0" ID screen (#10-slot) from 8' to 18' and solid riser to grade. Well removed and abandoned 11/16/2021.
25				
30				
35				

## **APPENDIX C**