# Appendix I – Supplemental Reports

Aztech Environmental
TECHNOLOGIES
A LaBella Company

March 13, 2023 (Revised 4-18-2023)

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New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233

RE: **Site Summary Report (Rev. 4-18-2023)**
**Algonquin Middle School PFAS Assessment #2105197**
**333 NY 351, Averill Park, NY**
**Tax parcel ID: 136.-9-28.1**

Aztech Environmental Technologies Inc. (Aztech), a LaBella company, has provided this report to document overburden soil and groundwater assessment methodologies and sampling results for the above referenced location. All field investigation activities were performed at the discretion of and in accordance with the scope of work (SOW) developed and provided to Aztech by the New York State Department of Environmental Conservation (NYSDEC).

The property is currently utilized by the Averill Park Central School District as an educational institution and associated sports fields for grades 6 through 8. The approximate 52.57-acre parcel is located west of the intersection of NY Route 351 and Averill Park Rd (RT 66). The property is mainly flat with a downward gradient from east to west. Bedrock outcropping is visible at several locations on the property. An unnamed tributary stream to the Newfoundland Creek flows south to north along the western property boundary. **Figure 1** depicts property features and boundaries.

Overburden soil encountered during drilling activities consisted primarily of coarse to fine sand and silt with varying amounts of shale fragments which typically increased in depth to tooling refusal. Shale fragments in the sampler shoe at terminal boring depth is noted on the attached boring logs.

Prior to intrusive groundwork, a UDig NY utility clearance ticket was ordered for the property. Additionally, a private utility locating contractor performed utility clearance with ground penetrating radar (GPR) at each boring location on August 8, 2022. Boring locations confirmed as clear were painted white and marked with a white flag.

## SUMMARY OF FIELD INVESTIGATIONS:

### Air monitoring

Air monitoring was conducted during all ground-intrusive work at the property (August 22, 23, and 24, 2022) in accordance with the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan (CAMP). One dedicated Dust Trak unit with photo-ionization detector (PID) was positioned upwind with a second dedicated unit placed downwind at each boring location. No exceedances for volatile organic compounds (VOCs) or particulates were recorded.

### Soil Boring and Monitoring Well Installation

On August 22, 23, and 24, 2022, Clean Globe Environmental (CGE) advanced soil borings (AMS-SB-01 through AMS-SB-08A) utilizing a Geoprobe 7822DT and direct-push techniques to terminal depths ranging from 9 to 24 feet below grade (fbg). Shallow refusal was encountered at two (2) boring

locations (SB-AMS-02 and SB-AMS-08). Drill tooling was removed from the borehole and advanced again a few feet from the original location. As such, the location identifier is amended with an "A" for soil boring locations SB-AMS-02A and SB-AMS-08A. All 8 boring locations were converted to monitoring wells (AMS-0W-01 through AMS-0W-08). Aztech provided oversight of drilling activities, performed soil headspace screening, soil classification, and both soil and groundwater sampling.

Monitoring wells were installed by over-drilling the borehole utilizing 4 ¼" inside diameter (ID) hollow stem augers. The well assembly consisted of 2-inch ID PVC 10-slot screen set to straddle the water table and casing to grade. A number 2 filtration sand was installed to fill the borehole annulus to approximately one (1) to two (2) feet above the screened interval. Bentonite chips were added atop the sand to seal the casing from surface water intrusion and subsequently hydrated with certified per- and polyfluoroalkyl substance (PFAS)-free water. Native soil and well sand were added as needed to the finish grade. Each well was finished within a flush mount road box or a steel stick-up. Each newly installed groundwater monitoring well was developed on August 30 and September 1, 2022 by using a peristaltic pump and/or bailer to remove a targeted 10 well volumes. Monitoring well specifications are presented below in **Table 1.** Individual boring logs are attached. Monitoring well locations are depicted on the attached Figure 1.

**TABLE 1**

Monitoring Well Specifications

| Well ID | Borehole Depth (Feet) | Well Diameter (Inches) | Screened Interval (Feet) | Sand Packed Interval (Feet) | Bentonite Seal (Feet) | Observed DTW* (Feet) |
|---|---|---|---|---|---|---|
| AMS-0W-01 | 9 | 2 | 9.0 - 4.0 | 9.0 - 2.0 | 2.0 - 0.5 | 0.65 |
| AMS-0W-02 | 16 | 2 | 16 - 6.0 | 16 - 4.0 | 4.0 - 2.0 | 10.69 |
| AMS-0W-03 | 14.5 | 2 | 14.5 - 4.5 | 14.5 - 2.5 | 2.5 - 1.0 | 7.40 |
| AMS-0W-04 | 18 | 2 | 18 - 8.0 | 18 - 6.0 | 6.0 - 4.0 | 14.02 |
| AMS-0W-05 | 17 | 2 | 17 - 7.0 | 17 - 5.0 | 5.0 - 3.0 | 14.7 |
| AMS-0W-06 | 24 | 2 | 24 - 14 | 24 - 12 | 12 - 10 | 17.84 |
| AMS-0W-07 | 12 | 2 | 11 - 6.0 | 12 - 4.0 | 4.0 - 2.0 | dry |
| AMS-0W-08 | 17 | 2 | 17 - 7.0 | 17 - 5.0 | 5.0 - 3.0 | 12.71 |

Notes:

Wells drilled/installed by Clean Globe Environmental (CGE)

*Depth to Water (DTW) as measured on September 19, 2022 from top of casing (TOC)

## Soil Sampling

Individual soil samples were visually classified and headspace screened with a photo-ionization detector (PID) calibrated to a 100 part per million (ppm) isobutylene calibrant gas. Soil samples from select boring locations were collected from the following depth intervals:

- Surface grade to 2 -inch below grade (BG), beneath vegetative cover,
- 2-inch BG to 12-inch BG, and
- Air/water interface (water table) as observed in borehole.

The actual number of soil samples was dependent on field conditions. A total of 24 depth discrete subsurface soil samples were collected from the eight (8) soil borings and analyzed for PFAS compounds by Environmental Protection Agency (EPA) analytical method 537M for soil. Select soil samples from the 2"BG to 12"BG interval were analyzed using the Synthetic Precipitation Leaching Procedure (SPLP) by EPA Method 1312 and the leachate was subsequently analyzed for PFAS compounds by analytical method 537M. SPLP PFAS results are not considered reportable as it was determined that Con-Test (a Pace Analytical Laboratory at East Longmeadow, MA and the NYSDEC's contracted lab for this project) did not hold the appropriate ELAP certification for EPA Method 1312 at the time of analysis.

Additional samples collected for the purpose of quality assurance (quality control (QA/QC)) included one equipment blank, one matrix spike/matrix spike duplicate (MS/MSD) and one field duplicate following quality control procedures. The attached boring logs reference the parent sample for the MS/MSD and duplicate samples. The equipment blank collected on August 24, 2022 was performed on the nitrile gloves used during soil sampling. Laboratory analytical results for the equipment blank did not report any compounds above the laboratory minimum reporting limit (RL). Refer to **Table 2** for additional details.

Groundwater Sampling

Seven (7) groundwater samples were collected on September 19 and 20, 2022 from the newly installed overburden groundwater monitoring wells. Although eight (8) monitoring wells were installed, AMS-OW-07 was dry and as such, no groundwater sample could be obtained. Samples were collected utilizing low-flow/low-stress sampling techniques with a peristaltic pump and associated HDPE and silicone tubing. Water quality field parameters (temperature, pH, specific conductance, oxygen-reduction potential (ORP), dissolved oxygen (DO), and turbidity) were recorded during the well purging at five (5) minute intervals up to stabilization. A copy of the stabilization logs is attached. Samples were immediately placed on ice and transferred to Pace Analytical and Eurofins TestAmerica under chain of custody protocols. Groundwater samples were analyzed for PFAS compounds by EPA Method 537M, pharmaceutically active compounds-negative by Method L221, and nitrate and nitrite anions by EPA Method 300.

Additional samples collected for QA/QC purposes included an MS/MSD, Field Duplicate, and Equipment Blanks. AMS-OW-06 was the parent sample for the MS/MSD. The field duplicate sample was collected from well AMS-OW-05. The Equipment Blank samples were collected using the HDPE tubing associated with the peristaltic pump on September 19 and nitrile sampling gloves on September 20, 2022. Laboratory analytical results for the equipment blanks did not report any compounds above the laboratory RL. Refer to Table 2 for additional details.

## DISCUSSION OF ANALYTICAL RESULTS

STANDARDS, CRITERIA, & GUIDANCE VALUES:

The following documents are used to evaluate the soil and groundwater analytical results:

*Soil*

- Unrestricted Use and Residential Use soil guidance values from NYSDEC Sampling, Analysis, and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs, November 2022.

*Groundwater*

- Screening levels identified in NYSDEC Sampling, Analysis, and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs, November 2022
- New York State Drinking Water Maximum Contaminant Level (MCL) for PFOA (10 parts per trillion (ppt)), PFOS (10 ppt), and 1,4-dioxane (1 part per billion (ppb)).

It is noted that the NYSDEC Standards, Criteria, & Guidance Values are listed in concentrations of parts per trillion (ppt), parts per billion (ppb), and parts per million (ppm) while laboratory analytical results are reported in equivalent concentrations. For example,

- In soil:
    - 1 ppt = 1 nanogram per kilogram (ng/kg),
    - 1 ppb = 1 microgram per kilogram (µg/kg), and
    - 1 ppm = 1 milligram per kilogram (mg/kg)

- In water:
    - 1 ppt = 1 nanogram per liter (ng/L),
    - 1 ppb = 1 microgram per liter (µg/L), and
    - 1 ppm = 1 milligram per liter (mg/L).

<u>Soil Results:</u>

Of the 24 soil samples collected, 21 samples were analyzed for PFAS compounds by analytical method 537M. Nineteen (19) of the 21 samples had one or more PFAS compounds detected. Perfluorooctanoic acid (PFOA) was recorded in at least one (1) sample from six (6) borehole locations at estimated concentrations ranging from of 0.15 µg/kg to 0.47 µg/kg and were below both the laboratory RL and the Unrestricted Use guidance value of 0.66 µg/kg. Concentrations recorded below the RL are considered estimated values. Perfluorooctane sulfonic acid (PFOS) was recorded in at least one (1) sample from each of the eight (8) soil borings. Concentrations ranged from an estimated 0.063 µg/kg to 1.000 µg/kg. Two (2) locations (AMS-SB-02A and AMS-SB-03) recorded PFOS above the Unrestricted Use guidance value of 0.88 µg/kg.

PFAS compounds that were detected but do not have corresponding guidance values include: PFBA, PFDS, PFDA, PFDoA, PFHpA, PFHxA, PFNA, PFPeA, PFTA, and PFUnA. Of these compounds, PFDA had the highest detected concentration of 0.6 µg/kg. Refer to **Table 3** for additional details. Refer to **Appendix A** for the laboratory analytical reports.

<u>Groundwater Results:</u>

All seven (7) groundwater samples collected September 19 and 20, 2022 recorded one or more PFAS compounds. PFOA was recorded at concentrations ranging from 5.1 ng/L (AMS-OW-05) to 24 ng/L (AMS-OW-03). PFOS was recorded at concentrations ranging from an estimated 0.91 ng/L (AMS-OW-8) to 51 ng/L (AMS-OW-2). Five (5) concentrations recorded for PFOA and PFOS at three (3) locations (AMS-OW-02, AMS-OW-03, and AMS-OW-04) are above the 10 ng/L screening level. Refer to **Table 4A** for additional details.

Ten (10) PFAS compounds were detected but do not have corresponding screening levels. Those compounds include: 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid, PFBS, PFBA, PFDA, PFHpS, PFHpA, PFHxS, PFHxA, PFNA, and PFPeA. These compounds ranged in concentration from an estimated 0.46 ng/L (PFDA) to 60 ng/L (PFHxA). Refer to Table 4A for additional details.

Groundwater samples were additionally analyzed for artificial sweeteners (including sucralose and acesulfame-k) and nitrate to evaluate the potential migration of septic derived wastewater to

groundwater. Artificial sweetener results are used solely as a qualitive screening tool by the NYSDEC to evaluate this potential. Acesulfame-K was detected in all groundwater samples with concentrations ranging from 0.0097 µg/L to 3.3 µg/L. Sucralose was detected in samples collected from four (4) monitoring wells and results ranged from 0.38 µg/L to 12 µg/L. The maximum detections of sucralose and acesulfame-k were both identified in monitoring wells adjacent to the Middle School's septic system. Nitrate was detected in all eight (8) groundwater samples and results ranged from 0.13 mg/L to 14 mg/L. The detection of 14 mg/L, which is above the groundwater standard of 10 mg/L, was identified in AMS-OW-03 which is adjacent to the septic system of the middle school. Refer to **Tables 4B and 4C** for additional details. Refer to Appendix A for the laboratory analytical reports.

Surface water and sediment on the Middle School property were sampled and analyzed as part of the investigation completed by CDM Smith. Further discussion on the findings and conclusions of the investigation of the Algonquin Middle School property are discussed within the main PFAS assessment report provided by CDM smith.

This report was prepared by Aztech with review and editorial input by the NYSDEC.

Respectfully submitted,

Aztech Environmental Technologies (a LaBella Company)

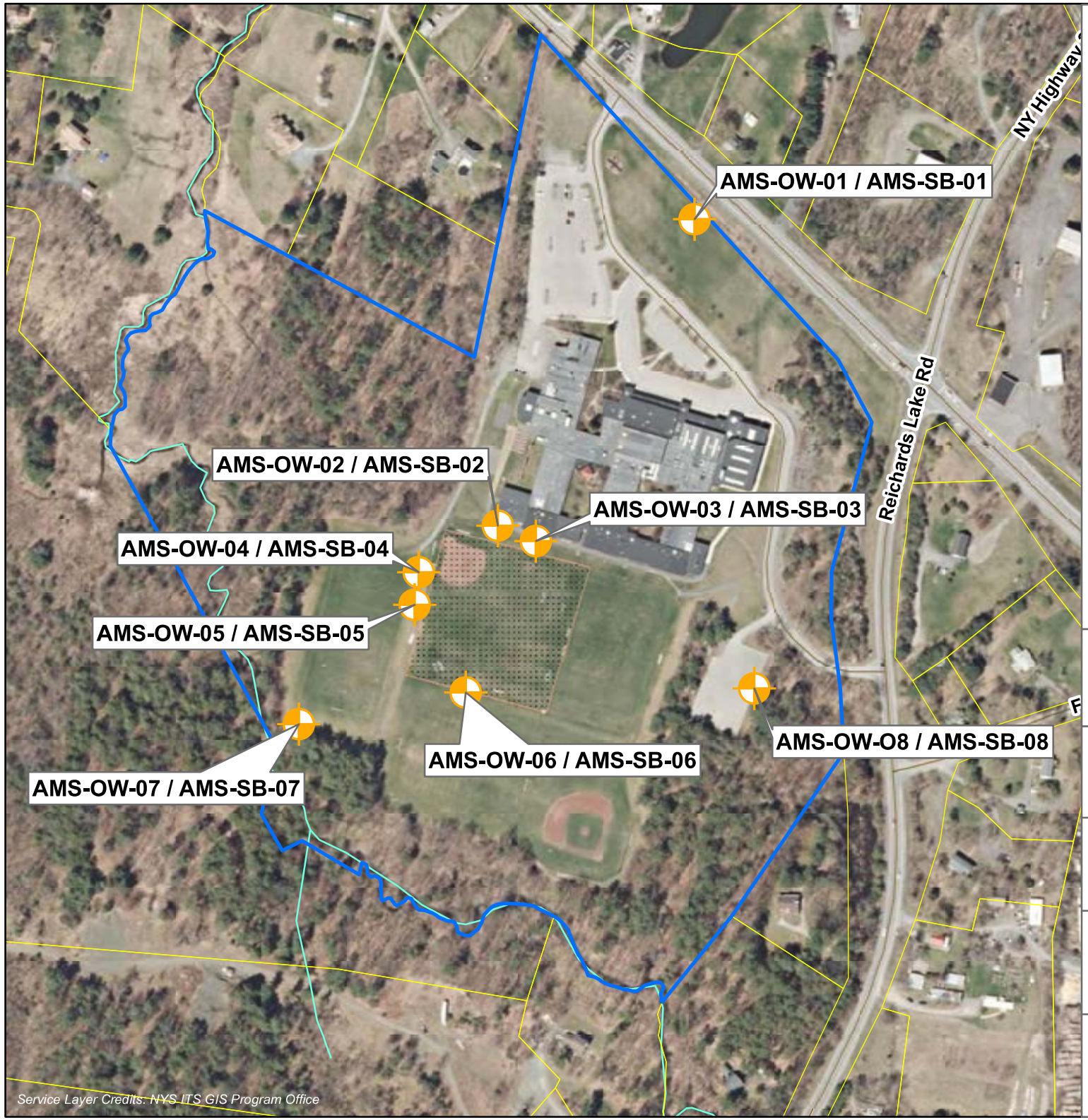
Todd Rollend
Environmental Scientist

I Randy Hoose certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10). All investigation and activities were performed in full accordance with the work plan provided by the NYSDEC.

Randy Hoose, P.G.
Senior Hydrogeologist

Attachments:
Figure 1 – Site Map
Table 2 – Equipment Blank, PFAS Results
Table 3 – Soil, PFAS Results
Table 4A – Groundwater, PFAS Results
Table 4B – Groundwater, Artificial Sweetener Results
Table 4C – Groundwater, Nitrate & Nitrite Results
Boring Logs
Well Development Logs
Low-Flow Stabilization Sampling Logs
Appendix – A: Laboratory Analytical Reports

# FIGURE




## Legend

N

- Algonquin Middle School
- Tax Parcels
- Stream

### Location Type

- Overburden Monitoring Well/Soil Boring

0 150 300 600 Feet

**Groundwater sample was not collected from AMS-OW-07 / AMS-SB-07 due to lack of overburden groundwater*

Algonquin Middle School

Figure 1
Sample Locations

Rensselaer County
Town of Poestenkill

**Algonquin Middle School**
**PFAS Assessment**
**#2105197**

NEW YORK STATE | Department of Environmental Conservation

# TABLES

**Table 2**
**Algonquin Middle School**
**Equipment Blank, PFAS Results**

| | | | Client Sample ID: | | EQUIPMENT BLANK | | EQUIPMENT BLANK | |
|---|---|---|---|---|---|---|---|---|
| | | | Lab Sample ID: | | 480-201814-3 | | 480-201900-6 | |
| | | | Sample Date: | | 9/19/2022 | | 9/20/2022 | |
| | | | Sample Type Code: | | EB | | EB | |
| Analyte | Unit | NYSDEC Guidelines[1] | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS) | ng/L | NC | < 0.61 | U | NA | | NA | |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | ng/L | NC | < 0.58 | U | < 1.7 | U | < 1.8 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | ng/L | NC | < 0.27 | U | NA | | NA | |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | ng/L | NC | < 0.35 | U | < 4.4 | U | < 4.5 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ng/L | NC | < 0.33 | U | NA | | NA | |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid (9Cl-PF3ONS) | ng/L | NC | < 0.37 | U | NA | | NA | |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | ng/L | NC | < 0.23 | U | NA | | NA | |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | ng/L | NC | < 0.6 | U | NA | | NA | |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | ng/L | NC | < 0.72 | U | NA | | NA | |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | ng/L | NC | NA | | < 4.4 | U | < 4.5 | U |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | ng/L | NC | NA | | < 4.4 | U | < 4.5 | U |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | ng/L | NC | < 0.26 | U | NA | | NA | |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | ng/L | NC | < 0.22 | U | NA | | NA | |
| Perfluoro-1-butanesulfonamide (FBSA) | ng/L | NC | < 0.18 | U | NA | | NA | |
| Perfluoro-1-hexanesulfonamide (FHxSA) | ng/L | NC | < 0.29 | U | NA | | NA | |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | ng/L | NC | < 0.39 | U | NA | | NA | |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | ng/L | NC | < 0.32 | U | NA | | NA | |
| Perfluorobutanesulfonic acid (PFBS) | ng/L | NC | < 0.27 | U | < 1.7 | U | < 1.8 | U |
| Perfluorobutanoic Acid (PFBA) | ng/L | NC | < 0.7 | U | < 4.4 | U | < 4.5 | U |
| Perfluorodecanesulfonic acid (PFDS) | ng/L | NC | < 0.31 | U | < 1.7 | U | < 1.8 | U |
| Perfluorodecanoic acid (PFDA) | ng/L | NC | < 0.46 | U | < 1.7 | U | < 1.8 | U |
| Perfluorododecanoic acid (PFDoA) | ng/L | NC | < 0.42 | U | < 1.7 | U | < 1.8 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | ng/L | NC | < 0.89 | U | < 1.7 | U | < 1.8 | U |
| Perfluoroheptanoic acid (PFHpA) | ng/L | NC | < 0.33 | U | < 1.7 | U | < 1.8 | U |
| Perfluorohexanesulfonic acid (PFHxS) | ng/L | NC | < 0.32 | U | < 1.7 | U | < 1.8 | U |
| Perfluorohexanoic acid (PFHxA) | ng/L | NC | < 0.36 | U | < 1.7 | U | < 1.8 | U |
| Perfluorononanesulfonic Acid (PFNS) | ng/L | NC | < 0.16 | U | NA | | NA | |
| Perfluorononanoic acid (PFNA) | ng/L | NC | < 0.33 | U | < 1.7 | U | < 1.8 | U |
| Perfluorooctane Sulfonamide (PFOSA) | ng/L | NC | < 0.4 | U | < 1.7 | U | < 1.8 | U |
| Perfluorooctanesulfonic acid (PFOS) | ng/L | 10 | < 0.57 | U | < 1.7 | U | < 2.4 | U |
| Perfluorooctanoic acid (PFOA) | ng/L | 10 | < 0.64 | U | < 1.7 | U | < 1.8 | U |
| Perfluoropentanesulfonic Acid (PFPeS) | ng/L | NC | < 0.24 | U | NA | | NA | |
| Perfluoropentanoic Acid (PFPeA) | ng/L | NC | < 0.37 | U | < 1.7 | U | < 1.8 | U |
| Perfluorotetradecanoic acid (PFTeDA) | ng/L | NC | < 0.35 | U | < 1.7 | U | < 1.8 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | ng/L | NC | < 0.26 | U | < 1.7 | U | < 1.8 | U |
| Perfluoroundecanoic Acid (PFUnA) | ng/L | NC | < 0.35 | U | < 1.7 | U | < 1.8 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

Sample Type Code: EB - Equipment Blank

ng/L - nanogram per liter = parts per trillion (ppt)

NC - No criteria currently exists

NA - Compound was not analyzed for

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

**Table 3**
**Algonquin Middle School**
**Soil, PFAS Results**

| | | | | Client Sample ID: | AMS-SB-01 0-2IN | | AMS-SB-01 72-84IN | | AMS-SB-02A 0-2IN | | AMS-SB-02A 2-12IN | | AMS-SB-02A 144-156IN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | 22H1545-07 | | 22H1545-09 | | 22H1546-04 | | 22H1546-05 | | 22H1546-06 | |
| | | | | Location ID: | AMS-SB-01 | | AMS-SB-01 | | AMS-SB-02A | | AMS-SB-02A | | AMS-SB-02A | |
| | | | | Sample Date: | 8/24/2022 | | 8/24/2022 | | 8/23/2022 | | 8/23/2022 | | 8/23/2022 | |
| | | | | Sample Type Code: | N | | N | | N | | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Residential Use Guidance Value[1] | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.14 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.14 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.13 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U | < 0.13 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.089 | U | < 0.085 | U | < 0.086 | U | < 0.085 | U | < 0.093 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.11 | U | < 0.11 | U | < 0.12 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.16 | U | < 0.15 | U | < 0.15 | U | < 0.15 | U | < 0.16 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.12 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U | < 0.13 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.23 | U | < 0.22 | U | < 0.22 | U | < 0.22 | U | < 0.24 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.14 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.14 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.088 | U | < 0.084 | U | < 0.085 | U | < 0.084 | U | < 0.092 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.075 | U | < 0.072 | U | < 0.072 | U | < 0.072 | U | < 0.079 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.08 | U | < 0.076 | U | < 0.076 | U | < 0.076 | U | < 0.083 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.15 | U | < 0.15 | U | < 0.15 | U | < 0.15 | U | < 0.16 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.15 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U | < 0.15 | U |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.092 | U | < 0.087 | U | < 0.088 | U | < 0.087 | U | < 0.096 | U |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.089 | U | < 0.085 | U | < 0.086 | U | < 0.085 | U | < 0.093 | U |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.074 | U | < 0.071 | U | < 0.071 | U | < 0.071 | U | < 0.078 | U |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | < 0.065 | U | < 0.062 | U | < 0.062 | U | < 0.061 | U | < 0.067 | U |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | 0.34 | J | < 0.11 | U | < 0.12 | U |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | 0.11 | J | < 0.059 | U | 0.60 | | < 0.059 | U | < 0.065 | U |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.074 | U | < 0.071 | U | 0.22 | J | < 0.071 | U | < 0.078 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.15 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U | < 0.15 | U |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | 0.11 | J | < 0.067 | U | < 0.067 | U | < 0.066 | U | < 0.073 | U |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.078 | U | < 0.074 | U | < 0.074 | U | < 0.074 | U | < 0.081 | U |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | < 0.091 | U | < 0.086 | U | 0.13 | J | 0.11 | J | < 0.094 | U |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.12 | U | < 0.14 | U |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | 0.22 | J | < 0.076 | U | 0.10 | J | < 0.076 | U | < 0.083 | U |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.095 | U | < 0.09 | U | < 0.091 | U | < 0.09 | U | < 0.099 | U |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 8.8 | 0.49 | | < 0.063 | U | 0.45 | J | 0.39 | J | 1.00 | |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 6.6 | 0.47 | J | < 0.13 | U | 0.15 | J | < 0.13 | U | < 0.14 | U |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.071 | U | < 0.068 | U | < 0.068 | U | < 0.067 | U | < 0.074 | U |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | 0.076 | J | < 0.071 | U | 0.15 | J | 0.10 | J | < 0.078 | U |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.093 | U | < 0.088 | U | 0.10 | J | < 0.088 | U | < 0.097 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.11 | U | < 0.1 | U | < 0.1 | U | < 0.1 | U | < 0.11 | U |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | 0.10 | J | < 0.084 | U | 0.23 | J | < 0.084 | U | < 0.092 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

Sample Type Code: N - Normal, FD -Field Duplicate
µg/kg - microgram per kilogram = parts per billion (ppb)
NC - No criteria currently exists
U - Compound was not detected at the reporting limit shown
J - An estimated value
**Bold - Indicates the compound was detected**
Highlighted - Indicates the compound was detected above Unrestricted Use guidance value
Highlighted - Indicates the compound was detected above Residential Use guidance value

**Table 3**
**Algonquin Middle School**
**Soil, PFAS Results**

| | | | | Client Sample ID: | AMS-SB-03 0-2IN | | AMS-SB-03 84-96IN | | AMS-SB-04 0-2IN | | AMS-SB-04 2-12IN | | AMS-SB-04 168-180IN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | 22H1545-01 | | 22H1545-03 | | 22H1546-01 | | 22H1546-02 | | 22H1546-03 | |
| | | | | Location ID: | AMS-SB-03 | | AMS-SB-03 | | AMS-SB-04 | | AMS-SB-04 | | AMS-SB-04 | |
| | | | | Sample Date: | 8/24/2022 | | 8/24/2022 | | 8/23/2022 | | 8/23/2022 | | 8/23/2022 | |
| | | | | Sample Type Code: | N | | N | | N | | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Residential Use Guidance Value[1] | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.12 | U | < 0.14 | U | < 0.14 | U | < 0.13 | U | < 0.13 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.12 | U | < 0.13 | U | < 0.13 | U | < 0.12 | U | < 0.12 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.082 | U | < 0.092 | U | < 0.089 | U | < 0.084 | U | < 0.083 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.1 | U | < 0.11 | U | < 0.11 | U | < 0.1 | U | < 0.1 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.14 | U | < 0.16 | U | < 0.15 | U | < 0.15 | U | < 0.14 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.11 | U | < 0.12 | U | < 0.12 | U | < 0.11 | U | < 0.11 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.21 | U | < 0.24 | U | < 0.23 | U | < 0.22 | U | < 0.22 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.12 | U | < 0.14 | U | < 0.14 | U | < 0.13 | U | < 0.13 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.081 | U | < 0.091 | U | < 0.088 | U | < 0.083 | U | < 0.082 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.069 | U | < 0.077 | U | < 0.075 | U | < 0.071 | U | < 0.07 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.073 | U | < 0.082 | U | < 0.079 | U | < 0.075 | U | < 0.074 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.14 | U | < 0.16 | U | < 0.15 | U | < 0.14 | U | < 0.14 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.13 | U | < 0.15 | U | < 0.15 | U | < 0.14 | U | < 0.14 | U |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.084 | U | < 0.094 | U | < 0.091 | U | < 0.086 | U | < 0.085 | U |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.082 | U | < 0.092 | U | < 0.089 | U | < 0.084 | U | < 0.083 | U |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.068 | U | < 0.076 | U | < 0.074 | U | < 0.07 | U | < 0.069 | U |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | < 0.059 | U | < 0.066 | U | < 0.064 | U | < 0.061 | U | < 0.06 | U |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | < 0.1 | U | < 0.12 | U | 0.13 | J | < 0.11 | U | < 0.11 | U |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | 0.12 | J | < 0.064 | U | < 0.062 | U | < 0.059 | U | < 0.058 | U |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.068 | U | < 0.076 | U | < 0.074 | U | < 0.07 | U | < 0.069 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.13 | U | < 0.15 | U | < 0.15 | U | < 0.14 | U | < 0.14 | U |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | < 0.064 | U | < 0.072 | U | < 0.07 | U | < 0.066 | U | < 0.065 | U |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.071 | U | < 0.079 | U | < 0.077 | U | < 0.073 | U | < 0.072 | U |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | < 0.083 | U | < 0.093 | U | < 0.09 | U | 0.089 | J | < 0.084 | U |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.12 | U | < 0.13 | U | < 0.13 | U | < 0.12 | U | < 0.12 | U |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | 0.11 | J | < 0.082 | U | < 0.079 | U | < 0.075 | U | < 0.074 | U |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.087 | U | < 0.097 | U | < 0.095 | U | < 0.089 | U | < 0.088 | U |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 8.8 | 0.93 | | 0.17 | J | 0.30 | J | 0.20 | J | < 0.061 | U |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 6.6 | < 0.13 | U | < 0.14 | U | < 0.14 | U | < 0.13 | U | 0.20 | J |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.065 | U | < 0.073 | U | < 0.071 | U | < 0.067 | U | < 0.066 | U |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | < 0.068 | U | < 0.076 | U | < 0.074 | U | < 0.07 | U | < 0.069 | U |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.085 | U | < 0.095 | U | < 0.092 | U | < 0.087 | U | < 0.086 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.099 | U | < 0.11 | U | < 0.11 | U | < 0.1 | U | < 0.1 | U |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | < 0.081 | U | < 0.091 | U | 0.11 | J | < 0.083 | U | < 0.082 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

Sample Type Code: N - Normal, FD -Field Duplicate
µg/kg - microgram per kilogram = parts per billion (ppb)
NC - No criteria currently exists
U - Compound was not detected at the reporting limit shown
J - An estimated value
**Bold - Indicates the compound was detected**
Highlighted - Indicates the compound was detected above Unrestricted Use guidance value
Highlighted - Indicates the compound was detected above Residential Use guidance value

**Table 3**
**Algonquin Middle School**
**Soil, PFAS Results**

| | | | | Client Sample ID: | | AMS-SB-05 0-2IN | | DUPLICATE AMS | | AMS-SB-05 2-12IN | | AMS-SB-05 180-192IN | | AMS-SB-06 0-2IN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | | 22H1360-04 | | 22H1360-10 | | 22H1360-05 | | 22H1360-06 | | 22H1360-07 | |
| | | | | Location ID: | | AMS-SB-05 | | AMS-SB-05 0-2IN | | AMS-SB-05 | | AMS-SB-05 | | AMS-SB-06 | |
| | | | | Sample Date: | | 8/22/2022 | | 8/22/2022 | | 8/22/2022 | | 8/22/2022 | | 8/22/2022 | |
| | | | | Sample Type Code: | | N | | FD | | N | | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Residential Use Guidance Value[1] | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.13 | U | < 0.13 | U | < 0.12 | U | < 0.15 | U | < 0.12 | U | | |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.12 | U | < 0.12 | U | < 0.11 | U | < 0.14 | U | < 0.11 | U | | |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.082 | U | < 0.085 | U | < 0.08 | U | < 0.096 | U | < 0.081 | U | | |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.1 | U | < 0.11 | U | < 0.099 | U | < 0.12 | U | < 0.1 | U | | |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.14 | U | < 0.15 | U | < 0.14 | U | < 0.17 | U | < 0.14 | U | | |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.11 | U | < 0.12 | U | < 0.11 | U | < 0.13 | U | < 0.11 | U | | |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.22 | U | < 0.22 | U | < 0.21 | U | < 0.25 | U | < 0.21 | U | | |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.13 | U | < 0.13 | U | < 0.12 | U | < 0.15 | U | < 0.12 | U | | |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.081 | U | < 0.084 | U | < 0.079 | U | < 0.095 | U | < 0.08 | U | | |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.069 | U | < 0.072 | U | < 0.067 | U | < 0.081 | U | < 0.069 | U | | |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.073 | U | < 0.076 | U | < 0.071 | U | < 0.086 | U | < 0.073 | U | | |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.14 | U | < 0.15 | U | < 0.14 | U | < 0.17 | U | < 0.14 | U | | |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.13 | U | < 0.14 | U | < 0.13 | U | < 0.16 | U | < 0.13 | U | | |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.084 | U | < 0.087 | U | < 0.081 | U | < 0.098 | U | < 0.083 | U | | |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.082 | U | < 0.085 | U | < 0.08 | U | < 0.096 | U | < 0.081 | U | | |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.068 | U | < 0.071 | U | < 0.066 | U | < 0.08 | U | < 0.068 | U | | |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | 0.30 | J | < 0.062 | U | < 0.058 | U | < 0.069 | U | < 0.059 | U | | |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | 0.29 | J | 0.27 | J | < 0.1 | U | < 0.12 | U | < 0.1 | U | | |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | < 0.058 | U | < 0.06 | U | < 0.056 | U | < 0.067 | U | < 0.057 | U | | |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.068 | U | < 0.071 | U | < 0.066 | U | < 0.08 | U | < 0.068 | U | | |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.13 | U | < 0.14 | U | < 0.13 | U | < 0.16 | U | < 0.13 | U | | |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | 0.13 | J | < 0.067 | U | < 0.062 | U | < 0.075 | U | < 0.064 | U | | |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.071 | U | < 0.074 | U | < 0.069 | U | < 0.083 | U | < 0.071 | U | | |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | 0.18 | J | < 0.086 | U | < 0.081 | U | < 0.097 | U | < 0.082 | U | | |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.12 | U | < 0.13 | U | < 0.12 | U | < 0.14 | U | < 0.12 | U | | |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | < 0.073 | U | < 0.076 | U | < 0.071 | U | < 0.086 | U | < 0.073 | U | | |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.087 | U | < 0.09 | U | < 0.084 | U | < 0.1 | U | < 0.086 | U | | |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 8.8 | 0.58 | | 0.55 | | 0.14 | J | < 0.071 | U | 0.25 | J | | |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 6.6 | 0.21 | J | 0.37 | J | < 0.12 | U | < 0.15 | U | < 0.13 | U | | |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.066 | U | < 0.068 | U | < 0.063 | U | < 0.076 | U | < 0.065 | U | | |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | 0.25 | J | < 0.071 | U | < 0.066 | U | < 0.08 | U | < 0.068 | U | | |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.085 | U | < 0.088 | U | < 0.082 | U | < 0.1 | U | < 0.084 | U | | |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.1 | U | < 0.1 | U | < 0.097 | U | < 0.12 | U | < 0.099 | U | | |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | < 0.081 | U | < 0.084 | U | < 0.079 | U | < 0.095 | U | < 0.08 | U | | |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

Sample Type Code: N - Normal, FD -Field Duplicate
µg/kg - microgram per kilogram = parts per billion (ppb)
NC - No criteria currently exists
U - Compound was not detected at the reporting limit shown
J - An estimated value
**Bold - Indicates the compound was detected**
Highlighted - Indicates the compound was detected above Unrestricted Use guidance value
Highlighted - Indicates the compound was detected above Residential Use guidance value

**Table 3**
**Algonquin Middle School**
**Soil, PFAS Results**

| | | | | Client Sample ID: | AMS-SB-06 2-12IN | | AMS-SB-06 216-240IN | | AMS-SB-07 0-2IN | | AMS-SB-07 2-12IN | | AMS-SB-07 120-132IN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | 22H1360-08 | | 22H1360-09 | | 22H1360-01 | | 22H1360-02 | | 22H1360-03 | |
| | | | | Location ID: | AMS-SB-06 | | AMS-SB-06 | | AMS-SB-07 | | AMS-SB-07 | | AMS-SB-07 | |
| | | | | Sample Date: | 8/22/2022 | | 8/22/2022 | | 8/22/2022 | | 8/22/2022 | | 8/22/2022 | |
| | | | | Sample Type Code: | N | | N | | N | | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Residential Use Guidance Value[1] | | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | | < 0.12 | U | < 0.15 | U | < 0.13 | U | < 0.13 | U | < 0.14 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | | < 0.12 | U | < 0.14 | U | < 0.12 | U | < 0.12 | U | < 0.13 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | | < 0.082 | U | < 0.099 | U | < 0.084 | U | < 0.085 | U | < 0.091 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | | < 0.1 | U | < 0.12 | U | < 0.1 | U | < 0.11 | U | < 0.11 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | | < 0.14 | U | < 0.17 | U | < 0.15 | U | < 0.15 | U | < 0.16 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | | < 0.11 | U | < 0.14 | U | < 0.11 | U | < 0.12 | U | < 0.12 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | | < 0.22 | U | < 0.26 | U | < 0.22 | U | < 0.22 | U | < 0.24 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | | < 0.13 | U | < 0.15 | U | < 0.13 | U | < 0.13 | U | < 0.14 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | | < 0.081 | U | < 0.098 | U | < 0.083 | U | < 0.084 | U | < 0.09 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | | < 0.069 | U | < 0.084 | U | < 0.071 | U | < 0.072 | U | < 0.077 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | | < 0.073 | U | < 0.088 | U | < 0.075 | U | < 0.076 | U | < 0.081 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | | < 0.14 | U | < 0.17 | U | < 0.14 | U | < 0.15 | U | < 0.16 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | | < 0.13 | U | < 0.16 | U | < 0.14 | U | < 0.14 | U | < 0.15 | U |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | | < 0.084 | U | < 0.1 | U | < 0.086 | U | < 0.087 | U | < 0.094 | U |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | | < 0.082 | U | < 0.099 | U | < 0.084 | U | < 0.085 | U | < 0.091 | U |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | | < 0.068 | U | < 0.082 | U | < 0.07 | U | < 0.071 | U | < 0.076 | U |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | | < 0.059 | U | < 0.072 | U | < 0.061 | U | 0.073 | J | < 0.066 | U |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | | < 0.1 | U | < 0.13 | U | 0.17 | J | < 0.11 | U | < 0.12 | U |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | | < 0.058 | U | < 0.069 | U | < 0.059 | U | < 0.059 | U | < 0.064 | U |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | | < 0.068 | U | < 0.082 | U | < 0.07 | U | < 0.071 | U | < 0.076 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | | < 0.13 | U | < 0.16 | U | < 0.14 | U | < 0.14 | U | < 0.15 | U |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | | < 0.064 | U | < 0.078 | U | < 0.066 | U | < 0.067 | U | < 0.072 | U |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | | < 0.071 | U | < 0.086 | U | < 0.073 | U | < 0.074 | U | < 0.079 | U |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | | < 0.083 | U | < 0.1 | U | < 0.085 | U | < 0.086 | U | < 0.092 | U |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | | < 0.12 | U | < 0.15 | U | < 0.12 | U | < 0.13 | U | < 0.13 | U |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | | < 0.073 | U | < 0.088 | U | < 0.075 | U | < 0.076 | U | < 0.081 | U |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | | < 0.087 | U | < 0.11 | U | < 0.089 | U | < 0.09 | U | < 0.097 | U |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 8.8 | | 0.063 | J | < 0.073 | U | 0.38 | J | 0.19 | J | 0.084 | J |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 6.6 | | < 0.13 | U | 0.20 | J | < 0.13 | U | 0.26 | J | < 0.14 | U |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | | < 0.065 | U | < 0.079 | U | < 0.067 | U | < 0.068 | U | < 0.073 | U |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | | < 0.068 | U | < 0.082 | U | < 0.07 | U | < 0.071 | U | < 0.076 | U |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | | < 0.085 | U | < 0.1 | U | < 0.087 | U | < 0.088 | U | < 0.095 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | | < 0.1 | U | < 0.12 | U | < 0.1 | U | < 0.1 | U | < 0.11 | U |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | | < 0.081 | U | < 0.098 | U | < 0.083 | U | < 0.084 | U | < 0.09 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

Sample Type Code: N - Normal, FD -Field Duplicate
µg/kg - microgram per kilogram = parts per billion (ppb)
NC - No criteria currently exists
U - Compound was not detected at the reporting limit shown
J - An estimated value
**Bold - Indicates the compound was detected**
Highlighted - Indicates the compound was detected above Unrestricted Use guidance value
Highlighted - Indicates the compound was detected above Residential Use guidance value

**Table 3**
**Algonquin Middle School**
**Soil, PFAS Results**

| | | | Client Sample ID: | AMS-SB-08A 0-2IN | | AMS-SB-08A 192-204IN | |
|---|---|---|---|---|---|---|---|
| | | | Lab Sample ID: | 22H1545-04 | | 22H1545-06 | |
| | | | Location ID: | AMS-SB-08A | | AMS-SB-08A | |
| | | | Sample Date: | 8/24/2022 | | 8/24/2022 | |
| | | | Sample Type Code: | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Residential Use Guidance Value[1] | Result | Qualifier | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.15 | U | < 0.12 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.14 | U | < 0.12 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.098 | U | < 0.082 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.12 | U | < 0.1 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.17 | U | < 0.14 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.13 | U | < 0.11 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.26 | U | < 0.21 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.15 | U | < 0.13 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.096 | U | < 0.081 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.082 | U | < 0.069 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.087 | U | < 0.073 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.17 | U | < 0.14 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.16 | U | < 0.13 | U |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.1 | U | < 0.084 | U |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.098 | U | < 0.082 | U |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.081 | U | < 0.068 | U |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | < 0.071 | U | < 0.059 | U |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | < 0.12 | U | < 0.1 | U |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | < 0.068 | U | < 0.057 | U |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.081 | U | < 0.068 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.16 | U | < 0.13 | U |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | < 0.076 | U | < 0.064 | U |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.085 | U | < 0.071 | U |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | < 0.099 | U | < 0.083 | U |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.14 | U | < 0.12 | U |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | < 0.087 | U | < 0.073 | U |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.1 | U | < 0.087 | U |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 8.8 | 0.086 | J | 0.14 | J |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 6.6 | < 0.15 | U | < 0.13 | U |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.078 | U | < 0.065 | U |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | < 0.081 | U | < 0.068 | U |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.1 | U | < 0.085 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.12 | U | < 0.1 | U |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | < 0.096 | U | < 0.081 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

Sample Type Code: N - Normal, FD -Field Duplicate
µg/kg - microgram per kilogram = parts per billion (ppb)
NC - No criteria currently exists
U - Compound was not detected at the reporting limit shown
J - An estimated value
**Bold - Indicates the compound was detected**
Highlighted - Indicates the compound was detected above Unrestricted Use guidance value
Highlighted - Indicates the compound was detected above Residential Use guidance value

Table 4A
Algonquin Middle School
Groundwater, PFAS Results

| | | | Client Sample ID: | AMS-OW-01-20220919 | | AMS-OW-02-20220920 | | AMS-OW-03-20220920 | | AMS-OW-04-20220920 | | AMS-OW-05-20220920 | | FIELD DUP-20220920 | | AMS-OW-06-20220920 | | AMS-OW-08-20220919 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Lab Sample ID: | 480-201814-1 | | 480-201900-1 | | 480-201900-2 | | 480-201900-3 | | 480-201900-4 | | 480-201900-7 | | 480-201900-5 | | 480-201814-2 | |
| | | | Location ID: | AMS-OW-01 | | AMS-OW-02 | | AMS-OW-03 | | AMS-OW-04 | | AMS-OW-05 | | AMS-OW-05 | | AMS-OW-06 | | AMS-OW-08 | |
| | | | Sample Date: | 9/19/2022 | | 9/20/2022 | | 9/20/2022 | | 9/20/2022 | | 9/20/2022 | | 9/20/2022 | | 9/20/2022 | | 9/19/2022 | |
| | | | Sample Type Code: | N | | N | | N | | N | | N | | FD | | N | | N | |
| Analyte | Unit | NYSDEC Guidelines[1] | | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | ng/L | NC | | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.9 | U | < 1.9 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | ng/L | NC | | < 4.5 | U | < 4.5 | U | 1.3 | J | < 4.6 | U | < 4.5 | U | < 4.6 | U | < 4.8 | U | < 4.8 | U |
| N-ethyl perfluorooctanesulfonamidoacetic acid | ng/L | NC | | < 4.5 | U | < 4.5 | U | < 4.6 | U | < 4.6 | U | < 4.5 | U | < 4.6 | U | < 4.8 | U | < 4.8 | U |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | ng/L | NC | | < 4.5 | U | < 4.5 | U | < 4.6 | U | < 4.6 | U | < 4.5 | U | < 4.6 | U | < 4.8 | U | < 4.8 | U |
| Perfluorobutanesulfonic acid (PFBS) | ng/L | NC | | 0.93 | J | 3.4 | | 1 | J | 0.63 | J | < 1.8 | U | < 1.8 | U | < 1.9 | U | 0.65 | J |
| Perfluorobutanoic Acid (PFBA) | ng/L | NC | | 4.6 | | 5.7 | | 15 | | 9.4 | | 6.3 | | 5.6 | | < 4.8 | U | 4.3 | J |
| Perfluorodecanesulfonic acid (PFDS) | ng/L | NC | | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.9 | U | < 1.9 | U |
| Perfluorodecanoic acid (PFDA) | ng/L | NC | | < 1.8 | U | < 1.8 | U | 2.2 | | 1.1 | J | 0.46 | J | < 1.8 | U | < 1.9 | U | < 1.9 | U |
| Perfluorododecanoic acid (PFDoA) | ng/L | NC | | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.9 | U | < 1.9 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | ng/L | NC | | < 1.8 | U | 0.82 | J | 0.72 | J | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.9 | U | < 1.9 | U |
| Perfluoroheptanoic acid (PFHpA) | ng/L | NC | | 0.71 | J | 2.7 | | 7.5 | | 2.7 | | 1.6 | J | 1.4 | J | < 1.9 | U | 2.7 | |
| Perfluorohexanesulfonic acid (PFHxS) | ng/L | NC | | 0.97 | J | 1.1 | J | 1.6 | J | 1.2 | J | 0.71 | J | 0.64 | J | 0.67 | J | 0.73 | J |
| Perfluorohexanoic acid (PFHxA) | ng/L | NC | | < 1.8 | U | 12 | | 60 | | 39 | | 24 | | 21 | | 1.1 | J | 4.8 | |
| Perfluorononanoic acid (PFNA) | ng/L | NC | | < 1.8 | U | 1.4 | J | 4.2 | | 1.6 | J | 0.84 | J | 0.72 | J | < 1.9 | U | 0.57 | J |
| Perfluorooctane Sulfonamide (FOSA) | ng/L | NC | | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.9 | U | < 1.9 | U |
| Perfluorooctanesulfonic acid (PFOS) | ng/L | 10 | | 1.9 | | 51 | | 18 | | 13 | | 6.6 | | 5.5 | | < 1.9 | U | 0.91 | J |
| Perfluorooctanoic acid (PFOA) | ng/L | 10 | | 6.8 | | 12 | | 24 | | 10 | | 5.1 | | 4.3 | | < 1.9 | U | 6.5 | |
| Perfluoropentanoic Acid (PFPeA) | ng/L | NC | | < 1.8 | U | 9.9 | | 58 | | 25 | | 16 | | 14 | | 1 | J | 5.8 | |
| Perfluorotetradecanoic acid (PFTA) | ng/L | NC | | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.9 | U | < 1.9 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | ng/L | NC | | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.9 | U | < 1.9 | U |
| Perfluoroundecanoic Acid (PFUnA) | ng/L | NC | | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.8 | U | < 1.9 | U | < 1.9 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

ng/L - nanogram per liter = parts per trillion (ppt)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

**Table 4B**
**Algonquin Middle School**
**Groundwater, Artificial Sweetener Results**

| | Client Sample ID: | | AMS-OW-01-20220919 | | AMS-OW-02-20220920 | | AMS-OW-03-20220920 | | AMS-OW-04-20220920 | | AMS-OW-05-20220920 | | FIELD DUP-20220920 | | AMS-OW-06-20220920 | | AMS-OW-08-20220919 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Lab Sample ID: | | 22I1081-01 | | 22I1174-01 | | 22I1174-02 | | 22I1174-03 | | 22I1174-04 | | 22I1174-06 | | 22I1174-05 | | 22I1081-02 | |
| | Location ID: | | AMS-OW-01 | | AMS-OW-02 | | AMS-OW-03 | | AMS-OW-04 | | AMS-OW-05 | | AMS-OW-05 | | AMS-OW-06 | | AMS-OW-08 | |
| | Sample Date: | | 9/19/2022 | | 9/20/2022 | | 9/20/2022 | | 9/20/2022 | | 9/20/2022 | | 9/20/2022 | | 9/20/2022 | | 9/19/2022 | |
| | Sample Type Code: | | N | | N | | N | | N | | N | | FD | | N | | N | |
| Analyte | Screening Criteria | Unit | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| Acesulfame K | NC | µg/L | <0.0096 | U | **0.0097** | | **0.24** | | **3.3** | | **2.3** | | **2.2** | | **0.12** | | **0.02** | |
| Sucralose | NC | µg/L | <0.024 | U | **0.38** | | **12** | | **3.2** | | **2.1** | | **2** | | <0.024 | | <0.024 | |

Notes:
Sample Type Code: N - Normal, FD -Field Duplicate
µg/L - microgram per liter = parts per billion (ppb)
NC - No criteria currently exists
U - Compound was not detected at the reporting limit shown
**Bold - Indicates the compound was detected**

**Table 4C**
**Algonquin Middle School**
**Groundwater, Nitrate Nitrite Results**

| | Client Sample ID: | | AMS-OW-01-20220919 | | AMS-OW-02-20220920 | | AMS-OW-03-20220920 | | AMS-OW-04-20220920 | | AMS-OW-05-20220920 | | FIELD DUP-20220920 | | AMS-OW-06-20220920 | | AMS-OW-08-20220919 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Lab Sample ID: | | 22I1081-01 | | 22I1174-01 | | 22I1174-02 | | 22I1174-03 | | 22I1174-04 | | 22I1174-06 | | 22I1174-05 | | 22I1081-02 | |
| | Location ID: | | AMS-OW-01 | | AMS-OW-02 | | AMS-OW-03 | | AMS-OW-04 | | AMS-OW-05 | | AMS-OW-05 | | AMS-OW-06 | | AMS-OW-08 | |
| | Sample Date: | | 9/19/2022 | | 9/20/2022 | | 9/20/2022 | | 9/20/2022 | | 9/20/2022 | | 9/20/2022 | | 9/20/2022 | | 9/19/2022 | |
| | Sample Type Code: | | N | | N | | N | | N | | N | | FD | | N | | N | |
| Analyte | NYS Class GA[1] | Unit | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| Nitrate (as N) | 10 | mg/L | **0.61** | | **0.22** | | **14** | **H-04** | **9.6** | **H-04** | **8.2** | **H-04** | **8.0** | **H-04** | **3.8** | **MS-07** | **0.13** | |
| Nitrite (as N) | 1 | mg/L | < 0.100 | U | < 0.100 | U | < 0.100 | U | < 0.100 | U | < 0.100 | U | < 0.100 | U | < 0.100 | U | < 0.100 | U |

Notes:
[1]New York State Department of Environmental Conservation, Technical and Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised June 1998.
Sample Type Code: N - Normal, FD -Field Duplicate
mg/L - milligram per liter = parts per million (ppm)
U - Compound was not detected at the reporting limit shown
H-04 - Initial analysis within holding time. Reanalysis for required dilution was past holding time
MS-07 - Matrix spike recovery is outside of control limits. Possible low bias for reported result
**Bold - Indicates the compound was detected**
Highlighted - Indicates the compound was detected above applicable criteria

# BORING LOGS

MONITORING WELL / BORING NO. **AMS-OW-01 / AMS-SB-01**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 24, 2022

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

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B. Baulsir

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

Drilled TD: 9' (Dia): 2" | Sampled TD: See samples collected (Dia): 2"

Well TD: 9' (Dia): 2" | Well Type: PVC

Screen Interval: 9-4' | Slot Size: 0.010" | Diameter: 2-inch

Cased Interval: 4.0 - 0' | Type: PVC | Diameter: 2-inch

Sand Pack Interval: 9-2' | Type: #2 | Wellhead Prot: Flush Mount

Bentonite Seal Interval: 2-0.5' | Type: Chips | Grouted Interval: N/A

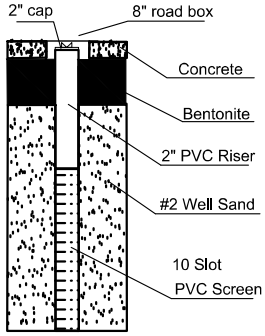
LaBella
Powered by partnership

**Soil Samples Collected:**

**AMS-SB-01 0-2"**

**AMS-SB-01 2-12"**

**AMS-SB-01 72-84"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 |   | Hand cleared | 6.1 | 0" - 1.0' Brown, dry, fine SAND and SILT, some fine Gravel |
| | | S-1: 1.0' - 5.0'<br>Rec: 3.5'/4.0' | < 1.0 | 1.0' - 4.5' Brown, moist, organics, coarse to fine SAND and SILT (topsoil), some shale fragments, some fine rounded Gravel (fill material) |
| 5 | | | | 4.5' - 9.0' Gray, dry, SILT and fine SAND some weathered rock becomes wet at 7 fbg |
| | | S-2: 5.0' - 9.0'<br>Rec: 4.0'/4.0' | < 1.0 | ▼ |
| | | | | Weathered bedrock (shale) fragments in sampler to end of boring (refusal) @ 9' |
| 10 | | | | 9' |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **AMS-OW-02 / AMS-SB-02A**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 23, 2022

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

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: S. Vaverchak

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

Drilled TD: 16' (Dia): 2" | Sampled TD: See samples collected (Dia):

Well TD: 16' (Dia): 2" | Well Type: PVC

Screen Interval: 16' - 6' | Slot Size: 0.010" | Diameter: 2"

Cased Interval: 6.0' - Grade | Type: PVC | Diameter: 2"

Sand Pack Interval: 16' - 4.0' | Type: #2 | Wellhead Prot: Flush Mount

Bentonite Seal Interval: 4.0' - 2.0' | Type: chips | Grouted Interval: N/A

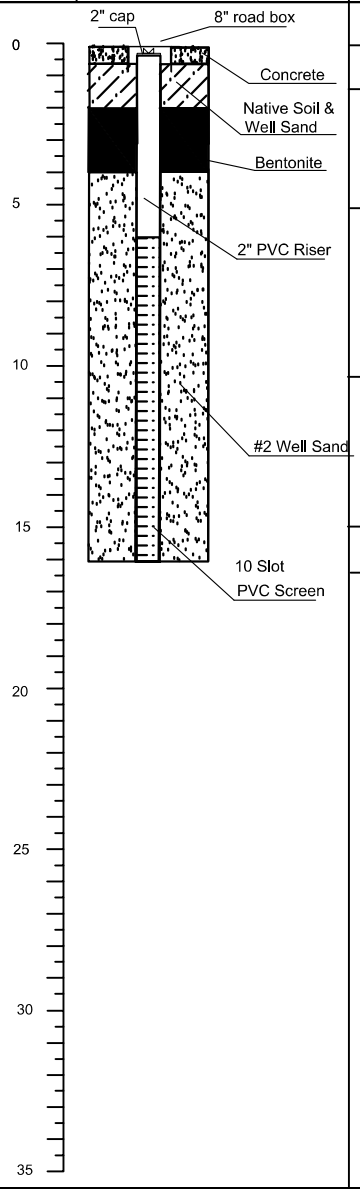
LaBella Powered by partnership.

**Soil Samples Collected:**

**AMS-SB-02A 0-2"**

**AMS-SB-02A 2-12"**

**AMS -SB-02A 144-156"**




| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| | | | | |
| | | Hand cleared | 2.7 | 0" - 1.0' Brown, dry, organics, coarse to fine SAND some Gravel |
| | | S-1: 1.0' - 5.0' Rec: 2.0'/4.0' | < 6.0 | 1.0' - 5.0' Brown fine to medium SAND and GRAVEL fragments (fill) |
| | | S-2: 5.0' - 10' Rec: 2.0'/5.0' | < 1.0 | 5.0' - 16' Brown fine to medium SAND, some Silt, intermittent Gravel layers (fill) |
| | | S-3: 10' - 15' Rec: 5.0'/5.0' | < 1.0 | ▼ Wet at 13.0' |
| | | S-4: 15' - 16' Rec: 1.0'/1.0' | < 1.0 | End of boring (refusal), gray shale fragments in sampler shoe @ 16' |
| | | | | 16' |

MONITORING WELL / BORING NO. **AMS-OW-03 / AMS-SB-03**

Site Name: Algonquin Middle School | Date Drilled: August 24, 2022

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

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B. Baulsir

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

Drilled TD: 14.5' (Dia): 2" | Sampled TD: See samples collected (Dia):

Well TD: 14.5 (Dia): 2" | Well Type: PVC

Screen Interval: 14.5' - 4.5' | Slot Size: 0.010" | Diameter: 2-inch

Cased Interval: 4.5' - Grade | Type: Sch 40 PVC | Diameter: 2-inch

Sand Pack Interval: 14.5' - 2.5' | Type: #2 | Wellhead Prot: Flush Mount

Bentonite Seal Interval: 2.5' - 1.0' | Type: Benchips | Grouted Interval: NA

LaBella Powered by partnership.

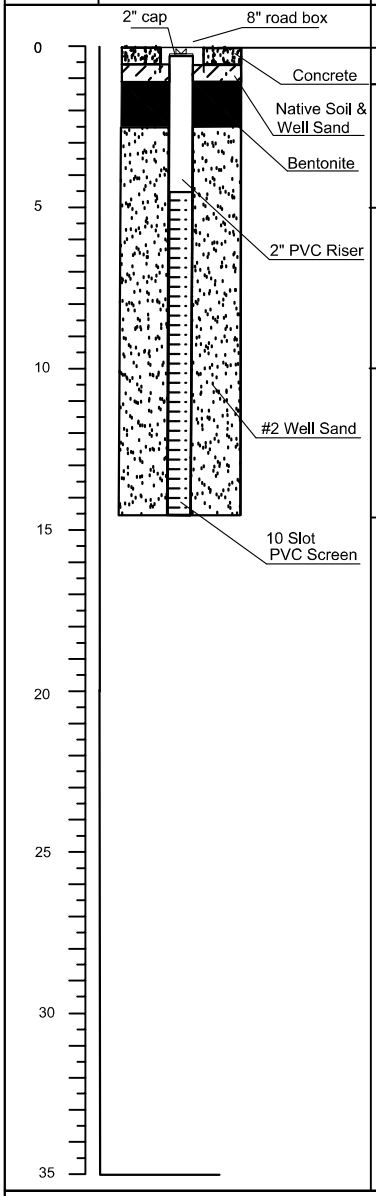
**Soil Samples Collected:**

**AMS-SB-03 0"-2"**

**AMS-SB-03 0"-2" MS/MSD**

**AMS-SB-03 2"-12"**

**AMS-SB-03 84"-96"**




| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| | | Hand cleared | 2.7 | 0.0' - 1.0' Brown, dry, organics, fine SAND and SILT (topsoil) trace fine Gravel |
| | | S-1: 1.0' - 5.0' Rec: 4.0'/4.0' | < 1.0 | 1.0' - 5.0' Brown, dry, fine SAND and GRAVEL some Silt, becomes fine SAND with interbedding SILT bands from 4 fbg to 5 fbg. |
| | | S-2: 5.0' - 10' Rec: 5.0'/5.0' | < 1.0 | 5.0' - 10' Brown, dry, fine SAND and fine GRAVEL some Silt. Gravel increasing in size with depth to approximately 10 fbg. ▼ Wet at 8.5' |
| | | S-3: 10' - 14.5' Rec: 4.5'/4.5' | 6.2 | As above, wet, fine SAND and increasing weathered shale fragments with depth to refusal @ 14.5' |
| | | | | 14.5' |

MONITORING WELL / BORING NO. **AMS-OW-04 / AMS-SB-04**

Site Name: Algonquin Middle School | Date Drilled: August 23, 2022

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

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: S. Vaverchak

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

Drilled TD: 18' (Dia): 2" | Sampled TD: See samples collected (Dia):

Well TD: 18' (Dia): 2" | Well Type: PVC

Screen Interval: 18' - 8.0' | Slot Size: 0.010" | Diameter: 2-inch

Cased Interval: 8.0' - grade | Type: Sch 40 PVC | Diameter: 2-inch

Sand Pack Interval: 18' - 6.0' | Type: #2 | Wellhead Prot: Flush Mount

Bentonite Seal Interval: 6.0' - 4.0' | Type: Benchips | Grouted Interval: NA

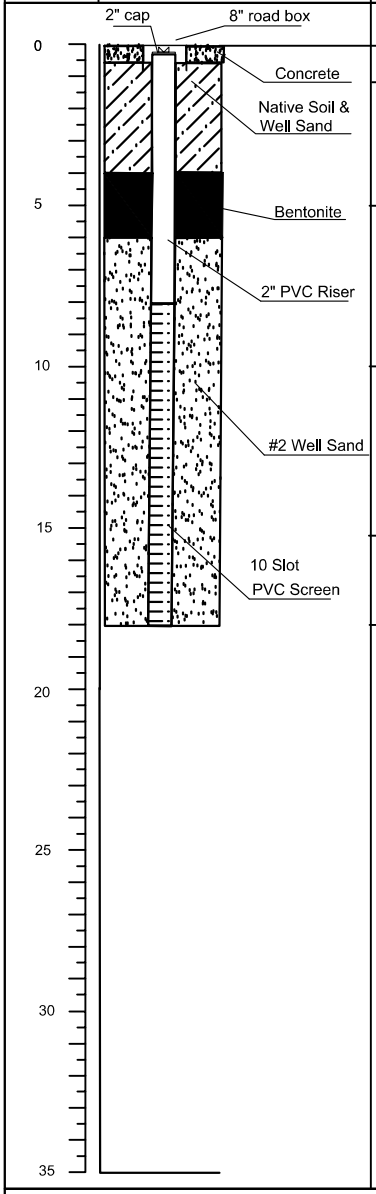
LaBella Powered by partnership.

**Soil Samples Collected:**

**AMS-SB-04 0"-2"**

**AMS-SB-04 2"-12"**

**AMS-SB-04 168" - 180"**




| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| | | Hand cleared | 2.9 | 0.0' - 1.0' Brown, dry, organics, fine SAND and SILT (topsoil) |
| | | S-1: 1.0' - 5.0' Rec: 2.5'/4.0' | 4.8 | 1.0' - 15' Brown, dry, fine SAND some Silt. Increasing medium and coarse Sand with depth. Becomes wet at 15 fbg. |
| | | S-2: 5.0' - 10' Rec: 4.0'/5.0' | 3.6 | |
| | | S-3: 10' - 15' Rec: 3.0'/5.0' | 3.1 | Brown, moist - wet, medium to coarse SAND, some Silt. Wet at 15' ▼ |
| | | S-4: 15' - 18' Rec: 3.0'/3.0' | < 1.0 | 15' - 16' Brown, wet, fine SAND<br>16' -18' Brown, wet SILTY CLAY, shale fragments to sampler refusal @ 18' |
| | | | | 18' |

MONITORING WELL / BORING NO. **AMS-OW-05 / AMS-SB-05**

Site Name: NYSDEC - Algonquin Middle School  Date Drilled: August 22, 2022

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

Client: NYSDEC  Driller: Mario Pineda

Phone No.: N/A  Logged by: B. Baulsir

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

Drilled TD: 17' (Dia): 2"  Sampled TD: see samples collected (Dia):

Well TD: 17' (Dia): 2"  Well Type: PVC

Screen Interval: 17-7'  Slot Size: 0.010"  Diameter: 2-inch

Cased Interval: 7-0'  Type: PVC  Diameter: 2-inch

Sand Pack Interval: 17-5'  Type: #2  Wellhead Prot: Flush Mount

Bentonite Seal Interval: 5-3'  Type: Chips  Grouted Interval: N/A

LaBella Powered by partnership.

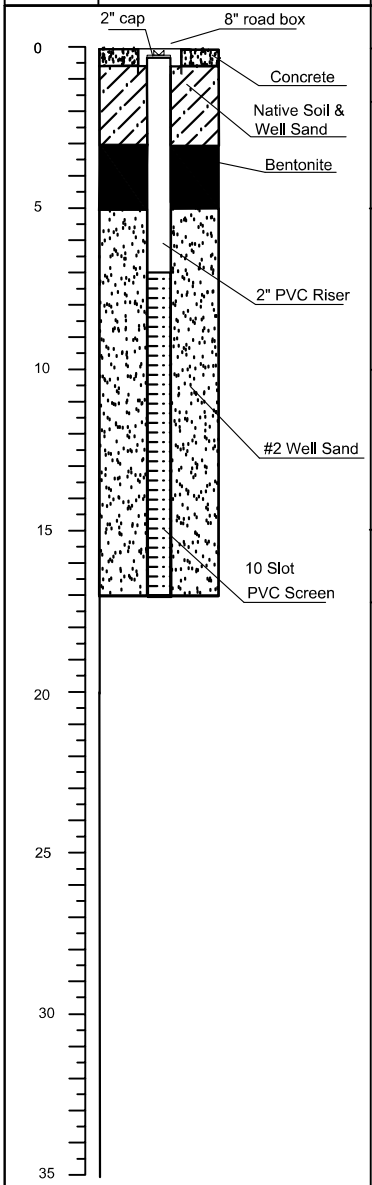
**Soil Samples Collected:**

**AMS-SB-05 0-2"**

**AMS-SB-05 2-12"**

**AMS-SB-05 180-192"**

**Duplicate Parent SB-05 0-2"**




| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| | | | | |
| | | Hand cleared | < 1.0 | 0" - 1.0' Brown, dry, organics, fine SAND and SILT (topsoil) trace small angular Gravel (shale fragments) |
| | | S-1: 1.0' - 5.0' Rec: 3.0'/4.0' | 7.8 | 1.0' - 5.5' Brown, dry, fine SAND and SILT |
| | | S-2: 5.0' - 10' Rec: 2.5'/5.0' | 8.7 | 5.5' - 6.5' Brown, dry, coarse to fine SAND trace Silt<br>6.5' - 17' Brown, dry, fine SAND and SILT becomes wet at 15 fbg |
| | | S-3: 10' - 15' Rec: 5.0'/5.0' | 3.2 | ▼ |
| | | S-4: 15' - 17' Rec: 2.0'/2.0' | 3.1 | End of boring (refusal), shale fragments in sampler shoe @ 17' |
| | | | | 17' |

MONITORING WELL / BORING NO. **AMS-OW-06 / AMS-SB-06**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 22, 2022

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

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B. Baulsir

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

Drilled TD: 24' (Dia): 2" | Sampled TD: see samples collected (Dia):

Well TD: 24' (Dia): 2" | Well Type: PVC

Screen Interval: 24' - 14' | Slot Size: 0.010" | Diameter: 2-inch

Cased Interval: 14' - Grade' | Type: PVC | Diameter: 2-inch

Sand Pack Interval: 24' - 12' | Type: #2 | Wellhead Prot: Flush Mount

Bentonite Seal Interval: 12' - 10' | Type: Chips | Grouted Interval: N/A

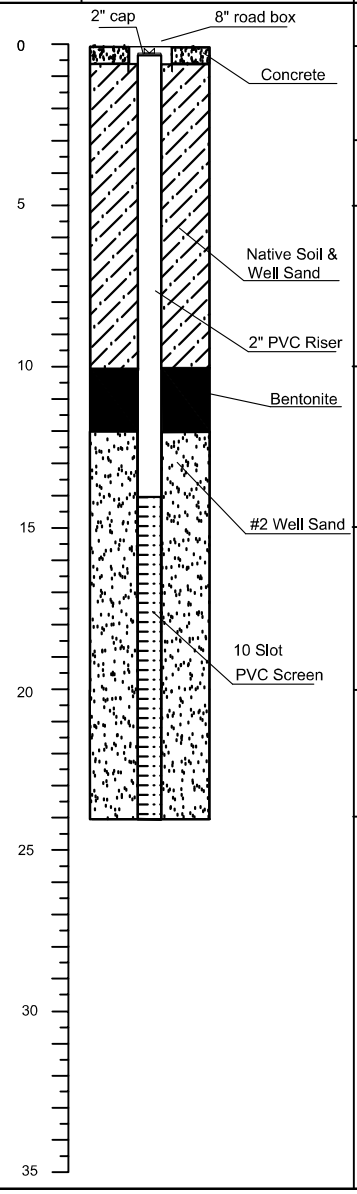
LaBella Powered by partnership.

**Soil Samples Collected:**

**AMS-SB-06 0"- 2"**

**AMS-SB-06 2"-12"**

**AMS-SB-06 216" - 240"**




| Depth (Feet) | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|
| | | | |
| | Hand cleared | 4.3 | 0.0' - 1.0' Brown, dry, organics, fine SAND and SILT (topsoil) |
| | | | 1.0' - 12' Brown, dry, medium to fine SAND and SILT |
| | S-1: 3.0' - 5.0' Rec: 2.0'/2.0' | 6.7 | |
| | S-2: 5.0' - 10' Rec: 2.5'/5.0' | 1.3 | |
| | S-3: 10' - 15' Rec: 2.5'/5.0' | < 1.0 | 12' - 13' Brown, dry, coarse to fine SAND, SILT, fine GRAVEL |
| | | | 13' - 19' Brown, dry, wet at 17', interbedded coarse to fine SAND and SILT lamina, |
| | S-4: 15' - 20' Rec: 4.0'/5.0' | < 1.0 | ▼ wet at 17' |
| | | | 19' - 24' Brown , wet, fine SAND and SILT to shale fragments in sampler shoe @ 24' |
| | S-5: 20' - 24' Rec: 4.0'/4.0' | < 1.0 | |
| | | | 24' |

MONITORING WELL / BORING NO. **AMS-OW-07 / AMS-SB-07**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 22, 2022

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

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B. Baulsir

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

Drilled TD: 12' (Dia): 2" | Sampled TD: see samples collected (Dia):

Well TD: 11' (Dia): 2" | Well Type: PVC

Screen Interval: 11' - 6.0' | Slot Size: 0.010" | Diameter: 2-inch

Cased Interval: 6.0' - Grade' | Type: PVC | Diameter: 2-inch

Sand Pack Interval: 12' - 4.0' | Type: #2 | Wellhead Prot: Flush Mount

Bentonite Seal Interval: 4.0' - 2.0' | Type: Chips | Grouted Interval: N/A

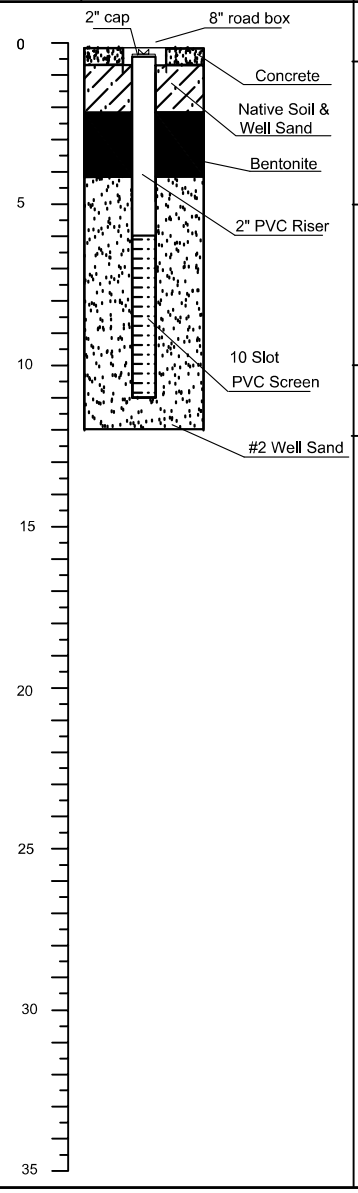
LaBella Powered by partnership

**Soil Samples Collected:**

**AMS-SB-07 0" - 2"**

**AMS-SB-07 2" - 12"**

**AMS-SB-07 120" - 132"**




| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| | | Hand cleared | 6.6 | 0.0' - 1.0' Black, dry, organics, coarse to fine SAND and SILT (topsoil)<br>1.0' - 1.5' SHALE fragments |
| | | S-1: 1.5' - 5.0'<br>Rec: 2.5'/3.5' | 7.1 | 1.5' - 2.0' Gray, dry, fine to coarse SAND, fine Gravel, Silt<br>2.0' - 10' Brown, dry, coarse to fine SAND and Silt |
| | | S-2: 5.0' - 10'<br>Rec: 4.0'/5.0' | 9.1 | |
| | | S-3: 10' - 12'<br>Rec: 2.0'/2.0' | < 1.0 | 10' - 12' Gray, dry, shale fragments to sampler refusal @ 12' |
| | | | | 12' |

MONITORING WELL / BORING NO. **AMS-OW-08 / AMS-SB-08A**

Site Name: Algonquin Middle School | Date Drilled: August 24, 2022

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

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B. Baulsir

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

Drilled TD: 17' (Dia): 2" | Sampled TD: see samples collected (Dia):

Well TD: 17' (Dia): 2" | Well Type: PVC

Screen Interval: 17' - 7' | Slot Size: 0.010" | Diameter: 2-inch

Cased Interval: 7.0' - Grade' | Type: PVC | Diameter: 2-inch

Sand Pack Interval: 17' - 5.0' | Type: #2 | Wellhead Prot: Flush Mount

Bentonite Seal Interval: 5.0' - 3.0' | Type: Chips | Grouted Interval: N/A

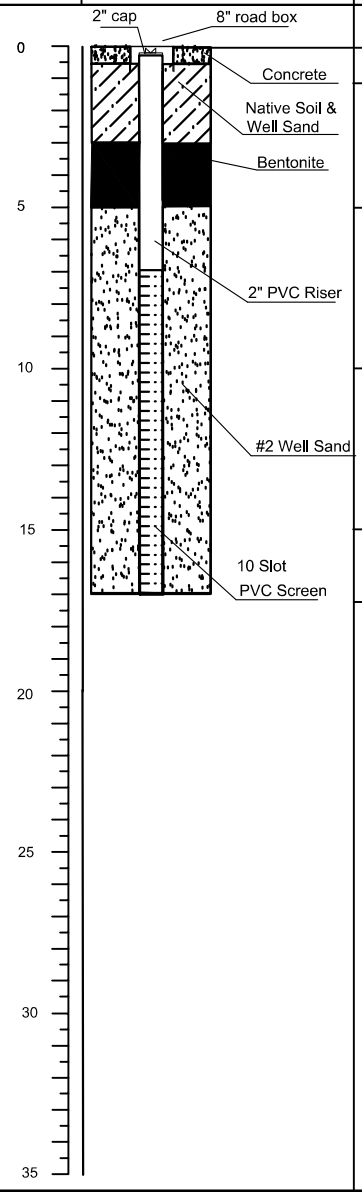
LaBella Powered by partnership.

**Soil Samples Collected:**

**AMS-SB-08A 0"- 2"**

**AMS-SB-08A 2" - 12"**

**AMS-SB-08A 192" - 204"**




| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| | | Hand cleared | < 1.0 | 0.0' - 1.0' Dark Brown, dry, organics, coarse to fine SAND, some silt |
| | | S-1: 1.0' - 5.0' Rec: 2.0'/4.0' | 1.6 | 1.0' - 4.0' Dark Brown to Gray-brown, dry, organics, coarse to fine SAND and fine GRAVEL (angular shale fragments), some Silt |
| | | S-2: 5.0' - 10' Rec: 5.0'/5.0' | 3.7 | 4.0' - 15' Light Brown, dry, fine SAND and SILT, little angular shale fragments |
| | | S-3: 10' - 15' Rec: 5.0'/5.0' | 5.1 | |
| | | S-4: 15' - 17' Rec: 2.0'/2.0' | 11 | 15' - 17' Gray, dry, fine SAND and SILT some weathered gray shale to refusal @ 17' |
| | | | | 17' |

# WELL DEVELOPMENT LOGS

| | |
|---|---|
| **Site Name** | Algonquin Middle School |
| **Site Location** | Averill Park, NY |
| **Well ID** | AMS-OW-01 |
| **Sampled By** | BB+NW |

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**Well Information**

| | |
|---|---|
| **Flush Mount or Riser** | Flush |
| **Measuring Point** | TOC |
| **Measuring Point Elevation** | |
| **Depth to Water (feet)** | 1.88 |
| **Depth to Bottom of Well** | 10.25 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:
± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

| | |
|---|---|
| **Date** | 8/30/2022 |
| **Weather** | Hot 90's Humid |
| **Purging Equipment** | Peristaltic |
| **Sampling Equipment** | Peristaltic/Horiba |
| **Decon Method** | Alconox |
| **Riser Diameter** | 2" |
| **Well Volume Calculation** | |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 810 | 5 gallons manually | | | | | | | 1.88 | |
| 834 | 5 hook up pump | | | | | | | 7.25 | |
| 905 | 8 | 169 | 8.19 | 17.2 | 2.40 | 2.41 | 72 | 6.22 | |
| 910 | 8.5 | 68.9 | 8.18 | 17.19 | 2.84 | 2.40 | 87 | 6.25 | |
| 916 | 10 | 37.2 | 8.19 | 17.19 | 2.48 | 2.41 | 102 | 6.32 | |
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|---|---|
| **Site Name** | Algonquin Middle School |
| **Site Location** | Averill Park, NY |
| **Well ID** | AMS-OW-02 |
| **Sampled By** | BB+NW |

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**Well Information**

| | |
|---|---|
| **Flush Mount or Riser** | Flush |
| **Measuring Point** | TOC |
| **Measuring Point Elevation** | |
| **Depth to Water (feet)** | 11.10 |
| **Depth to Bottom of Well** | 16.11 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:
± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

| | |
|---|---|
| **Date** | 8/30/2022 |
| **Weather** | Hot 90's Humid |
| **Purging Equipment** | Peristaltic |
| **Sampling Equipment** | Peristaltic/Horiba |
| **Decon Method** | Alconox |
| **Riser Diameter** | 2" |
| **Well Volume Calculation** | 0.82 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1120 | 2.5 gallons manually | | | | | | | 11.10 | |
| 1130 | 3 | pump used no horiba | | | | | | 14.91 | |
| 1200 | 3.5 | allowed recharge | | | | | | 15.70 | |
| 1215 | 3.5 | | | | | | | 14.30 | |
| 1220 | 3.75 | 76.3 | 7.66 | 23.79 | 2.91 | 0.472 | 161 | 13.62 | |
| 1225 | 4 | 38 | 7.69 | 23.60 | 0.0 | 0.469 | 156 | 13.75 | |
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|---|---|
| **Site Name** | Algonquin Middle School |
| **Site Location** | Averill Park, NY |
| **Well ID** | AMS-OW-03 |
| **Sampled By** | BB+NW |

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**Well Information**

| | |
|---|---|
| **Flush Mount or Riser** | Flush |
| **Measuring Point** | TOC |
| **Measuring Point Elevation** | |
| **Depth to Water (feet)** | 7.59 |
| **Depth to Bottom of Well** | 13.92 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:
± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

| | |
|---|---|
| **Date** | 8/30/2022 |
| **Weather** | Hot 90's Humid |
| **Purging Equipment** | Peristaltic |
| **Sampling Equipment** | Peristaltic/Horiba |
| **Decon Method** | Alconox |
| **Riser Diameter** | 2" |
| **Well Volume Calculation** | 1.03 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1232 | 4.5 gallons manually | | | | | | | 7.59 | |
| 1247 | 6.5 | pump used ,no horiba | | | | | | 7.59 | |
| 1320 | 7.5 | 15 | 7.82 | 22.78 | 2.91 | 0.742 | 154 | 7.59 | |
| 1331 | 8.5 | 16 | 7.86 | 21.18 | 0.0 | 0.778 | 163 | 7.69 | |
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|---|---|
| **Site Name** | Algonquin Middle School |
| **Site Location** | Averill Park, NY |
| **Well ID** | AMS-OW-04 |
| **Sampled By** | BB+NW |

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**Well Information**

| | |
|---|---|
| **Flush Mount or Riser** | Flush |
| **Measuring Point** | TOC |
| **Measuring Point Elevation** | |
| **Depth to Water (feet)** | 13.74 |
| **Depth to Bottom of Well** | 17.95 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:
± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

| | |
|---|---|
| **Date** | 8/30/2022 |
| **Weather** | Hot 90's Humid |
| **Purging Equipment** | Peristaltic |
| **Sampling Equipment** | Peristaltic/Horiba |
| **Decon Method** | Alconox |
| **Riser Diameter** | 2" |
| **Well Volume Calculation** | 0.69 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1020 | 3 gallons manuall | | | | | | | 13.74 | |
| 1030 | pump with no horiba 4.5 | | | | | | | 15.2 | |
| 1045 | 4.5 | 286 | 7.90 | 17.04 | 8.39 | 0.364 | 152 | 14.13 | |
| 1100 | 5.75 | 122 | 7.74 | 14.33 | 6.03 | 0.371 | 175 | 14.15 | |
| 1108 | 6.75 | 34.3 | 7.75 | 14.87 | 6.35 | 0.371 | 176 | 14.15 | |
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|---|---|
| **Site Name** | Algonquin Middle School |
| **Site Location** | Averill Park, NY |
| **Well ID** | AMS-OW-05 |
| **Sampled By** | BB+NW |

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**Well Information**

| | |
|---|---|
| **Flush Mount or Riser** | Flush |
| **Measuring Point** | TOC |
| **Measuring Point Elevation** | |
| **Depth to Water (feet)** | 14.30 |
| **Depth to Bottom of Well** | 16.80 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:
± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

| | |
|---|---|
| **Date** | 9/1/2022 |
| **Weather** | 80s sunny |
| **Purging Equipment** | Peristaltic |
| **Sampling Equipment** | Peristaltic/Horiba |
| **Decon Method** | Alconox |
| **Riser Diameter** | 2" |
| **Well Volume Calculation** | 0.41 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 940 | 2 purged with bailer | | | | | | | | |
| 950 | 3.0 | pump used with no horiba | | | | | | 14.77 | |
| 1000 | 3.5 | 90.4 | 7.58 | 13.49 | 6.82 | 0.261 | 163 | 14.62 | |
| 1010 | 4.0 | 12 | 7.50 | 13.31 | 7.85 | 0.262 | 182 | 14.61 | |
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|---|---|
| **Site Name** | Algonquin Middle School |
| **Site Location** | Averill Park, NY |
| **Well ID** | AMS-OW-06 |
| **Sampled By** | BB+NW |

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**Well Information**

| | |
|---|---|
| **Flush Mount or Riser** | Flush |
| **Measuring Point** | TOC |
| **Measuring Point Elevation** | |
| **Depth to Water (feet)** | 17.53 |
| **Depth to Bottom of Well** | 24 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:
± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

| | |
|---|---|
| **Date** | 9/1/2022 |
| **Weather** | 80s sunny |
| **Purging Equipment** | Peristaltic |
| **Sampling Equipment** | Peristaltic/Horiba |
| **Decon Method** | Alconox |
| **Riser Diameter** | 2" |
| **Well Volume Calculation** | 1.06 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| - | first 5 with bailer and 5-6 with pump and no horiba | | | | | | | | |
| 909 | 6.0 | 478 | 7.58 | 14.23 | 14.97 | 0.223 | 4.9 | 17.97 | |
| 922 | 7.0 | 206 | 7.26 | 13.27 | 5.68 | 0.208 | 143 | 17.99 | |
| 930 | 7.5 | 27.2 | 7.30 | 13.23 | 6.1400 | 0.202 | 154 | 17.97 | |
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| | |
|---|---|
| **Site Name** | Algonquin Middle School |
| **Site Location** | Averill Park, NY |
| **Well ID** | AMS OW-07 |
| **Sampled By** | BB+NW |

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**Well Information**

| | |
|---|---|
| **Flush Mount or Riser** | Flush |
| **Measuring Point** | TOC |
| **Measuring Point Elevation** | |
| **Depth to Water (feet)** | DRY |
| **Depth to Bottom of Well** | 10.72 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:
± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

| | |
|---|---|
| **Date** | 9/1/2022 |
| **Weather** | 80s sunny |
| **Purging Equipment** | Peristaltic |
| **Sampling Equipment** | Peristaltic/Horiba |
| **Decon Method** | Alconox |
| **Riser Diameter** | 2" |
| **Well Volume Calculation** | |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
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| | |
|---|---|
| **Site Name** | Algonquin Middle School |
| **Site Location** | Averill Park, NY |
| **Well ID** | AMS-OW-08 |
| **Sampled By** | BB+NW |

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**Well Information**

| | |
|---|---|
| **Flush Mount or Riser** | Flush |
| **Measuring Point** | TOC |
| **Measuring Point Elevation** | |
| **Depth to Water (feet)** | 13.31 |
| **Depth to Bottom of Well** | 17.8 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:
± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

| | |
|---|---|
| **Date** | 8/30/2022 |
| **Weather** | Hot 90's Humid |
| **Purging Equipment** | Peristaltic |
| **Sampling Equipment** | Peristaltic/Horiba |
| **Decon Method** | Alconox |
| **Riser Diameter** | 2" |
| **Well Volume Calculation** | 0.732 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 935 | start | | | | | | | 13.31 | |
| 950 | 3 gallons manually | | | | | | | 16.95 | |
| 1020 | 4.0 | start with pump no horiba | | | | | | 16.18 | |
| 1025 | allow recahrge up tp 16 ft and then hook up horiba | | | | | | | 17.38 | |
| 1032 | start with horiba | | | | | | | 16.10 | |
| 1044 | 4.5 | 262 | 7.61 | 15.20 | 3.26 | 0.56 | 11.2 | 16.35 | |
| 1059 | 5.0 | 232 | 7.63 | 14.32 | 4.0 | 0.553 | 134 | 17.3 | |
| 1117 | 6.0 | 10.1 | 7.6 | 15.1 | 3.89 | 0.515 | 152 | 17.6 | |
| | | | | | | | | | |
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# LOW FLOW STABILIZATION SAMPLING LOGS

| | |
|---|---|
| Site Name | Akwesasne M.S. |
| Site Location | Roosevelt, NY |
| Well ID | AMS-OW-01 |
| Sampled By | NW |

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**Well Information**

| | |
|---|---|
| Flush Mount or Riser | flush |
| Measuring Point | TOC |
| Measuring Point Elevation | — |
| Depth to Water | 9.65 - less deep than well can measure. |
| Depth to Bottom of Well | 10.25 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP

± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |

Well Volume Gallons = Multiplier x Length of Water Column

| | |
|---|---|
| Date | 9/9 |
| Weather | partly cloudy → overcast + light rain |
| Purging Equipment | pump |
| Sampling Equipment | pump |
| Decon Method | Alconox |
| Riser Diameter | 2" |
| Well Volume Calculation | 1.566 x 3 = 4.697 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1100 | Purge start | | | | | | | | |
| 1105 | | 68.4 | 7.70 | 22.97 | 0.35 | 2.32 | 3 | 1.68 | > Adjusted rate |
| 1110 | | 68.3 | 7.55 | 22.83 | 0.10 | 2.35 | 12 | 1.82 | |
| 1115 | | 62.2 | 7.41 | 22.70 | 0.0 | 2.35 | 28 | 1.94 | |
| 1120 | 1 Gallon | 58.5 | 7.29 | 22.68 | 0.0 | 2.36 | 43 | 2.05 | |
| 1125 | | 56.8 | 7.21 | 22.78 | 0.0 | 2.33 | 47 | 2.14 | |
| 1130 | | 58.4 | 7.10 | 22.69 | 0.0 | 2.33 | 41 | 2.14 | |
| 1135 | | 53.8 | 6.89 | 22.52 | 0.0 | 2.35 | 63 | 2.19 | |
| 1140 | 2 gallon | 52.5 | 6.73 | 22.59 | 0.0 | 2.36 | 79 | 2.23 | |
| 1145 | | 51.3 | 6.54 | 22.79 | 0.0 | 2.34 | 93 | 2.29 | |
| 1150 | | 50.5 | 6.47 | 23.03 | 0.0 | 2.30 | 102 | 2.35 | |
| 1155 | | 49.5 | 6.42 | 22.83 | 0.0 | 2.30 | 105 | 2.37 | |
| 1200 | 3 gallon | 47.5 | 6.43 | 22.53 | 0.0 | 2.29 | 99 | 2.38 | |
| 1205 | | 48.6 | 6.46 | 21.96 | 0.0 | 2.31 | 102 | 2.39 | |
| 1210 | | 49.2 | 6.50 | 21.82 | 0.0 | 2.32 | 80 | 2.40 | |
| 1215 | | 49.3 | 6.53 | 21.47 | 0.0 | 2.33 | 83 | 2.42 | |
| 1220 | 4 gallon | 48.7 | 6.53 | 21.46 | 0.0 | 2.34 | 85 | 2.43 | |

| | |
|---|---|
| Site Name | AMS |
| Site Location | Poestenkill, NY |
| Well ID | AMS-OW-01 |
| Sampled By | NW |

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Well Information

| | |
|---|---|
| Flush Mount or Riser | Flush |
| Measuring Point | TOC |
| Measuring Point Elevation | — |
| Depth to Water | ~0.65 |
| Depth to Bottom of Well | 10.25 |

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| | |
|---|---|
| Date | 7/19/22 |
| Weather | Overcast |
| Purging Equipment | Peristaltic |
| Sampling Equipment | Peristaltic |
| Decon Method | Alconox |
| Riser Diameter | 2" |
| Well Volume Calculation | 1.56 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1225 | | 49.4 | 6.53 | 21.61 | 0.0 | 2.33 | 86 | 2.44 | |
| 1230 | Sample | | | | | | | | |
| ~~1235~~ | | | | | | | | | |

| | |
|---|---|
| Site Name | NYSDEC Algonquin |
| Site Location | Middle School Peekskill NY |
| Well ID | AMS-GW-02 |
| Sampled By | MW |

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**Well Information**

| | |
|---|---|
| Flush Mount or Riser | flush |
| Measuring Point | TOC |
| Measuring Point Elevation | — |
| Depth to Water | 10.69 |
| Depth to Bottom of Well | 16.10 |

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |

Well Volume Gallons = Multiplier x Length of Water Column

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| | |
|---|---|
| Date | 9/20 |
| Weather | overcast |
| Purging Equipment | P. Pump #1 |
| Sampling Equipment | P. Pump #1 |
| Decon Method | Alconox |
| Riser Diameter | 2" |
| Well Volume Calculation | 2.647 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1150 | ~~1080~~ Purge start | | | | | | | | |
| 1155 | ~~1088~~ .25 | 51.0 | 7.25 | 20.82 | 1.98 | .535 | -55 | 10.95 | |
| 1200 | ~~1100~~ .50 | 46.9 | 7.16 | 20.83 | 1.72 | .518 | -38 | 11.20 | |
| 1205 | .75 | 50.1 | 7.08 | 20.92 | 1.68 | .484 | +5 | 11.34 | |
| 1210 | 1.0 | 45.5 | 7.03 | 21.03 | 1.71 | .476 | 24 | 11.47 | |
| 1215 | 1.25 | 48.2 | 6.99 | 21.10 | 1.73 | .474 | 43 | 11.58 | |
| 1220 | 1.50 | 51.5 | 6.98 | 21.34 | 1.71 | .466 | 57 | 11.74 | |
| 1225 | 1.75 | 53.2 | 6.97 | 21.37 | 1.69 | .465 | 60 | 11.83 | |
| 1230 | 2.0 | 54.2 | 6.97 | 21.46 | 1.65 | .462 | 62 | 11.88 | |
| 1235 | 2.25 | 58.5 | 6.96 | 21.54 | 1.60 | .457 | 64 | 11.95 | |
| 1240 | 2.50 | 73.3 | 6.95 | 20.48 | 1.55 | .468 | 59 | 12.04 | |
| 1245 | 2.75 | 81.0 | 6.93 | 20.47 | 1.43 | .469 | 63 | 12.45 | |
| 1250 | 3.0 | 93.2 | 6.90 | 19.91 | 0.0 | .475 | 59 | 13.16 | |
| 1255 | 3.25 | 100 | 6.86 | [illegible] | 0.10 | .479 | 57 | 13.35 | |
| 1300 | 3.50 | 73.8 | 6.78 | 20.87 | 0.78 | .478 | 51 | 13.92 | |
| 1305 | 3.75 | 51.9 | 6.75 | 19.22 | 1.24 | .506 | 46 | 14.30 | Pumping Rate decrease |
| 1310 | 4.0 | 55.6 | 6.73 | 19.44 | 1.34 | .513 | 46 | 14.25 | |

| | |
|---|---|
| **Site Name** | AMS |
| **Site Location** | Poestenkill, NY |
| **Well ID** | AMS-OW-02 |
| **Sampled By** | MW |

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**Well Information**

| | |
|---|---|
| **Flush Mount or Riser** | Flush |
| **Measuring Point** | TOC |
| **Measuring Point Elevation** | — |
| **Depth to Water** | 10.69 |
| **Depth to Bottom of Well** | 16.10 |

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| | |
|---|---|
| **Date** | 9/25/22 |
| **Weather** | overcast |
| **Purging Equipment** | peristaltic |
| **Sampling Equipment** | peristaltic |
| **Decon Method** | alconox |
| **Riser Diameter** | 2" |
| **Well Volume Calculation** | 2.65 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1315 | | 51.3 | 6.72 | 19.67 | 1.46 | .519 | 45 | 13.86 | |
| 1320 | | 49.6 | 6.72 | 19.42 | 1.58 | .516 | 45 | 13.79 | |
| 1325 | Sample | | | | | | | | |

| | |
|---|---|
| Site Name | AMS |
| Site Location | Poestenkill, NY |
| Well ID | AMS-OW-03 |
| Sampled By | SV |

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Well Information

| | |
|---|---|
| Flush Mount or Riser | Flush |
| Measuring Point | TOC |
| Measuring Point Elevation | — |
| Depth to Water | 7.40 |
| Depth to Bottom of Well | 14.10 |

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| | |
|---|---|
| Date | 7/20/22 |
| Weather | Overcast |
| Purging Equipment | Peristaltic |
| Sampling Equipment | Peristaltic |
| Decon Method | alconox |
| Riser Diameter | 2" |
| Well Volume Calculation | 1.09 |

1340 AMS-OW-03 Sampled for:
EPA 537 PFAS
L221 PFC-Neg active
EPA 300 Nitrogen, Nitrate/Nitrite

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1240 | Began Purge | | | | | | | | |
| 1245 | | 81.2 | 6.16 | 20.47 | 0.73 | 0.557 | 213 | 7.41 | |
| 1250 | 0.5 | 47.5 | 6.23 | 20.62 | 0.42 | 0.547 | 210 | 7.41 | |
| 1255 | | 12.5 | 6.32 | 20.77 | 0.12 | 0.552 | 202 | 7.42 | |
| 1300 | 1.0 | 11.9 | 6.31 | 20.76 | 0.12 | 0.551 | 201 | 7.41 | |
| 1305 | | 13.2 | 6.31 | 20.79 | 0.12 | 0.557 | 201 | 7.42 | |
| 1310 | 1.5 | 18.7 | 6.31 | 20.84 | 0.10 | 0.568 | 199 | 7.42 | |
| 1315 | | 24.2 | 6.32 | 20.81 | 0.05 | 0.561 | 199 | 7.42 | |
| 1320 | 2.0 | 21.3 | 6.32 | 20.93 | 0.10 | 0.566 | 211 | 7.42 | |
| 1325 | | 26.9 | 6.18 | 20.70 | 0.09 | 0.553 | 203 | 7.43 | |
| 1330 | 2.5 | 28.1 | 6.18 | 20.68 | 0.13 | 0.563 | 204 | 7.44 | |
| 1335 | | 29.9 | 6.24 | 20.67 | 0.20 | 0.570 | 202 | 7.44 | |
| | Ended Purge | | | | | | | | |

| | |
|---|---|
| Site Name | AMS |
| Site Location | Peekskill, NY |
| Well ID | AMS-OW-04 |
| Sampled By | SJV |

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Well Information

| | |
|---|---|
| Flush Mount or Riser | Flush |
| Measuring Point | TOC |
| Measuring Point Elevation | — |
| Depth to Water | 14.02 |
| Depth to Bottom of Well | 17.99 |

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| | |
|---|---|
| Date | 9/20/22 |
| Weather | Overcast |
| Purging Equipment | peristaltic |
| Sampling Equipment | peristaltic |
| Decon Method | alconox |
| Riser Diameter | 2" |
| Well Volume Calculation | 0.65 |

1210 AMS-OW-04 sampled for:
EPA 537 PFAS
L221 PAC-Negative
EPA300 Nitrogen, Nitrate/Nitrite

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1100 | Began Purge | | | | | | | | |
| 1105 | | 13.2 | 6.85 | 18.74 | 0.70 | 0.531 | 211 | 14.11 | |
| 1110 | 0.5 | 21.0 | 6.90 | 18.29 | 0.86 | 0.507 | 205 | 14.12 | |
| 1115 | | 51.2 | 6.82 | 17.62 | 1.62 | 0.442 | 199 | 14.12 | |
| 1120 | 1.0 | 10.1 | 6.72 | 17.23 | 2.18 | 0.383 | 193 | 14.16 | |
| 1125 | | 0.3 | 6.54 | 17.16 | 2.43 | 0.360 | 196 | 14.89 | |
| 1130 | 1.5 | 4.7 | 6.48 | 15.88 | 3.98 | 0.357 | 197 | 15.01 | |
| 1135 | | 2.6 | 6.37 | 14.59 | 3.14 | 0.362 | 207 | 14.21 | |
| 1140 | 2.0 | 2.7 | 6.38 | 14.54 | 3.06 | 0.356 | 202 | 14.23 | |
| 1145 | | 3.6 | 6.37 | 14.73 | 3.00 | 0.360 | 204 | 14.26 | |
| 1150 | 2.5 | 4.2 | 6.42 | 14.70 | 2.97 | 0.362 | 202 | 14.27 | |
| 1155 | | ~~5.6~~ 5.6 | 6.41 | 14.48 | 3.06 | 0.363 | 204 | 14.25 | |
| 1200 | 3.0 | 5.7 | 6.44 | 14.52 | 2.99 | 0.369 | 203 | 14.26 | |
| 1205 | | 5.6 | 6.43 | 14.67 | 3.05 | 0.365 | 202 | 14.27 | |
| | Ended Purge | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| | |
|---|---|
| Site Name | AMS |
| Site Location | Peekskill, NY |
| Well ID | AMS-OW-05 |
| Sampled By | SV |

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Well Information

| | |
|---|---|
| Flush Mount or Riser | Flush |
| Measuring Point | TOC |
| Measuring Point Elevation | — |
| Depth to Water | 14.70 |
| Depth to Bottom of Well | 16.86 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

| | |
|---|---|
| Date | 9/20/22 |
| Weather | overcast |
| Purging Equipment | peristaltic |
| Sampling Equipment | peristaltic |
| Decon Method | alconox |
| Riser Diameter | 2" |
| Well Volume Calculation | 0.35 |

1010 AMS-OW-05 sampled for:
EPA 537 PFAS
LZ21 PAC-Negative
EPA 300 Nitrogen, Nitrate/Nitrite

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 0915 | Began Purge | | | | | | | 14.70 | |
| 0920 | | 2.9 | 6.51 | 18.17 | 1.63 | 0.269 | 173 | 14.81 | |
| 0925 | 0.5 | 2.7 | 6.35 | 17.35 | 2.85 | 0.259 | 179 | 14.86 | |
| 0930 | | 2.5 | 6.20 | 16.88 | 4.08 | 0.256 | 187 | 14.86 | |
| 0935 | 1.0 | 3.8 | 6.32 | 16.66 | 4.22 | 0.257 | 187 | 14.84 | |
| 0940 | | 4.3 | 6.29 | 16.53 | 4.14 | 0.257 | 191 | 14.88 | |
| 0945 | 1.5 | 4.8 | 6.25 | 16.47 | 4.23 | 0.257 | 195 | 14.88 | |
| 0950 | | 0.9 | 6.30 | 16.47 | 4.25 | 0.256 | 195 | 14.87 | |
| 0955 | 2.0 | 0.3 | 6.32 | 16.47 | 4.26 | 0.256 | 196 | 14.85 | |
| 1000 | | 0.3 | 6.29 | 16.51 | 4.25 | 0.254 | 197 | 14.87 | |
| 1005 | 2.5 | 0.7 | 6.32 | 16.51 | 4.25 | 0.254 | 199 | 14.88 | |
| | Ended Purge | | | | | | | | |

| | |
|---|---|
| Site Name | AMS |
| Site Location | Poestenkill, NY |
| Well ID | AMS-GW-06 |
| Sampled By | NW |

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**Well Information**

| | |
|---|---|
| Flush Mount or Riser | Flush |
| Measuring Point | TOC |
| Measuring Point Elevation | — |
| Depth to Water | 17.84 |
| Depth to Bottom of Well | 24.05 |

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP

± 10% change in DO and Turbidity

| | |
|---|---|
| Date | 9/20/22 |
| Weather | overcast |
| Purging Equipment | peristaltic |
| Sampling Equipment | peristaltic |
| Decon Method | alconox |
| Riser Diameter | 2" |
| Well Volume Calculation | 1.51 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 0930 | Purge start | | | | | | | | |
| 0935 | .25 | 39.4 | 8.43 | 19.37 | 8.81 | 0.247 | -55 | 18.02 | 300 mL/min |
| 0940 | .50 | 38.6 | 8.15 | 18.53 | 2.58 | 0.239 | -38 | 18.05 | |
| 0945 | .75 | 49.6 | 7.88 | 17.65 | 4.62 | .204 | 13 | 18.08 | |
| 0950 | 1.0 | 44.9 | 7.62 | 17.18 | 5.50 | .189 | 64 | 18.10 | |
| 0955 | 1.25 | 43.2 | 7.49 | 17.02 | 5.58 | .186 | 84 | 18.11 | |
| 1000 | 1.50 | 51.7 | 7.39 | 16.96 | 5.56 | .186 | 102 | 18.13 | |
| 1005 | 1.75 | 49.6 | 7.32 | 16.91 | 5.42 | .186 | 106 | 18.14 | |
| 1010 | 2.0 | 48.2 | 7.26 | 16.83 | 5.48 | .186 | 112 | 18.15 | |
| 1015 | 2.25 | 47.0 | 7.19 | 16.69 | 5.36 | .185 | 118 | 18.16 | |
| 1020 | 2.5 | 46.6 | 7.12 | 16.71 | 5.30 | .184 | 123 | 18.17 | |
| 1025 | Sample | | | | | | | | |

| | |
|---|---|
| Site Name | AMS |
| Site Location | Poestenkill, NY |
| Well ID | AMS-OW-07 |
| Sampled By | — |

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**Well Information**

| | |
|---|---|
| Flush Mount or Riser | Flush |
| Measuring Point | TOC |
| Measuring Point Elevation | — |
| Depth to Water | N/A |
| Depth to Bottom of Well | 10.75 |

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| | |
|---|---|
| Date | 9/20/22 |
| Weather | Overcast |
| Purging Equipment | — |
| Sampling Equipment | — |
| Decon Method | — |
| Riser Diameter | — |
| Well Volume Calculation | — |

AMS-OW-07 was dry

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
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| | |
|---|---|
| Site Name | AMS |
| Site Location | PEEKSKILL, NY |
| Well ID | AMS-OW-08 |
| Sampled By | SV |

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Well Information

| | |
|---|---|
| Flush Mount or Riser | FLUSH |
| Measuring Point | TOC |
| Measuring Point Elevation | ~~TOC~~ |
| Depth to Water | 12.71 |
| Depth to Bottom of Well | 17.88 |

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |

Well Volume Gallons = Multiplier x Length of Water Column

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP

± 10% change in DO and Turbidity

| | |
|---|---|
| Date | 9/19/22 |
| Weather | OVERCAST |
| Purging Equipment | PERISTALTIC |
| Sampling Equipment | PERISTALTIC |
| Decon Method | ALCONOX |
| Riser Diameter | 2" |
| Well Volume Calculation | 0.894 |

1145 AMS-OW-08 sampled for:
EPA 537 PFAS
6221 PAC-Negative
EPA 300 Nitrogen, Nitrate/Nitrite

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1035 | Began Purge | | | | | | | 12.71 ~~17.88~~ | |
| 1040 | | 22.2 | 5.92 | 19.46 | 2.78 | 0.672 | 69 | 13.56 | |
| 1045 | 0.5 | 27.2 | 5.85 | 18.17 | 2.85 | 0.674 | 61 | 13.58 | |
| 1050 | | 22.4 | 5.85 | 17.55 | 3.01 | 0.665 | 131 | 13.70 | |
| 1055 | 1.0 | 14.4 | 6.22 | 15.83 | 3.92 | 0.689 | 121 | 13.74 | |
| 1100 | | 9.5 | 6.16 | 15.93 | 3.89 | 0.676 | 132 | 13.86 | |
| 1105 | 1.5 | 13.7 | 6.06 | 15.61 | 5.26 | 0.675 | 142 | 13.98 | |
| 1110 | | 13.3 | 6.05 | 15.60 | 3.81 | 0.684 | 150 | 14.02 | |
| 1115 | 2.0 | 17.8 | 6.05 | 15.56 | 3.73 | 0.684 | 153 | 14.33 | |
| 1120 | | 33.0 | 6.02 | 15.39 | 3.69 | 0.692 | 159 | 14.83 | |
| 1125 | 2.5 | 25.3 | 6.11 | 15.55 | 3.61 | 0.692 | 158 | 14.91 | |
| 1130 | | 20.7 | 6.13 | 15.56 | 3.58 | 0.682 | 159 | 15.06 | |
| 1135 | 3.0 | 21.4 | 6.13 | 15.56 | 3.53 | 0.691 | 160 | 15.12 | |
| 1140 | | 18.6 | 6.13 | 15.58 | 3.50 | 0.693 | 162 | 15.17 | |
| | Ended purge | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

# LABORATORY ANALYTICAL REPORTS

Aztech Environmental
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March 13, 2023 (Revised 4-18-2023)

Brittany O'Brien-Drake
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233

**RE: Site Summary Report (Rev. 4-18-2023)**
**Algonquin Middle School PFAS Assessment #2105197**
**Waste Management (Poestenkill) Transfer Station, NY 66, Poestenkill, NY**
**Tax parcel ID: 136.-6-7**

Aztech Environmental Technologies Inc. (Aztech), a LaBella company, has provided this report to document overburden soil and groundwater assessment methodologies and sampling results for the above referenced location. All field investigation activities were performed at the discretion of and in accordance with the scope of work (SOW) developed and provided by the New York State Department of Environmental Conservation (NYSDEC).

The property is currently utilized by Waste Management, Inc. (WM) as a municipal transfer station with the transfer station operations primarily located on the western portion. The approximate 13.31-acre parcel is located along the eastern side of the intersection of NY RT 351 and RT 66. A low-lying area is centrally located within the property with a small rise toward the western portion of the property and a low ridge (oriented north to south) located toward the eastern portion of the property. A small pond is located within the low-lying area of the property and is surrounded by a former racecar track. Two unoccupied houses are located at the base of the eastern ridge. The attached **Figure 1** depicts property features and boundaries.

Overburden soil encountered during drilling activities consisted primarily of coarse to fine sand and silt with varying amounts of shale fragments which typically increased in depth to drill tooling refusal. Shale fragments in the sampler shoe at terminal boring depths ranging from 2-feet below grade (fbg) to 15 fbg are noted on the attached boring logs.

Prior to intrusive groundwork, a UDig NY utility clearance ticket was ordered for the property. Additionally, a private utility locating contractor performed utility clearance with ground penetrating radar (GPR) at each boring location on August 11, 2022. Boring locations confirmed as clear were painted white and marked with a white flag.

## SUMMARY OF FIELD INVESTIGATIONS:

### Air monitoring

Air monitoring was conducted during all ground-intrusive work at the property (August 15 and 16, 2022) in accordance with the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan (CAMP). One dedicated Dust Trak unit with photo-ionization detector (PID) was positioned upwind with a second dedicated unit placed downwind at each boring location. No exceedances for volatile organic compounds (VOCs) or particulates were recorded.

## Soil Boring and Monitoring Well Installation

On August 15 and 16, 2022, Clean Globe Environmental (CGE) advanced soil borings (WM-SB-01 through WM-SB-08) utilizing a Geoprobe 7822DT and direct-push techniques to terminal depths ranging from 2 to 15 feet below grade (fbg). Boring locations WM-SB-01 and WM-SB-02 were used to confirm shallow depth to bedrock and as such, were each side-stepped twice and given a location identification ending in "A" and "B". Of the 12 total soil boring locations, 4 were converted to monitoring wells (WM-OW-01 through WM-OW-04). Aztech provided oversight of drilling activities and performed soil headspace screening, soil classification, and both soil and groundwater sampling.

Monitoring wells were installed by over-drilling selected boreholes utilizing 4 ¼" inner diameter (ID) hollow stem augers. The well assembly consisted of 2-inch polyvinyl chloride (PVC) 10-slot screen set to straddle the water table and casing to grade. A number 2 filtration sand was installed to fill the borehole annulus to approximately one (1) to two (2) feet above the screened interval. Bentonite chips were added atop the sand to seal the casing from surface water intrusion and subsequently hydrated with certified per-and polyfluoroalkyl substance (PFAS)-free water. Native soil and well sand were added as needed to the finish grade. Each well was finished within a flush mount road box (WM-OW-01) or a steel stick-up. Each newly installed groundwater monitoring well was developed on August 30, 2022 by using a peristaltic pump and/or bailer to remove a targeted 10 well volumes. Monitoring well specifications are presented below in **Table 1.** Individual boring logs are attached. Monitoring well locations are depicted on the attached Figure 1.

**TABLE 1**

Monitoring Well Specifications

| Well ID | Borehole Depth (Feet) | Well Diameter (Inches) | Screened Interval (Feet) | Sand Packed Interval (Feet) | Bentonite Seal (Feet) | Observed DTW* (Feet) |
|---|---|---|---|---|---|---|
| WM-OW-01 | 12 | 2 | 10 - 5.0 | 10 - 3.5 | 3.5 - 2.5 | 3.34 |
| WM-OW-02 | 15 | 2 | 13 - 3.0 | 13 - 2.0 | 2.0 - 1.0 | 7.79 |
| WM-OW-03 | 15 | 2 | 14 - 4.0 | 14 - 2.0 | 2.0 - 1.0 | 8.92 |
| WM-OW-04 | 13 | 2 | 13 - 3.0 | 13 - 2.0 | 2.0 - 1.0 | 4.34 |

Notes:

Wells drilled/installed by Clean Globe Environmental (CGE)

*Depth to Water (DTW) as measured on September 27, 2022 from top of casing (TOC)

## Surface Water and Sediment Sampling

On August 16, 2022, one (1) surface water sample was collected from the south side of the pond and designated WM-SW-01-20220816. A stainless-steel dip cup, which was decontaminated prior to sample collection, was used to obtain the sample. Subsequent to the surface water sample collection, one (1) sediment sample was collected from the same location (designated as WM-SED-01-20220816) using the stainless-steel dip cup. Both samples were analyzed for PFAS compounds by analytical method 537M. The approximate locations of the sediment and surface water samples are depicted on Figure 1.

## Soil Sampling

Individual soil samples were visually classified and headspace screened with a photo-ionization detector (PID) calibrated to a 100 part per million (ppm) isobutylene calibrant gas. Soil samples from select boring locations were collected from the following depth intervals:

- Surface grade to 2 -inch below grade (BG), beneath vegetative cover,

- 2-inch BG to 12-inch BG, and
- Air/water interface (water table) as observed in borehole.

The actual number of soil samples was dependent on field conditions. A total of sixteen (16) depth discrete subsurface soil samples were collected from the twelve (12) soil borings and analyzed for PFAS compounds by analytical method 537M for soil. Select soil samples (from the 2"BG to 12"BG interval) were analyzed using the Synthetic Precipitation Leaching Procedure (SPLP) by Environmental Protection Agency (EPA) Method 1312 and the leachate was subsequently analyzed for PFAS compounds by analytical method 537M to assess the mobility of contaminants in soil. SPLP PFAS results are not considered reportable as it was determined that Con-Test (a Pace Analytical Laboratory at East Longmeadow, MA and the NYSDEC's contracted lab for this project) did not hold the appropriate ELAP certification for EPA Method 1312 at the time of analysis.

Soil from boring location WM-SB-06 was also analyzed for VOCs by EPA Method 8260, semi-volatile organic compounds (SVOCs) by EPA Method 8270, and polychlorinated biphenyls (PCBs) by EPA Method 8082. These additional analyses were based upon the elevated PID readings, visual, and olfactory evidence of petroleum impact noted at that location.

Additional samples collected for the purpose of quality assurance (quality control (QA/QC)) included two (2) equipment blanks, one matrix spike/matrix spike duplicate (MS/MSD) and one field duplicate. The attached boring logs reference the parent sample for MS/MSD and duplicate samples. Equipment blanks were collected on August 15 and August 16, 2022 and performed on the core barrel equipped with acetate sleeve and a laboratory supplied HDPE soil container respectively.

Laboratory analytical results for the equipment blank sample collected August 15, 2022 recorded concentrations of 6:2 FTS A and FBSA at estimated concentrations (below the laboratory reporting limit (RL)) of 0.72 nanograms per liter (ng/L) and 0.26 ng/L respectively. Laboratory analytical results for the equipment blank collected August 16, 2022 did not record any compounds above the laboratory's minimum RL. Refer to **Table 2** for additional details.

Groundwater Sampling

Four (4) groundwater samples were collected September 21 and 27, 2022 from the newly installed overburden groundwater monitoring wells. Samples were collected utilizing low-flow/low-stress sampling techniques with a peristaltic pump and associated HDPE and silicone tubing. Water quality field parameters (temperature, pH, specific conductance, oxygen-reduction potential (ORP), dissolved oxygen (DO), and turbidity) were recorded during the well purging at five (5) minute intervals up to the sample time. A copy of the stabilization logs is attached.

Samples were immediately placed on ice and transferred to Pace Analytical and Eurofins TestAmerica under chain of custody protocols. Groundwater samples were analyzed for PFAS compounds by EPA Method 537M, pharmaceutically active compounds-negative by Method L221, and nitrate and nitrite anions by EPA Method 300. Additionally, groundwater samples from wells WM-OW-02 and WM-OW-03 were also analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, 1,4-dioxane by EPA Method 8270 (SIM) and PCBs by EPA Method 8082.

Additional samples collected for QA/QC purposes included an MS/MSD, Field Duplicate, and Equipment Blank. WM-OW-02 was the parent sample location for both the MS/MSD and Field Duplicate samples. The Equipment Blank sample was collected via the tubing associated with the peristaltic pump. Laboratory analytical results for the equipment blank sample submitted September 27, 2022 recorded two PFAS compounds. PFOS was recorded below the laboratory RL at an estimated concentration of 0.73 ng/L. 6:2 FTS A was recorded at a concentration of 13 ng/L. Refer to Table 2 for additional details.

## DISCUSSION OF ANALYTICAL RESULTS

### STANDARDS, CRITERIA, & GUIDANCE VALUES:

The following documents will be used to evaluate soil, groundwater, surface water, and sediment analytical results:

*Soil*

- Unrestricted Use and Industrial Use soil cleanup objectives from NYSDEC 6 NYCRR Part 375-6.8 Soil Cleanup Objective Tables, 2006
- Unrestricted Use and Industrial Use soil guidance values from NYSDEC Sampling, Analysis, and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs, November 2022.

Groundwater

- Screening levels identified in NYSDEC Sampling, Analysis, and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs, November 2022
- New York State Department of Environmental Conservation, Technical and Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised (TOGS 1.1.1), June 1998
- New York State Drinking Water Maximum Contaminant Level (MCL) for PFOA (10 parts per trillion (ppt)), PFOS (10 ppt), and 1,4-dioxane (1 part per billion (ppb)).

Surface Water

- Screening levels identified in NYSDEC Sampling, Analysis, and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs, November 2022
- New York State Drinking Water Maximum Contaminant Level (MCL) for PFOA (10 ppt) and PFOS (10 ppt)

Sediment

- Standards, criteria, or guidance values do not currently exist for PFAS in sediment. Results will be discussed as provided by the laboratory.

It is noted that the NYSDEC Standards, Criteria, & Guidance Values are listed in concentrations of parts per trillion (ppt), parts per billion (ppb), and parts per million (ppm) while laboratory analytical results are reported in equivalent concentrations. For example,

- In soil:
    - 1 ppt = 1 nanogram per kilogram (ng/kg),
    - 1 ppb = 1 microgram per kilogram (µg/kg), and
    - 1 ppm = 1 milligram per kilogram (mg/kg)

- In water:
    - 1 ppt = 1 nanogram per liter (ng/L),
    - 1 ppb = 1 microgram per liter (µg/L), and
    - 1 ppm = 1 milligram per liter (mg/L).

### Soil Results:

Of the 16 soil samples collected and analyzed for PFAS compounds by analytical method 537M, 12 had one or more compounds detected. PFOA was recorded at one (1) location (WM-SB-04) in two (2) intervals at estimated concentrations of 0.19 µg/kg and 0.35 µg/kg. These concentrations are below the Unrestricted Use guidance value of 0.66 µg/kg. Additionally, both concentrations were recorded below the laboratory RL. PFOS was recorded in twelve (12) samples from six (6) soil boring locations and ranged in concentration from an estimated 0.078 µg/kg (WM-SB-05) to 0.81 µg/kg (WM-SB-04). These concentrations are below the Unrestricted Use guidance value of 0.88 µg/kg.

PFAS compounds that were detected but do not have corresponding guidance values include: PFBA, PFPeA, PFHxA, PFDA, PFDoA, PFTA, PFDS, PFUnA, PFHpA and, PFNA. The maximum concentration recorded for compounds without criteria was PFPeA at 1.1 µg/kg (WM-SB-04). Refer to **Table 3A** for additional details.

One soil sample (WM-SB-06) was also analyzed for VOCs, SVOCs and PCBs. Three VOC compounds were recorded above the laboratory RL. Isopropylbenzene (Cumene), n-Propylbenzene and, m+p Xylene were recorded at concentrations of 0.31 mg/kg, 0.4 mg/kg and 0.94 mg/kg, respectively. Phenanthrene was recorded above the RL at a concentration of 0.33 mg/kg but below the SVOC SCO for Unrestricted Use of 100 mg/kg. Three PCB compounds were recorded above the laboratory RL and above the Unrestricted Use guidance value of 0.1 mg/kg for total PCBs, but below the 25 mg/kg guidance value for Industrial Use. Specifically, aroclor-1248, aroclor-1254 and aroclor-1260 were recorded at concentrations of 3.7 mg/kg, 9.3 mg/kg and 5.4 mg/kg respectively. Refer to **Tables 3B-3D** for additional details. Refer to **Appendix A** for the laboratory analytical reports.

Sediment Results:

One (1) sediment sample (WM-SED-01) was collected and analyzed for PFAS compounds. PFOS was reported at an estimated concentration of 0.088 µg/kg. No other PFAS compounds were reported above the RL. No standards, criteria, or guidance values (SCGs) for PFAS in sediment have been established. Refer to **Table 4** for additional details.

Surface Water Results:

One (1) surface water sample (WM-SW-01) was collected and analyzed for PFAS compounds. A total of ten (10) PFAS compounds were reported above the laboratory RL. PFOA and PFOS were recorded at concentrations of 4.8 ng/L and 8.6 ng/L respectively. Additionally, PFBA, PFBS, PFPeA, PFHxA, PFDS, PFHxS, PFHpA and PFNA were recorded at concentrations ranging from an estimated 0.52 ng/L (PFHxS) to 3.2 ng/L (PFBA). The recorded concentrations of PFOA and PFOS are below the 10 ng/L (ppt) screening level and NYSDEC Guideline for drinking water. No SCGs are available for the remaining compounds. Refer to **Table 5** for additional details.

Groundwater Results:

All four (4) groundwater samples collected September 21 and 27, 2022 reported one or more PFAS compounds. PFOA was recorded at concentrations ranging from 2.2 ng/L (WM-OW-03) to 5.6 ng/L (WM-OW-02). PFOA concentrations detected were below the NYSDEC screening level of 10 ng/L. PFOS was recorded at four (4) locations, one of which was above the 10 ng/L screening level at 14 ng/L (WM-OW-04). The remaining three samples recorded PFOS concentrations that ranged from 5.8 ng/L (WM-OW-01) to 9.5 ng/L (WM-OW0-02). Additionally, PFBS, PFBA PFDA, PFHpS, PFHpA, PFHxS, PFHxA, PFNA, and PFPeA were recorded at that range from an estimated 0.46 ng/L (PFDA) to 36 ng/L (PFPeA).

Groundwater samples were also analyzed for VOCs, SVOCs, and PCBs. Three (3) VOC compounds were detected above the laboratory RL in sample WM-OW-04. 1,4-Dichlorobenzene was recorded at 3.6 µg/L which is above the 3.0 µg/L groundwater guidance value. Isopropylbenzene and Chlorobenzene were recorded at concentrations of 3.12 µg/L and 1.6 µg/L respectively. Both of these concentrations are below the NYSDEC Standard for Class GA Groundwater (5.0 µg/L). In groundwater sample WM-OW-03, 1,4-Dioxane was recorded at a concentration of 1.4 µg/L which is above the NYSDEC Standard for Class GA Groundwater of 1.0 µg/L. Additionally, the compounds 1,2-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, m,p-Xylene, N-Propylbenzene, Sec-Butylbenzene, Tetrachloroethylene (PCE), Trichloroethylene (TCE), 1,4-Dioxane, and Anthracene were recorded at estimated concentrations below the laboratory RL. Acetone, a common laboratory artifact, was recorded below the RL at a concentration of 2.6 µg/L and is considered both an estimated value and laboratory contaminant. No PCBs were recorded within any of the four (4) groundwater samples obtained September 21 and 27, 2022.

Groundwater samples were additionally analyzed for artificial sweeteners, including sucralose and acesulfame-k, and nitrate to assess the potential migration of septic derived wastewater to groundwater. Acesulfame K was detected in all groundwater samples with concentrations ranging from 0.054 µg/L to 0.98 µg/L. Sucralose was detected in three (3) groundwater samples and results ranged from 0.77 µg/L to 2 µg/L. The maximum detections of sucralose and acesulfame-k were both identified in the sample collected from WM-OW-01. Nitrate was detected in all four (4) groundwater samples and results ranged in concentration from an estimated 0.062 mg/L (WM-OW-4) to 0.28 mg/L (WM-OW-02). Each of these detected concentrations are below the groundwater standard of 10 mg/L. Refer to **Tables 6A-6F** for additional details. Refer to Appendix A for the laboratory analytical reports.

Further discussion on the findings and conclusions of the investigation of the Waste Management property are discussed within the main PFAS assessment report provided by CDM Smith.

This report was prepared by Aztech with review and editorial input by the NYSDEC.

Respectfully submitted,

Aztech Environmental Technologies (a LaBella Company)

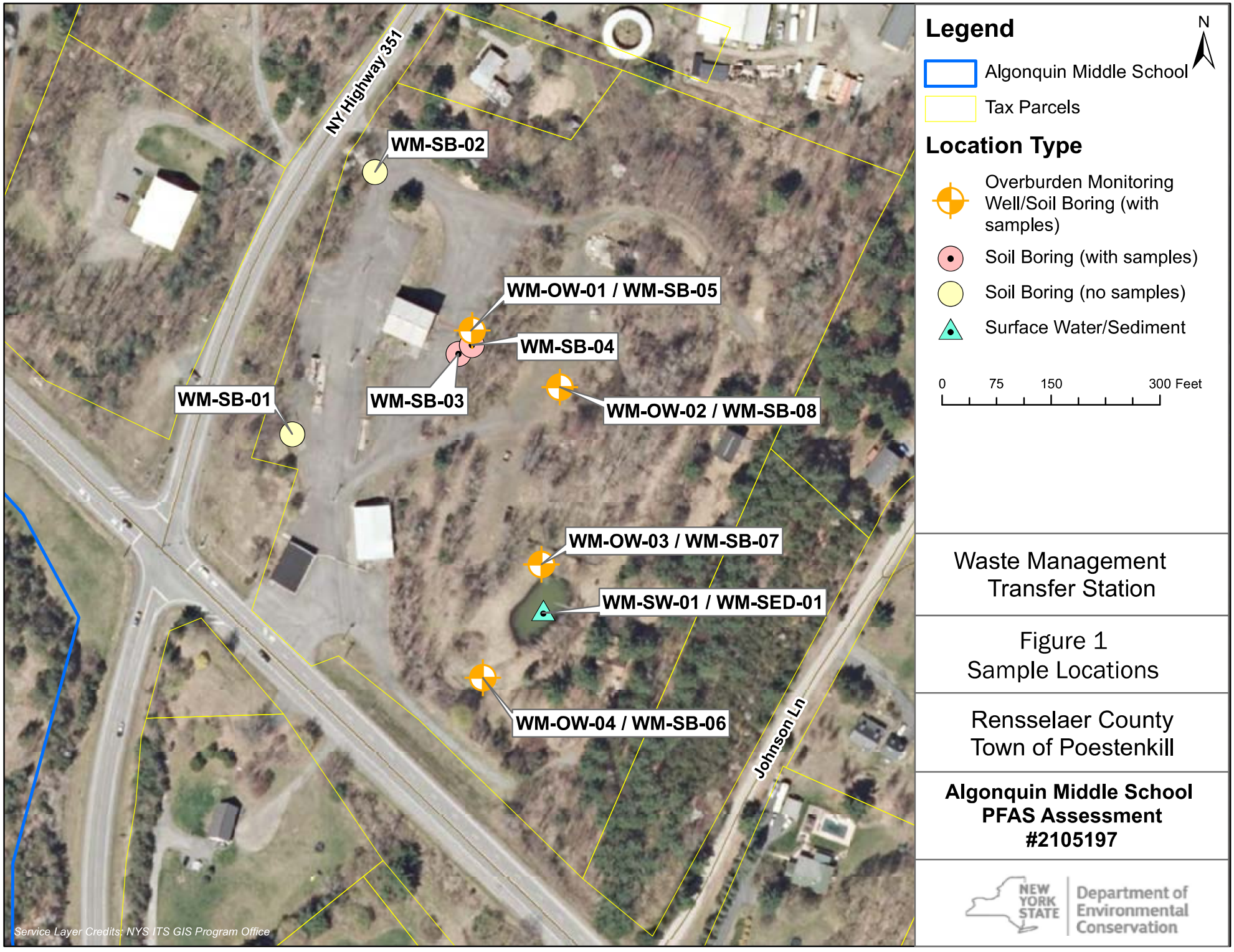
Todd Rollend
Environmental Scientist

I Randy Hoose certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10). All investigation and activities were performed in full accordance with the work plan provided by the NYSDEC.

Randy Hoose, P.G.
Senior Hydrogeologist

Attachments:
Figure 1 – Site Map
Table 2 – Equipment Blank, PFAS Results
Table 3A – Soil, PFAS Results
Table 3B – Soil, Volatile Organic Compound (VOC) Results
Table 3C – Soil, Semi-volatile Organic Compound (SVOC) Results
Table 3D – Soil, Polychlorinated Biphenyl (PCB) Results
Table 4 – Sediment, PFAS Results
Table 5 – Surface Water, PFAS Results
Table 6A – Groundwater, PFAS Results
Table 6B – Groundwater, Volatile Organic Compound (VOC) Results
Table 6C – Groundwater, Semi-volatile Organic Compound (SVOC) Results
Table 6D – Groundwater, Polychlorinated Biphenyl (PCB) Results
Table 6E – Groundwater, Nitrate & Nitrite Results
Table 6F – Groundwater, Artificial Sweetener Results
Boring Logs
Well Development Logs
Low-Flow Stabilization Sampling Logs
Appendix – A: Laboratory Analytical Reports

# FIGURE


NY Highway 351
WM-SB-02
WM-OW-01 / WM-SB-05
WM-SB-04
WM-SB-03
WM-SB-01
WM-OW-02 / WM-SB-08
WM-OW-03 / WM-SB-07
WM-SW-01 / WM-SED-01
WM-OW-04 / WM-SB-06
Johnson Ln
Service Layer Credits: NYS ITS GIS Program Office
Legend
N
Algonquin Middle School
Tax Parcels
Location Type
Overburden Monitoring Well/Soil Boring (with samples)
Soil Boring (with samples)
Soil Boring (no samples)
Surface Water/Sediment
0
75
150
300 Feet
Waste Management Transfer Station
Figure 1
Sample Locations
Rensselaer County
Town of Poestenkill
Algonquin Middle School
PFAS Assessment
#2105197
NEW YORK STATE
Department of Environmental Conservation

# TABLES

**Table 2**
**Waste Management Inc**
**Equipment Blank, PFAS Results**

| | | | Client Sample ID: | Equipment Blank | | Equipment Blank | | EQUIPMENT BLANK | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Lab Sample ID: | 22H1143-01 | | 22H1143-09 | | 480-202148-4 | |
| | | | Sample Date: | 8/15/2022 | | 8/16/2022 | | 9/27/2022 | |
| | | | Sample Type Code: | EB | | EB | | EB | |
| Analyte | Unit | NYSDEC Guidelines[1] | | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS) | ng/L | NC | | < 0.56 | U | < 0.6 | U | NA | |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | ng/L | NC | | < 0.53 | U | < 0.56 | U | < 1.7 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | ng/L | NC | | < 0.24 | U | < 0.26 | U | NA | |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | ng/L | NC | | 0.72 | J | < 0.34 | U | 13 | |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ng/L | NC | | < 0.3 | U | < 0.32 | U | NA | |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid (9Cl-PF3ONS) | ng/L | NC | | < 0.34 | U | < 0.36 | U | NA | |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | ng/L | NC | | < 0.21 | U | < 0.22 | U | NA | |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | ng/L | NC | | < 0.55 | U | < 0.59 | U | NA | |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | ng/L | NC | | < 0.66 | U | < 0.71 | U | NA | |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | ng/L | NC | | NA | | NA | | < 4.3 | U |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | ng/L | NC | | NA | | NA | | < 4.3 | U |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | ng/L | NC | | < 0.24 | U | < 0.26 | U | NA | |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | ng/L | NC | | < 0.2 | U | < 0.22 | U | NA | |
| Perfluoro-1-butanesulfonamide (FBSA) | ng/L | NC | | 0.26 | J | < 0.18 | U | NA | |
| Perfluoro-1-hexanesulfonamide (FHxSA) | ng/L | NC | | < 0.27 | U | < 0.29 | U | NA | |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | ng/L | NC | | < 0.36 | U | < 0.39 | U | NA | |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | ng/L | NC | | < 0.3 | U | < 0.32 | U | NA | |
| Perfluorobutanesulfonic acid (PFBS) | ng/L | NC | | < 0.24 | U | < 0.26 | U | < 1.7 | U |
| Perfluorobutanoic Acid (PFBA) | ng/L | NC | | < 0.65 | U | < 0.69 | U | < 4.3 | U |
| Perfluorodecanesulfonic acid (PFDS) | ng/L | NC | | < 0.28 | U | < 0.3 | U | < 1.7 | U |
| Perfluorodecanoic acid (PFDA) | ng/L | NC | | < 0.43 | U | < 0.46 | U | < 1.7 | U |
| Perfluorododecanoic acid (PFDoA) | ng/L | NC | | < 0.38 | U | < 0.41 | U | < 1.7 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | ng/L | NC | | < 0.81 | U | < 0.87 | U | < 1.7 | U |
| Perfluoroheptanoic acid (PFHpA) | ng/L | NC | | < 0.3 | U | < 0.32 | U | < 1.7 | U |
| Perfluorohexanesulfonic acid (PFHxS) | ng/L | NC | | < 0.29 | U | < 0.31 | U | < 1.7 | U |
| Perfluorohexanoic acid (PFHxA) | ng/L | NC | | < 0.33 | U | < 0.36 | U | < 1.7 | U |
| Perfluorononanesulfonic Acid (PFNS) | ng/L | NC | | < 0.15 | U | < 0.16 | U | NA | |
| Perfluorononanoic acid (PFNA) | ng/L | NC | | < 0.3 | U | < 0.32 | U | < 1.7 | U |
| Perfluorooctane Sulfonamide (PFOSA) | ng/L | NC | | < 0.36 | U | < 0.39 | U | < 1.7 | U |
| Perfluorooctanesulfonic acid (PFOS) | ng/L | 10 | | < 0.52 | U | < 0.56 | U | 0.73 | J |
| Perfluorooctanoic acid (PFOA) | ng/L | 10 | | < 0.59 | U | < 0.63 | U | < 1.7 | U |
| Perfluoropentanesulfonic Acid (PFPeS) | ng/L | NC | | < 0.22 | U | < 0.24 | U | NA | |
| Perfluoropentanoic Acid (PFPeA) | ng/L | NC | | < 0.34 | U | < 0.36 | U | < 1.7 | U |
| Perfluorotetradecanoic acid (PFTeDA) | ng/L | NC | | < 0.32 | U | < 0.34 | U | < 1.7 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | ng/L | NC | | < 0.24 | U | < 0.26 | U | < 1.7 | U |
| Perfluoroundecanoic Acid (PFUnA) | ng/L | NC | | < 0.32 | U | < 0.34 | U | < 1.7 | U |

Notes:
[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022
Sample Type Code: EB - Equipment Blank
ng/L - nanogram per liter = parts per trillion (ppt)
NC - No criteria currently exists
NA - Compound was not analyzed for
U - Compound was not detected at the reporting limit shown
J - An estimated value
**Bold - Indicates the compound was detected**
Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

**Table 3A**
**Waste Management Inc**
**Soil, PFAS Results**

| | | | | Client Sample ID: | WM-SB-03 2-12IN | | WM-SB-03 72IN | | WM-SB-04 0-2IN | | WM-SB-04 168-180IN | | WM-SB-04 2-12IN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | 22H1143-02 | | 22H1143-03 | | 22H1143-04 | | 22H1143-06 | | 22H1143-05 | |
| | | | | Location ID: | WM-SB-03 | | WM-SB-03 | | WM-SB-04 | | WM-SB-04 | | WM-SB-04 | |
| | | | | Sample Date: | 8/15/2022 | | 8/15/2022 | | 8/15/2022 | | 8/15/2022 | | 8/15/2022 | |
| | | | | Sample Type Code: | N | | N | | N | | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Industrial Use Guidance Value[1] | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.13 | U | < 0.14 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.12 | U | < 0.13 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.088 | U | < 0.089 | U | < 0.083 | U | < 0.085 | U | < 0.088 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.1 | U | < 0.11 | U | < 0.11 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.15 | U | < 0.15 | U | < 0.14 | U | < 0.15 | U | < 0.15 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.12 | U | < 0.12 | U | < 0.11 | U | < 0.12 | U | < 0.12 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.23 | U | < 0.23 | U | < 0.22 | U | < 0.22 | U | < 0.23 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.13 | U | < 0.14 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.087 | U | < 0.088 | U | < 0.082 | U | < 0.084 | U | < 0.087 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.074 | U | < 0.075 | U | < 0.07 | U | < 0.072 | U | < 0.074 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.079 | U | < 0.08 | U | < 0.074 | U | < 0.076 | U | < 0.079 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.15 | U | < 0.15 | U | < 0.14 | U | < 0.15 | U | < 0.15 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.14 | U | < 0.15 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.09 | U | < 0.091 | U | < 0.085 | U | < 0.088 | U | < 0.09 | U |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.088 | U | < 0.089 | U | < 0.083 | U | < 0.085 | U | < 0.088 | U |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.073 | U | < 0.074 | U | < 0.069 | U | < 0.071 | U | < 0.073 | U |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | < 0.064 | U | < 0.064 | U | 0.11 | J | < 0.062 | U | < 0.064 | U |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | 0.33 | J | < 0.11 | U | < 0.11 | U |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | < 0.062 | U | < 0.062 | U | 0.27 | J | < 0.06 | U | < 0.062 | U |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.073 | U | < 0.074 | U | 0.17 | J | < 0.071 | U | < 0.073 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.14 | U | < 0.15 | U | < 0.13 | U | < 0.14 | U | < 0.14 | U |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | < 0.069 | U | < 0.07 | U | 0.067 | J | < 0.067 | U | < 0.069 | U |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.076 | U | < 0.077 | U | < 0.072 | U | < 0.074 | U | < 0.076 | U |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | < 0.089 | U | < 0.09 | U | 0.34 | J | < 0.087 | U | < 0.089 | U |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.13 | U | < 0.13 | U | < 0.12 | U | < 0.13 | U | < 0.13 | U |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | < 0.079 | U | < 0.08 | U | 0.086 | J | < 0.076 | U | < 0.079 | U |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.093 | U | < 0.095 | U | < 0.088 | U | < 0.091 | U | < 0.093 | U |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 440 | 0.16 | J | 0.29 | J | 0.81 | | < 0.063 | U | 0.34 | J |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 600 | < 0.14 | U | < 0.14 | U | 0.19 | J | < 0.13 | U | 0.35 | J |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.07 | U | < 0.071 | U | < 0.066 | U | < 0.068 | U | < 0.07 | U |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | < 0.073 | U | < 0.074 | U | 1.1 | | < 0.071 | U | < 0.073 | U |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.091 | U | < 0.092 | U | 0.12 | J | < 0.089 | U | < 0.091 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.1 | U | < 0.1 | U | < 0.11 | U |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | < 0.087 | U | < 0.088 | U | 0.14 | J | < 0.084 | U | < 0.087 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

µg/kg - microgram per kilogram = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above Unrestricted Use guidance value

Highlighted - Indicates the compound was detected above Industrial Use guidance value

**Table 3A**
**Waste Management Inc**
**Soil, PFAS Results**

| | | | | Client Sample ID: | WM-SB-05 0-2IN | | WM-SB-05 84-120IN | | WM-SB-06 0-2IN | | WM-SB-06 2-12IN | | DUPE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | 22H1143-07 | | 22H1143-23 | | 22H1143-17 | | 22H1143-18 | | 22H1143-21 | |
| | | | | Location ID: | WM-SB-05 | | WM-SB-05 | | WM-SB-06 | | WM-SB-06 | | WM-SB-06 2-12IN | |
| | | | | Sample Date: | 8/15/2022 | | 8/17/2022 | | 8/16/2022 | | 8/16/2022 | | 8/16/2022 | |
| | | | | Sample Type Code: | N | | N | | N | | N | | FD | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Industrial Use Guidance Value[1] | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.13 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U | < 0.13 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.12 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.12 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.087 | U | < 0.092 | U | < 0.09 | U | < 0.09 | U | < 0.085 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.11 | U | < 0.11 | U | < 0.11 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.15 | U | < 0.16 | U | < 0.16 | U | < 0.16 | U | < 0.15 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.12 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.23 | U | < 0.24 | U | < 0.24 | U | < 0.24 | U | < 0.22 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.13 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U | < 0.13 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.086 | U | < 0.091 | U | < 0.089 | U | < 0.089 | U | < 0.084 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.073 | U | < 0.077 | U | < 0.076 | U | < 0.076 | U | < 0.072 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.078 | U | < 0.082 | U | < 0.081 | U | < 0.08 | U | < 0.076 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.15 | U | < 0.16 | U | < 0.16 | U | < 0.16 | U | < 0.15 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.14 | U | < 0.15 | U | < 0.15 | U | < 0.15 | U | < 0.14 | U |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.089 | U | < 0.094 | U | < 0.092 | U | < 0.092 | U | < 0.088 | U |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.087 | U | < 0.092 | U | < 0.09 | U | < 0.09 | U | < 0.085 | U |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.072 | U | < 0.076 | U | < 0.075 | U | < 0.075 | U | < 0.071 | U |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | < 0.063 | U | < 0.066 | U | < 0.065 | U | < 0.065 | U | < 0.062 | U |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | 0.33 | J | < 0.12 | U | < 0.11 | U | < 0.11 | U | < 0.11 | U |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | 0.19 | J | < 0.064 | U | < 0.063 | U | < 0.063 | U | < 0.06 | U |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | 0.16 | J | < 0.076 | U | < 0.075 | U | < 0.075 | U | < 0.071 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.14 | U | < 0.15 | U | < 0.15 | U | < 0.15 | U | < 0.14 | U |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | < 0.068 | U | < 0.072 | U | < 0.071 | U | < 0.071 | U | < 0.067 | U |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.076 | U | < 0.08 | U | < 0.078 | U | < 0.078 | U | < 0.074 | U |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | 0.12 | J | < 0.093 | U | < 0.091 | U | < 0.091 | U | < 0.087 | U |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | < 0.078 | U | < 0.082 | U | < 0.081 | U | < 0.08 | U | < 0.076 | U |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.092 | U | < 0.097 | U | < 0.096 | U | < 0.096 | U | < 0.091 | U |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 440 | 0.52 | | 0.078 | J | 0.48 | J | 0.36 | J | 0.44 | J |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 600 | < 0.13 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U | < 0.13 | U |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.069 | U | < 0.073 | U | < 0.072 | U | < 0.072 | U | < 0.068 | U |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | 0.25 | J | 0.10 | J | < 0.075 | U | < 0.075 | U | < 0.071 | U |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | 0.10 | J | < 0.095 | U | < 0.094 | U | < 0.094 | U | < 0.089 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.11 | U | < 0.11 | U | < 0.1 | U |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | 0.097 | J | < 0.091 | U | 0.099 | J | < 0.089 | U | < 0.084 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

µg/kg - microgram per kilogram = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above Unrestricted Use guidance value

Highlighted - Indicates the compound was detected above Industrial Use guidance value

**Table 3A**
**Waste Management Inc**
**Soil, PFAS Results**

| | | | | Client Sample ID: | WM-SB-06 36-48IN | | WM-SB-07 0-2IN | | WM-SB-07 2-12IN | | WM-SB-07 84-96IN | | WM-SB-08 0-2IN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | 22H1143-19 | | 22H1143-13 | | 22H1143-15 | | 22H1143-16 | | 22H1143-08 | |
| | | | | Location ID: | WM-SB-06 | | WM-SB-07 | | WM-SB-07 | | WM-SB-07 | | WM-SB-08 | |
| | | | | Sample Date: | 8/16/2022 | | 8/16/2022 | | 8/16/2022 | | 8/16/2022 | | 8/16/2022 | |
| | | | | Sample Type Code: | N | | N | | N | | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Industrial Use Guidance Value[1] | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.14 | U | < 0.13 | U | < 0.12 | U | < 0.13 | U | < 0.13 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.13 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.09 | U | < 0.087 | U | < 0.082 | U | < 0.087 | U | < 0.086 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.1 | U | < 0.11 | U | < 0.11 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.16 | U | < 0.15 | U | < 0.14 | U | < 0.15 | U | < 0.15 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.12 | U | < 0.12 | U | < 0.11 | U | < 0.12 | U | < 0.12 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.24 | U | < 0.23 | U | < 0.21 | U | < 0.23 | U | < 0.22 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.14 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.089 | U | < 0.086 | U | < 0.081 | U | < 0.086 | U | < 0.085 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.076 | U | < 0.074 | U | < 0.069 | U | < 0.073 | U | < 0.072 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.08 | U | < 0.078 | U | < 0.073 | U | < 0.077 | U | < 0.077 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.16 | U | < 0.15 | U | < 0.14 | U | < 0.15 | U | < 0.15 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.15 | U | < 0.14 | U | < 0.13 | U | < 0.14 | U | < 0.14 | U |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.092 | U | < 0.09 | U | < 0.084 | U | < 0.089 | U | < 0.088 | U |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.09 | U | < 0.087 | U | < 0.082 | U | < 0.087 | U | < 0.086 | U |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.075 | U | < 0.073 | U | < 0.068 | U | < 0.072 | U | < 0.071 | U |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | < 0.065 | U | < 0.063 | U | < 0.059 | U | < 0.063 | U | < 0.062 | U |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.1 | U | < 0.11 | U | < 0.11 | U |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | < 0.063 | U | < 0.061 | U | < 0.057 | U | < 0.061 | U | 0.14 | J |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.075 | U | < 0.073 | U | < 0.068 | U | < 0.072 | U | 0.12 | J |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.15 | U | < 0.14 | U | < 0.13 | U | < 0.14 | U | < 0.14 | U |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | < 0.071 | U | < 0.069 | U | < 0.064 | U | < 0.068 | U | < 0.067 | U |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.078 | U | < 0.076 | U | < 0.071 | U | < 0.075 | U | < 0.074 | U |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | < 0.091 | U | < 0.089 | U | < 0.083 | U | < 0.088 | U | < 0.087 | U |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.13 | U | < 0.13 | U | < 0.12 | U | < 0.13 | U | < 0.13 | U |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | < 0.08 | U | < 0.078 | U | < 0.073 | U | < 0.077 | U | < 0.077 | U |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.096 | U | < 0.093 | U | < 0.087 | U | < 0.092 | U | < 0.091 | U |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 440 | < 0.066 | U | 0.34 | J | 0.52 | | < 0.064 | U | 0.25 | J |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 600 | < 0.14 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.072 | U | < 0.07 | U | < 0.065 | U | < 0.069 | U | < 0.068 | U |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | < 0.075 | U | < 0.073 | U | < 0.068 | U | < 0.072 | U | < 0.071 | U |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.093 | U | < 0.091 | U | < 0.085 | U | < 0.09 | U | < 0.089 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.099 | U | < 0.11 | U | < 0.1 | U |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | < 0.089 | U | < 0.086 | U | < 0.081 | U | < 0.086 | U | 0.098 | J |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

µg/kg - microgram per kilogram = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above Unrestricted Use guidance value

Highlighted - Indicates the compound was detected above Industrial Use guidance value

**Table 3A**
**Waste Management Inc**
**Soil, PFAS Results**

| | | | Client Sample ID: | WM-SB-08 120-132IN | | WM-SB-08 2-12IN | |
|---|---|---|---|---|---|---|---|
| | | | Lab Sample ID: | 22H1143-14 | | 22H1143-10 | |
| | | | Location ID: | WM-SB-08 | | WM-SB-08 | |
| | | | Sample Date: | 8/16/2022 | | 8/16/2022 | |
| | | | Sample Type Code: | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Industrial Use Guidance Value[1] | Result | Qualifier | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.15 | U | < 0.14 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.14 | U | < 0.13 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.1 | U | < 0.091 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.12 | U | < 0.11 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.17 | U | < 0.16 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.14 | U | < 0.12 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.26 | U | < 0.24 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.15 | U | < 0.14 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.099 | U | < 0.09 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.085 | U | < 0.077 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.089 | U | < 0.081 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.17 | U | < 0.16 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.16 | U | < 0.15 | U |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.1 | U | < 0.093 | U |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.1 | U | < 0.091 | U |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.083 | U | < 0.076 | U |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | < 0.072 | U | < 0.066 | U |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | < 0.13 | U | < 0.12 | U |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | < 0.07 | U | < 0.064 | U |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.083 | U | < 0.076 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.16 | U | < 0.15 | U |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | < 0.078 | U | < 0.071 | U |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.087 | U | < 0.079 | U |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | < 0.1 | U | < 0.092 | U |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.15 | U | < 0.13 | U |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | < 0.089 | U | < 0.081 | U |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.11 | U | < 0.097 | U |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 440 | < 0.074 | U | 0.33 | J |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 600 | < 0.15 | U | < 0.14 | U |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.08 | U | < 0.072 | U |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | < 0.083 | U | < 0.076 | U |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.1 | U | < 0.094 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.12 | U | < 0.11 | U |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | < 0.099 | U | < 0.09 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

µg/kg - microgram per kilogram = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above Unrestricted Use guidance value

Highlighted - Indicates the compound was detected above Industrial Use guidance value

**Table 3B**
**Waste Management, Inc.**
**Soil, Volatile Organic Compound (VOC) Results**

| | | | Client Sample ID: | WM-SB-06 20220816 | |
|---|---|---|---|---|---|
| | | | Lab Sample ID: | 22H1143-20 | |
| | | | Location ID: | WM-SB-06 | |
| | | | Sample Date: | 8/16/2022 | |
| | | | Sample Type Code: | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Industrial Use Guidance Value[1] | Result | Qualifier |
| 1,1,1,2-Tetrachloroethane | mg/kg | NC | NC | < 0.25 | U |
| 1,1,1-Trichloroethane (TCA) | mg/kg | 0.68 | 1000 | < 0.25 | U |
| 1,1,2,2-Tetrachloroethane | mg/kg | NC | NC | < 0.13 | U |
| 1,1,2-Trichloro-1,2,2-Trifluoroethane | mg/kg | NC | NC | < 0.51 | U |
| 1,1,2-Trichloroethane | mg/kg | NC | NC | < 0.25 | U |
| 1,1-Dichloroethane | mg/kg | 0.27 | 480 | < 0.25 | U |
| 1,1-Dichloroethene | mg/kg | 0.33 | 1000 | < 0.25 | U |
| 1,1-Dichloropropene | mg/kg | NC | NC | < 0.51 | U |
| 1,2,3-Trichlorobenzene | mg/kg | NC | NC | < 1.3 | U |
| 1,2,3-Trichloropropane | mg/kg | NC | NC | < 0.51 | U |
| 1,2,4-Trichlorobenzene | mg/kg | NC | NC | < 0.25 | U |
| 1,2,4-Trimethylbenzene | mg/kg | 3.6 | 380 | < 0.25 | U |
| 1,2-Dibromo-3-Chloropropane | mg/kg | NC | NC | < 1.3 | U |
| 1,2-Dibromoethane (Ethylene Dibromide) | mg/kg | NC | NC | < 0.13 | U |
| 1,2-Dichlorobenzene | mg/kg | 1.1 | 1000 | < 0.25 | U |
| 1,2-Dichloroethane | mg/kg | 0.02 | 60 | < 0.25 | U |
| 1,2-Dichloropropane | mg/kg | NC | NC | < 0.25 | U |
| 1,3,5-Trichlorobenzene | mg/kg | NC | NC | < 0.25 | U |
| 1,3,5-Trimethylbenzene (Mesitylene) | mg/kg | 8.4 | 380 | < 0.25 | U |
| 1,3-Dichlorobenzene | mg/kg | 2.4 | 560 | < 0.25 | U |
| 1,3-Dichloropropane | mg/kg | NC | NC | < 0.13 | U |
| 1,4-Dichlorobenzene | mg/kg | 1.8 | 250 | < 0.25 | U |
| 1,4-Dioxane (P-Dioxane) | mg/kg | 0.1 | 250 | < 13 | U |
| 2,2-Dichloropropane | mg/kg | NC | NC | < 0.25 | U |
| 2-Chlorotoluene | mg/kg | NC | NC | < 0.25 | U |
| 2-Hexanone | mg/kg | NC | NC | < 2.5 | U |
| 2-Methoxy-2-Methylbutane | mg/kg | NC | NC | < 0.13 | U |
| 4-Chlorotoluene | mg/kg | NC | NC | < 0.25 | U |
| Acetone | mg/kg | 0.05 | 1000 | < 13 | U |
| Acrylonitrile | mg/kg | NC | NC | < 1.3 | U |
| Benzene | mg/kg | 0.06 | 89 | < 0.25 | U |
| Bromobenzene | mg/kg | NC | NC | < 0.25 | U |
| Bromochloromethane | mg/kg | NC | NC | < 0.25 | U |
| Bromodichloromethane | mg/kg | NC | NC | < 0.25 | U |
| Bromoform | mg/kg | NC | NC | < 0.51 | U |
| Bromomethane | mg/kg | NC | NC | < 0.51 | U |
| Carbon Disulfide | mg/kg | NC | NC | < 1.3 | U |
| Carbon Tetrachloride | mg/kg | 0.76 | 44 | < 0.25 | U |
| Chlorobenzene | mg/kg | 1.1 | 1000 | < 0.25 | U |
| Chloroethane | mg/kg | NC | NC | < 0.51 | U |
| Chloroform | mg/kg | 0.37 | 700 | < 0.51 | U |
| Chloromethane (Methyl Chloride) | mg/kg | NC | NC | < 0.51 | U |
| Cis-1,2-Dichloroethylene | mg/kg | 0.25 | 1000 | < 0.25 | U |
| Cis-1,3-Dichloropropene | mg/kg | NC | NC | < 0.13 | U |
| Cymene (4-Isopropyltoluene) | mg/kg | NC | NC | < 0.25 | U |
| Dibromochloromethane | mg/kg | NC | NC | < 0.13 | U |
| Dibromomethane | mg/kg | NC | NC | < 0.25 | U |
| Dichlorodifluoromethane | mg/kg | NC | NC | < 0.51 | U |

**Table 3B**
**Waste Management, Inc.**
**Soil, Volatile Organic Compound (VOC) Results**

| | | | Client Sample ID: | WM-SB-06 20220816 | |
|---|---|---|---|---|---|
| | | | Lab Sample ID: | 22H1143-20 | |
| | | | Location ID: | WM-SB-06 | |
| | | | Sample Date: | 8/16/2022 | |
| | | | Sample Type Code: | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Industrial Use Guidance Value[1] | Result | Qualifier |
| Diethyl Ether (Ethyl Ether) | mg/kg | NC | NC | < 0.51 | U |
| Ethyl Tert-Butyl Ether | mg/kg | NC | NC | < 0.13 | U |
| Ethylbenzene | mg/kg | 1.0 | 780.0 | < 0.25 | U |
| Hexachlorobutadiene | mg/kg | NC | NC | < 0.25 | U |
| Isopropyl Ether | mg/kg | NC | NC | < 0.13 | U |
| Isopropylbenzene (Cumene) | mg/kg | NC | NC | 0.31 | D |
| m,p-Xylene | mg/kg | NC | NC | 0.94 | D |
| Methyl Acetate | mg/kg | NC | NC | < 2.5 | U |
| Methyl Ethyl Ketone (2-Butanone) | mg/kg | 0.12 | 1000 | < 5.1 | U |
| Methyl Isobutyl Ketone (4-Methyl-2-Pentanone) | mg/kg | NC | NC | < 2.5 | U |
| Methylcyclohexane | mg/kg | NC | NC | < 0.25 | U |
| Methylene Chloride | mg/kg | 0.05 | 1000 | < 1.3 | U |
| Naphthalene | mg/kg | 12 | 1000 | < 0.51 | U |
| N-Butylbenzene | mg/kg | 12 | 1000 | < 0.25 | U |
| N-Propylbenzene | mg/kg | 3.9 | 1000 | 0.4 | D |
| O-Xylene (1,2-Dimethylbenzene) | mg/kg | 0.26 | #N/A | < 0.25 | U |
| Sec-Butylbenzene | mg/kg | 11 | 1000 | < 0.25 | U |
| Styrene | mg/kg | NC | NC | < 0.25 | U |
| T-Butylbenzene | mg/kg | 5.9 | 1000 | < 0.25 | U |
| Tert-Butyl Alcohol | mg/kg | NC | NC | < 5.1 | U |
| Tert-Butyl Methyl Ether | mg/kg | 0.93 | 1000 | < 0.25 | U |
| Tetrachloroethylene (PCE) | mg/kg | 1.3 | 300 | < 0.25 | U |
| Tetrahydrofuran | mg/kg | NC | NC | < 2.5 | U |
| Toluene | mg/kg | 0.7 | 1000 | < 0.25 | U |
| Trans-1,2-Dichloroethene | mg/kg | 0.19 | 1000 | < 0.25 | U |
| Trans-1,3-Dichloropropene | mg/kg | NC | NC | < 0.13 | U |
| Trans-1,4-Dichloro-2-Butene | mg/kg | NC | NC | < 0.51 | U |
| Trichloroethylene (TCE) | mg/kg | 0.47 | 400 | < 0.25 | U |
| Trichlorofluoromethane | mg/kg | NC | NC | < 0.51 | U |
| Vinyl Chloride | mg/kg | 0.02 | 27 | < 0.51 | U |

Notes:
[1]6 NYCRR Part 375-6.8(a), 375-6.8(b) Soil Cleanup Objective Tables, 2006
Sample Type Code: N - Normal, FD -Field Duplicate
mg/kg - milligram per kilogram = parts per million (ppm)
NC - No criteria currently exists
U - Compound was not detected at the reporting limit shown
J - An estimated value
D - Identified compound in the analysis was diluted to determine result
**Bold - Indicates the compound was detected**
Highlighted - Indicates the compound was detected above Unrestricted Use guidance value
Highlighted - Indicates the compound was detected above Industrial Use guidance value

**Table 3C**
**Waste Management Inc**
**Soil, Semi-volatile Organic Compound (SVOC) Results**

| | | | Client Sample ID: | WM-SB-06 20220816 | |
|---|---|---|---|---|---|
| | | | Lab Sample ID: | 22H1143-20 | |
| | | | Location ID: | WM-SB-06 | |
| | | | Sample Date: | 8/16/2022 | |
| | | | Sample Type Code: | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Industrial Use Guidance Value[1] | Result | Qualifier |
| 1,2,4,5-Tetrachlorobenzene | mg/kg | NC | NC | < 0.39 | U |
| 1,2,4-Trichlorobenzene | mg/kg | NC | NC | < 0.39 | U |
| 1,2-Dichlorobenzene | mg/kg | 1.1 | 1000 | < 0.39 | U |
| 1,2-Diphenylhydrazine | mg/kg | NC | NC | < 0.39 | U |
| 1,3-Dichlorobenzene | mg/kg | 2.4 | 560 | < 0.39 | U |
| 1,4-Dichlorobenzene | mg/kg | 1.8 | 250 | < 0.39 | U |
| 1-Methylnaphthalene | mg/kg | NC | NC | < 0.2 | U |
| 2,4,5-Trichlorophenol | mg/kg | NC | NC | < 0.39 | U |
| 2,4,6-Trichlorophenol | mg/kg | NC | NC | < 0.39 | U |
| 2,4-Dichlorophenol | mg/kg | NC | NC | < 0.39 | U |
| 2,4-Dimethylphenol | mg/kg | NC | NC | < 0.39 | U |
| 2,4-Dinitrophenol | mg/kg | NC | NC | < 0.76 | U |
| 2,4-Dinitrotoluene | mg/kg | NC | NC | < 0.39 | U |
| 2,6-Dinitrotoluene | mg/kg | NC | NC | < 0.39 | U |
| 2-Chloronaphthalene | mg/kg | NC | NC | < 0.39 | U |
| 2-Chlorophenol | mg/kg | NC | NC | < 0.39 | U |
| 2-Methylnaphthalene | mg/kg | NC | NC | < 0.2 | U |
| 2-Methylphenol (O-Cresol) | mg/kg | 0.33 | 1000 | < 0.39 | U |
| 2-Nitroaniline | mg/kg | NC | NC | < 0.39 | U |
| 2-Nitrophenol | mg/kg | NC | NC | < 0.39 | U |
| 3- And 4- Methylphenol (Total) | mg/kg | NC | NC | < 0.39 | U |
| 3,3'-Dichlorobenzidine | mg/kg | NC | NC | < 0.2 | U |
| 3-Nitroaniline | mg/kg | NC | NC | < 0.39 | U |
| 4,6-Dinitro-2-Methylphenol | mg/kg | NC | NC | < 0.39 | U |
| 4-Bromophenyl Phenyl Ether | mg/kg | NC | NC | < 0.39 | U |
| 4-Chloro-3-Methylphenol | mg/kg | NC | NC | < 0.76 | U |
| 4-Chloroaniline | mg/kg | NC | NC | < 0.76 | U |
| 4-Chlorophenyl Phenyl Ether | mg/kg | NC | NC | < 0.39 | U |
| 4-Nitroaniline | mg/kg | NC | NC | < 0.39 | U |
| 4-Nitrophenol | mg/kg | NC | NC | < 0.76 | U |
| Acenaphthene | mg/kg | 20 | 1000 | < 0.2 | U |
| Acenaphthylene | mg/kg | 100 | 1000 | < 0.2 | U |
| Acetophenone | mg/kg | NC | NC | < 0.39 | U |
| Aniline | mg/kg | NC | NC | < 0.39 | U |
| Anthracene | mg/kg | 100 | 1000 | < 0.2 | U |
| Benzidine | mg/kg | NC | NC | < 0.76 | U |
| Benzo(A)Anthracene | mg/kg | 1 | 11 | < 0.2 | U |
| Benzo(A)Pyrene | mg/kg | 1 | 1.1 | < 0.2 | U |
| Benzo(B)Fluoranthene | mg/kg | 1 | 11 | < 0.2 | U |
| Benzo(G,H,I)Perylene | mg/kg | 100 | 1000 | < 0.2 | U |
| Benzo(K)Fluoranthene | mg/kg | 0.8 | 110 | < 0.2 | U |
| Benzoic Acid | mg/kg | NC | NC | < 1.2 | U |
| Benzyl Butyl Phthalate | mg/kg | NC | NC | < 0.39 | U |
| Bis(2-Chloroethoxy) Methane | mg/kg | NC | NC | < 0.39 | U |
| Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether) | mg/kg | NC | NC | < 0.39 | U |
| Bis(2-Chloroisopropyl) Ether | mg/kg | NC | NC | < 0.39 | U |
| Bis(2-Ethylhexyl) Phthalate | mg/kg | NC | NC | < 0.39 | U |
| Carbazole | mg/kg | NC | NC | < 0.2 | U |
| Chrysene | mg/kg | 1 | 110 | < 0.2 | U |
| Dibenz(A,H)Anthracene | mg/kg | 0.33 | 1.1 | < 0.2 | U |
| Dibenzofuran | mg/kg | 7 | 1000 | < 0.39 | U |
| Diethyl Phthalate | mg/kg | NC | NC | < 0.39 | U |
| Dimethyl Phthalate | mg/kg | NC | NC | < 0.39 | U |
| Di-N-Butyl Phthalate | mg/kg | NC | NC | < 0.39 | U |
| Di-N-Octylphthalate | mg/kg | NC | NC | < 0.39 | U |
| Fluoranthene | mg/kg | 100 | 1000 | < 0.2 | U |
| Fluorene | mg/kg | 30 | 1000 | < 0.2 | U |
| Hexachlorobenzene | mg/kg | 0.33 | 12 | < 0.39 | U |
| Hexachlorobutadiene | mg/kg | NC | NC | < 0.39 | U |
| Hexachlorocyclopentadiene | mg/kg | NC | NC | < 0.39 | U |
| Hexachloroethane | mg/kg | NC | NC | < 0.39 | U |
| Indeno(1,2,3-C,D)Pyrene | mg/kg | 0.5 | 11 | < 0.2 | U |

**Table 3C**
**Waste Management Inc**
**Soil, Semi-volatile Organic Compound (SVOC) Results**

| | | | Client Sample ID: | WM-SB-06 20220816 | |
|---|---|---|---|---|---|
| | | | Lab Sample ID: | 22H1143-20 | |
| | | | Location ID: | WM-SB-06 | |
| | | | Sample Date: | 8/16/2022 | |
| | | | Sample Type Code: | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Industrial Use Guidance Value[1] | Result | Qualifier |
| Isophorone | mg/kg | NC | NC | < 0.39 | U |
| Naphthalene | mg/kg | 12 | 1000 | < 0.2 | U |
| Nitrobenzene | mg/kg | NC | NC | < 0.39 | U |
| N-Nitrosodimethylamine | mg/kg | NC | NC | < 0.39 | U |
| N-Nitrosodi-N-Propylamine | mg/kg | NC | NC | < 0.39 | U |
| N-Nitrosodiphenylamine | mg/kg | NC | NC | < 0.39 | U |
| Pentachloronitrobenzene | mg/kg | NC | NC | < 0.39 | U |
| Pentachlorophenol | mg/kg | 0.8 | 55 | < 0.39 | U |
| Phenanthrene | mg/kg | 100 | 1000 | 0.33 | |
| Phenol | mg/kg | 0.33 | 1000 | < 0.39 | U |
| Pyrene | mg/kg | 100 | 1000 | < 0.2 | U |
| Pyridine | mg/kg | NC | NC | < 0.39 | U |

Notes:
[1]6 NYCRR Part 375-6.8(a), 375-6.8(b) Soil Cleanup Objective Tables, 2006
Sample Type Code: N - Normal, FD -Field Duplicate
NC - No criteria currently exists
mg/kg - milligram per kilogram / parts per million (ppm)
U - Compound was not detected at the reporting limit shown
J - An estimated value
D - Identified compound in the analysis was diluted to determine result
**Bold - Indicates the compound was detected**
Highlighted - Indicates the compound was detected above Unrestricted Use guidance value
Highlighted - Indicates the compound was detected above Residential Use guidance value

**Table 3D**
**Waste Management Inc.**
**Soil, Polychlorinated Biphenyl (PCB) Results**

| | | | | | |
|---|---|---|---|---|---|
| | | | | Client Sample ID: | WM-SB-06 20220816 |
| | | | | Lab Sample ID: | 22H1143-20 |
| | | | | Location ID: | WM-SB-06 |
| | | | | Sample Date: | 8/16/2022 |
| | | | | Sample Type Code: | N |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Industrial Use Guidance Value[1] | Result | Qualifier |
| PCB-1016 (Aroclor 1016) | mg/kg | NC | NC | < 0.46 | U |
| PCB-1221 (Aroclor 1221) | mg/kg | NC | NC | < 0.46 | U |
| PCB-1232 (Aroclor 1232) | mg/kg | NC | NC | < 0.46 | U |
| PCB-1242 (Aroclor 1242) | mg/kg | NC | NC | < 0.46 | U |
| PCB-1248 (Aroclor 1248) | mg/kg | NC | NC | 3.7 | D |
| PCB-1254 (Aroclor 1254) | mg/kg | NC | NC | 9.3 | D |
| PCB-1260 (Aroclor 1260) | mg/kg | NC | NC | 5.4 | D |
| PCB-1262 (Aroclor 1262) | mg/kg | NC | NC | < 0.46 | U |
| PCB-1268 (Aroclor 1268) | mg/kg | NC | NC | < 0.46 | U |
| Total PCBs | mg/kg | 0.1 | 25 | 18.40 | D |

Notes:

[1]6 NYCRR Part 375-6.8(a), 375-6.8(b) Soil Cleanup Objective Tables, 2006
Sample Type Code: N - Normal, FD -Field Duplicate
NC - No criteria currently exists
mg/kg - milligram per kilogram = parts per million (ppm)
U - Compound was not detected at the reporting limit shown
J - An estimated value
D - Identified compound in the analysis was diluted to determine result
**Bold - Indicates the compound was detected**
Highlighted - Indicates the compound was detected above Unrestricted Use guidance value
Highlighted - Indicates the compound was detected above Industrial Use guidance value

**Table 4**
**Waste Management Inc**
**Sediment, PFAS Results**

| | | | | |
|---|---|---|---|---|
| | | Client Sample ID: | WM-SED-01-20220816 | |
| | | Lab Sample ID: | 22H1143-12 | |
| | | Location ID: | WM-SED-01 | |
| | | Sample Date: | 8/16/2022 | |
| | | Sample Type Code: | N | |
| Analyte | Unit | NYSDEC Guidelines[1] | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | < 0.17 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | < 0.15 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | < 0.11 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | < 0.14 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | < 0.19 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | < 0.15 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | < 0.29 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | < 0.17 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | < 0.11 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | < 0.092 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | < 0.098 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | < 0.19 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | < 0.18 | U |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | < 0.11 | U |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | < 0.11 | U |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | < 0.091 | U |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | < 0.079 | U |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | < 0.14 | U |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | < 0.076 | U |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | < 0.091 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | < 0.18 | U |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | < 0.086 | U |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | < 0.095 | U |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | < 0.11 | U |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | < 0.16 | U |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | < 0.098 | U |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | < 0.12 | U |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | NC | 0.088 | J |
| Perfluorooctanoic acid (PFOA) | µg/kg | NC | < 0.17 | U |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | < 0.087 | U |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | < 0.091 | U |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | < 0.11 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | < 0.13 | U |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | < 0.11 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

µg/kg - microgram per kilogram = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

**Table 5**
**Waste Management Inc**
**Surface Water, PFAS Results**

| | | | | |
|---|---|---|---|---|
| | | Client Sample ID: | WM-SW-01-20220816 | |
| | | Lab Sample ID: | 22H1143-11 | |
| | | Location ID: | WM-SW-01 | |
| | | Sample Date: | 16 Aug 2022 | |
| | | Sample Type Code: | N | |
| Analyte | Unit | NYSDEC Guidelines[1] | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | ng/L | NC | < 0.56 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | ng/L | NC | < 0.53 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | ng/L | NC | < 0.25 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | ng/L | NC | < 0.32 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ng/L | NC | < 0.31 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | ng/L | NC | < 0.34 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | ng/L | NC | < 0.21 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | ng/L | NC | < 0.55 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | ng/L | NC | < 0.67 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | ng/L | NC | < 0.24 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | ng/L | NC | < 0.2 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | ng/L | NC | < 0.17 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | ng/L | NC | < 0.27 | U |
| Perfluoro-3-methoxypropanoic acid | ng/L | NC | < 0.36 | U |
| Perfluoro-4-methoxybutanoic acid | ng/L | NC | < 0.3 | U |
| Perfluorobutanesulfonic acid (PFBS) | ng/L | NC | 1.4 | J |
| Perfluorobutanoic Acid (PFBA) | ng/L | NC | 3.2 | |
| Perfluorodecanesulfonic acid (PFDS) | ng/L | NC | 0.83 | J |
| Perfluorodecanoic acid (PFDA) | ng/L | NC | < 0.43 | U |
| Perfluorododecanoic acid (PFDoA) | ng/L | NC | < 0.39 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | ng/L | NC | < 0.82 | U |
| Perfluoroheptanoic acid (PFHpA) | ng/L | NC | 0.88 | J |
| Perfluorohexanesulfonic acid (PFHxS) | ng/L | NC | 0.52 | J |
| Perfluorohexanoic acid (PFHxA) | ng/L | NC | 1.1 | J |
| Perfluorononanesulfonic Acid (PFNS) | ng/L | NC | < 0.15 | U |
| Perfluorononanoic acid (PFNA) | ng/L | NC | 0.62 | J |
| Perfluorooctane Sulfonamide (FOSA) | ng/L | NC | < 0.37 | U |
| Perfluorooctanesulfonic acid (PFOS) | ng/L | 10 | 8.6 | |
| Perfluorooctanoic acid (PFOA) | ng/L | 10 | 4.8 | |
| Perfluoropentanesulfonic Acid (PFPeS) | ng/L | NC | < 0.23 | U |
| Perfluoropentanoic Acid (PFPeA) | ng/L | NC | 1.5 | J |
| Perfluorotetradecanoic acid (PFTA) | ng/L | NC | < 0.32 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | ng/L | NC | < 0.24 | U |
| Perfluoroundecanoic Acid (PFUnA) | ng/L | NC | < 0.32 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

ng/L - nanogram per liter = parts per trillion (ppt)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

**Table 6A**
**Waste Managment Inc**
**Groundwater, PFAS Results**

| | | | Client Sample ID: | WM-OW-01-20220921 | | WM-OW-02-20220927 | | WM-OW-03-20220927 | | WM-OW-04-20220927 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Lab Sample ID: | 480-201885-4 | | 480-202148-1 | | 480-202148-2 | | 480-202148-5 | |
| | | | Location ID: | WM-OW-01 | | WM-OW-02 | | WM-OW-03 | | WM-OW-04 | |
| | | | Sample Date: | 9/21/2022 | | 9/27/2022 | | 9/27/2022 | | 9/27/2022 | |
| | | | Sample Type Code: | N | | N | | N | | N | |
| Analyte | Unit | NYSDEC Guidelines[1] | | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | ng/L | NC | | < 1.9 | U | < 1.8 | U | < 1.8 | U | < 10 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | ng/L | NC | | < 4.6 | U | < 4.6 | U | < 4.6 | U | < 25 | U |
| N-ethyl perfluorooctanesulfonamidoacetic acid | ng/L | NC | | < 4.6 | U | < 4.6 | U | < 4.6 | U | < 25 | U |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | ng/L | NC | | < 4.6 | U | < 4.6 | U | < 4.6 | U | < 25 | U |
| Perfluorobutanesulfonic acid (PFBS) | ng/L | NC | | **3.8** | | **0.94** | **J** | **0.63** | **J** | < 10 | U |
| Perfluorobutanoic Acid (PFBA) | ng/L | NC | | **7.5** | | **4.6** | | **3.3** | **J** | **6.7** | **J** |
| Perfluorodecanesulfonic acid (PFDS) | ng/L | NC | | < 1.9 | U | < 1.8 | U | < 1.8 | U | < 10 | U |
| Perfluorodecanoic acid (PFDA) | ng/L | NC | | **0.96** | **J** | < 1.8 | U | **0.46** | **J** | < 10 | U |
| Perfluorododecanoic acid (PFDoA) | ng/L | NC | | < 1.9 | U | < 1.8 | U | < 1.8 | U | < 10 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | ng/L | NC | | **1.2** | **J** | < 1.8 | U | < 1.8 | U | < 10 | U |
| Perfluoroheptanoic acid (PFHpA) | ng/L | NC | | **3** | | **1.5** | **J** | **0.7** | **J** | < 10 | U |
| Perfluorohexanesulfonic acid (PFHxS) | ng/L | NC | | **0.97** | **J** | **0.89** | **J** | **0.52** | **J** | < 10 | U |
| Perfluorohexanoic acid (PFHxA) | ng/L | NC | | **15** | | **3.7** | | < 1.8 | U | < 10 | U |
| Perfluorononanoic acid (PFNA) | ng/L | NC | | **1.3** | **J** | **6.4** | | **0.59** | **J** | **2.4** | **J** |
| Perfluorooctane Sulfonamide (FOSA) | ng/L | NC | | < 1.9 | U | < 1.8 | U | < 1.8 | U | < 10 | U |
| Perfluorooctanesulfonic acid (PFOS) | ng/L | 10 | | **5.8** | | **9.5** | | **8.3** | | **14** | |
| Perfluorooctanoic acid (PFOA) | ng/L | 10 | | **5.2** | | **5.6** | | **2.2** | | **4.9** | **J** |
| Perfluoropentanoic Acid (PFPeA) | ng/L | NC | | **36** | | **3.5** | | **0.8** | **J** | **5.2** | **J** |
| Perfluorotetradecanoic acid (PFTA) | ng/L | NC | | < 1.9 | U | < 1.8 | U | < 1.8 | U | < 10 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | ng/L | NC | | < 1.9 | U | < 1.8 | U | < 1.8 | U | < 10 | U |
| Perfluoroundecanoic Acid (PFUnA) | ng/L | NC | | < 1.9 | U | < 1.8 | U | < 1.8 | U | < 10 | U |

Notes:
[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022
Sample Type Code: N - Normal, FD -Field Duplicate
ng/L - nanogram per liter = parts per trillion (ppt)
NC - No criteria currently exists
U - Compound was not detected at the reporting limit shown
J - An estimated value
**Bold - Indicates the compound was detected**
Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

**Table 6B**
**Waste Management Inc**
**Groundwater, Volatile Organic Compound (VOC) Results**

| | | | Client Sample ID: | | WM-OW-02-20220927 | | FIELD DUP-20220927 | | WM-OW-03-20220927 | | WM-OW-04-20220927 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Lab Sample ID: | | 22I1719-01 | | 22I1719-04 | | 22I1719-02 | | 22I1719-03 | |
| | | | Location ID: | | WM-OW-02 | | WM-OW-02 | | WM-OW-03 | | WM-OW-04 | |
| | | | Sample Date: | | 9/27/2022 | | 9/27/2022 | | 9/27/2022 | | 9/27/2022 | |
| | | | Sample Type Code: | | N | | FD | | N | | N | |
| Analyte | NYS Class GA[1] | Unit | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer | | |
| 1,1,1,2-Tetrachloroethane | 5 | µg/L | < 0.18 | U | < 0.18 | U | < 0.18 | U | < 0.18 | U | | |
| 1,1,1-Trichloroethane (TCA) | 5 | µg/L | < 0.17 | U | < 0.17 | U | < 0.17 | U | < 0.17 | U | | |
| 1,1,2,2-Tetrachloroethane | 5 | µg/L | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U | | |
| 1,1,2-Trichloro-1,2,2-Trifluoroethane | 5 | µg/L | < 0.23 | U | < 0.23 | U | < 0.23 | U | < 0.23 | U | | |
| 1,1,2-Trichloroethane | 1 | µg/L | < 0.18 | U | < 0.18 | U | < 0.18 | U | < 0.18 | U | | |
| 1,1-Dichloroethane | 5 | µg/L | < 0.14 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U | | |
| 1,1-Dichloroethene | 5 | µg/L | < 0.14 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U | | |
| 1,1-Dichloropropene | NC | µg/L | < 0.15 | U | < 0.15 | U | < 0.15 | U | < 0.15 | U | | |
| 1,2,3-Trichlorobenzene | 5 | µg/L | < 0.3 | U | < 0.3 | U | < 0.3 | U | < 0.3 | U | | |
| 1,2,3-Trichloropropane | 0.04 | µg/L | < 0.28 | U | < 0.28 | U | < 0.28 | U | < 0.28 | U | | |
| 1,2,4-Trichlorobenzene | 5 | µg/L | < 0.25 | U | < 0.25 | U | < 0.25 | U | < 0.25 | U | | |
| 1,2,4-Trimethylbenzene | 5 | µg/L | < 0.2 | U | < 0.2 | U | < 0.2 | U | < 0.2 | U | | |
| 1,2-Dibromo-3-Chloropropane | 0.04 | µg/L | < 0.8 | U | < 0.8 | U | < 0.8 | U | < 0.8 | U | | |
| 1,2-Dibromoethane (Ethylene Dibromide) | 0.0006 | µg/L | < 0.17 | U | < 0.17 | U | < 0.17 | U | < 0.17 | U | | |
| 1,2-Dichlorobenzene | 3 | µg/L | < 0.12 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U | | |
| 1,2-Dichloroethane | 0.6 | µg/L | < 0.31 | U | < 0.31 | U | < 0.31 | U | < 0.31 | U | | |
| 1,2-Dichloropropane | 1 | µg/L | < 0.18 | U | < 0.18 | U | < 0.18 | U | < 0.18 | U | | |
| 1,3,5-Trichlorobenzene | 5 | µg/L | < 0.21 | U | < 0.21 | U | < 0.21 | U | < 0.21 | U | | |
| 1,3,5-Trimethylbenzene (Mesitylene) | 5 | µg/L | < 0.11 | U | < 0.11 | U | < 0.11 | U | < 0.11 | U | | |
| 1,3-Dichlorobenzene | 3 | µg/L | < 0.12 | U | < 0.12 | U | < 0.12 | U | **0.67** | **J** | | |
| 1,3-Dichloropropane | 5 | µg/L | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U | | |
| 1,4-Dichlorobenzene | 3 | µg/L | < 0.13 | U | < 0.13 | U | **0.35** | **J** | **3.6** | | | |
| 1,4-Dioxane (P-Dioxane) | NC | µg/L | < 21 | U | < 21 | U | < 21 | U | < 21 | U | | |
| 2,2-Dichloropropane | 5 | µg/L | < 0.33 | U | < 0.33 | U | < 0.33 | U | < 0.33 | U | | |
| 2-Chlorotoluene | 5 | µg/L | < 0.11 | U | < 0.11 | U | < 0.11 | U | < 0.11 | U | | |
| 2-Hexanone | 50 | µg/L | < 1.1 | U | < 1.1 | U | < 1.1 | U | < 1.1 | U | | |
| 2-Methoxy-2-Methylbutane | NC | µg/L | < 0.14 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U | | |
| 4-Chlorotoluene | 5 | µg/L | < 0.12 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U | | |
| Acetone | 50 | µg/L | < 2 | U | **2.6** | **J** | < 2 | U | < 2 | U | | |
| Acrylonitrile | NC | µg/L | < 0.55 | U | < 0.55 | U | < 0.55 | U | < 0.55 | U | | |
| Benzene | NC | µg/L | < 0.2 | U | < 0.2 | U | < 0.2 | U | **0.34** | **J** | | |
| Bromobenzene | NC | µg/L | < 0.15 | U | < 0.15 | U | < 0.15 | U | < 0.15 | U | | |
| Bromochloromethane | 5 | µg/L | < 0.31 | U | < 0.31 | U | < 0.31 | U | < 0.31 | U | | |
| Bromodichloromethane | 50 | µg/L | < 0.18 | U | < 0.18 | U | < 0.18 | U | < 0.18 | U | | |
| Bromoform | 50 | µg/L | < 0.38 | U | < 0.38 | U | < 0.38 | U | < 0.38 | U | | |
| Bromomethane | 5 | µg/L | < 1.5 | U | < 1.5 | U | < 1.5 | U | < 1.5 | U | | |
| Carbon Disulfide | 60 | µg/L | < 1.4 | U | < 1.4 | U | < 1.4 | U | < 1.4 | U | | |
| Carbon Tetrachloride | 5 | µg/L | < 0.16 | U | < 0.16 | U | < 0.16 | U | < 0.16 | U | | |
| Chlorobenzene | 5 | µg/L | < 0.11 | U | < 0.11 | U | < 0.11 | U | **1.6** | | | |
| Chloroethane | 5 | µg/L | < 0.32 | U | < 0.32 | U | < 0.32 | U | < 0.32 | U | | |
| Chloroform | 7 | µg/L | < 0.17 | U | < 0.17 | U | < 0.17 | U | < 0.17 | U | | |
| Chloromethane (Methyl Chloride) | 5 | µg/L | < 0.52 | U | < 0.52 | U | < 0.52 | U | < 0.52 | U | | |
| Cis-1,2-Dichloroethylene | 5 | µg/L | < 0.15 | U | < 0.15 | U | < 0.15 | U | < 0.15 | U | | |
| Cis-1,3-Dichloropropene | 0.4 | µg/L | < 0.16 | U | < 0.16 | U | < 0.16 | U | < 0.16 | U | | |
| Cymene (4-Isopropyltoluene) | 5 | µg/L | < 0.097 | U | < 0.097 | U | < 0.097 | U | < 0.097 | U | | |

**Table 6B**
**Waste Management Inc**
**Groundwater, Volatile Organic Compound (VOC) Results**

| | | | Client Sample ID: | | WM-OW-02-20220927 | | FIELD DUP-20220927 | | WM-OW-03-20220927 | | WM-OW-04-20220927 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Lab Sample ID: | | 22I1719-01 | | 22I1719-04 | | 22I1719-02 | | 22I1719-03 | |
| | | | Location ID: | | WM-OW-02 | | WM-OW-02 | | WM-OW-03 | | WM-OW-04 | |
| | | | Sample Date: | | 9/27/2022 | | 9/27/2022 | | 9/27/2022 | | 9/27/2022 | |
| | | | Sample Type Code: | | N | | FD | | N | | N | |
| Analyte | NYS Class GA[1] | Unit | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer | | |
| Dibromochloromethane | 50 | µg/L | < 0.22 | U | < 0.22 | U | < 0.22 | U | < 0.22 | U | | |
| Dibromomethane | 5 | µg/L | < 0.35 | U | < 0.35 | U | < 0.35 | U | < 0.35 | U | | |
| Dichlorodifluoromethane | 5 | µg/L | < 0.19 | U | < 0.19 | U | < 0.19 | U | < 0.19 | U | | |
| Diethyl Ether (Ethyl Ether) | NC | µg/L | < 0.18 | U | < 0.18 | U | < 0.18 | U | < 0.18 | U | | |
| Ethyl Tert-Butyl Ether | NC | µg/L | < 0.15 | U | < 0.15 | U | < 0.15 | U | < 0.15 | U | | |
| Ethylbenzene | 5 | µg/L | < 0.21 | U | < 0.21 | U | < 0.21 | U | < 0.21 | U | | |
| Hexachlorobutadiene | 0.5 | µg/L | < 0.46 | U | < 0.46 | U | < 0.46 | U | < 0.46 | U | | |
| Isopropyl Ether | NC | µg/L | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U | | |
| Isopropylbenzene (Cumene) | 5 | µg/L | < 0.11 | U | < 0.11 | U | < 0.11 | U | **3.1** | | | |
| m,p-Xylene | NC | µg/L | < 0.46 | U | < 0.46 | U | < 0.46 | U | **0.48** | **J** | | |
| Methyl Acetate | NC | µg/L | < 0.45 | U | < 0.45 | U | < 0.45 | U | < 0.45 | U | | |
| Methyl Ethyl Ketone (2-Butanone) | 50 | µg/L | < 1.6 | U | < 1.6 | U | < 1.6 | U | < 1.6 | U | | |
| Methyl Isobutyl Ketone (4-Methyl-2-Pentanone) | NC | µg/L | < 1.3 | U | < 1.3 | U | < 1.3 | U | < 1.3 | U | | |
| Methylcyclohexane | NC | µg/L | < 0.24 | U | < 0.24 | U | < 0.24 | U | < 0.24 | U | | |
| Methylene Chloride | 5 | µg/L | < 0.23 | U | < 0.23 | U | < 0.23 | U | < 0.23 | U | | |
| Naphthalene | 10 | µg/L | < 0.24 | U | < 0.24 | U | < 0.24 | U | < 0.24 | U | | |
| N-Butylbenzene | 5 | µg/L | < 0.15 | U | < 0.15 | U | < 0.15 | U | < 0.15 | U | | |
| N-Propylbenzene | 5 | µg/L | < 0.086 | U | < 0.086 | U | < 0.086 | U | **0.23** | **J** | | |
| O-Xylene (1,2-Dimethylbenzene) | 5 | µg/L | < 0.23 | U | < 0.23 | U | < 0.23 | U | < 0.23 | U | | |
| Sec-Butylbenzene | 5 | µg/L | < 0.11 | U | < 0.11 | U | < 0.11 | U | **0.15** | **J** | | |
| Styrene | 5 | µg/L | < 0.11 | U | < 0.11 | U | < 0.11 | U | < 0.11 | U | | |
| T-Butylbenzene | 5 | µg/L | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U | | |
| Tert-Butyl Alcohol | NC | µg/L | < 4.7 | U | < 4.7 | U | < 4.7 | U | < 4.7 | U | | |
| Tert-Butyl Methyl Ether | 10 | µg/L | < 0.17 | U | < 0.17 | U | < 0.17 | U | < 0.17 | U | | |
| Tetrachloroethylene (PCE) | 5 | µg/L | **0.31** | **J** | **0.38** | **J** | < 0.19 | U | < 0.19 | U | | |
| Tetrahydrofuran | 50 | µg/L | < 0.49 | U | < 0.49 | U | < 0.49 | U | < 0.49 | U | | |
| Toluene | 5 | µg/L | < 0.22 | U | < 0.22 | U | < 0.22 | U | < 0.22 | U | | |
| Trans-1,2-Dichloroethene | 5 | µg/L | < 0.17 | U | < 0.17 | U | < 0.17 | U | < 0.17 | U | | |
| Trans-1,3-Dichloropropene | 0.4 | µg/L | < 0.17 | U | < 0.17 | U | < 0.17 | U | < 0.17 | U | | |
| Trans-1,4-Dichloro-2-Butene | 5 | µg/L | < 1.6 | U | < 1.6 | U | < 1.6 | U | < 1.6 | U | | |
| Trichloroethylene (TCE) | 5 | µg/L | **0.32** | **J** | **0.3** | **J** | < 0.19 | U | < 0.19 | U | | |
| Trichlorofluoromethane | 5 | µg/L | < 0.18 | U | < 0.18 | U | < 0.18 | U | < 0.18 | U | | |
| Vinyl Chloride | 2 | µg/L | < 0.21 | U | < 0.21 | U | < 0.21 | U | < 0.21 | U | | |

Notes:

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

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

µg/L - microgram per liter = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

**Table 6C**
**Waste Management Inc**
**Groundwater, Semi-volatile Organic Compound (SVOC) Results**

| | | | Client Sample ID: | | WM-OW-02-20220927 | | FIELD DUP-20220927 | | WM-OW-03-20220927 | | WM-OW-04-20220927 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Lab Sample ID: | | 22I1719-01 | | 22I1719-04 | | 22I1719-02 | | 22I1719-03 | |
| | | | Location ID: | | WM-OW-02 | | WM-OW-02 | | WM-OW-03 | | WM-OW-04 | |
| | | | Sample Date: | | 9/27/2022 | | 9/27/2022 | | 9/27/2022 | | 9/27/2022 | |
| | | | Sample Type Code: | | N | | FD | | N | | N | |
| Analyte | NYS Class GA[1] | Unit | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer |
| 1,2,4,5-Tetrachlorobenzene | 5 | µg/L | < 0.64 | U | < 0.65 | U | < 0.64 | U | < 0.67 | U | | |
| 1,2,4-Trichlorobenzene | 5 | µg/L | < 0.66 | U | < 0.67 | U | < 0.66 | U | < 0.68 | U | | |
| 1,2-Dichlorobenzene | 3 | µg/L | < 0.65 | U | < 0.67 | U | < 0.65 | U | **1.6** | **J** | | |
| 1,2-Diphenylhydrazine | ND | µg/L | < 0.56 | U | < 0.57 | U | < 0.56 | U | < 0.59 | U | | |
| 1,3-Dichlorobenzene | 3 | µg/L | < 0.66 | U | < 0.67 | U | < 0.66 | U | < 0.69 | U | | |
| 1,4-Dichlorobenzene | 3 | µg/L | < 0.65 | U | < 0.67 | U | < 0.65 | U | **1.5** | **J** | | |
| 1,4-Dioxane (P-Dioxane) | 0.35* | µg/L | **0.23** | | **0.2** | | **1.4** | | < 0.033 | U | | |
| 1-Methylnaphthalene | NC | µg/L | < 0.59 | U | < 0.6 | U | < 0.59 | U | < 0.61 | U | | |
| 2,4,5-Trichlorophenol | NC | µg/L | < 0.5 | U | < 0.51 | U | < 0.5 | U | < 0.52 | U | | |
| 2,4,6-Trichlorophenol | NC | µg/L | < 0.44 | U | < 0.45 | U | < 0.44 | U | < 0.46 | U | | |
| 2,4-Dichlorophenol | 1 | µg/L | < 0.47 | U | < 0.48 | U | < 0.47 | U | < 0.49 | U | | |
| 2,4-Dimethylphenol | 1 | µg/L | < 0.69 | U | < 0.7 | U | < 0.69 | U | < 0.72 | U | | |
| 2,4-Dinitrophenol | 1 | µg/L | < 7.9 | U | < 8.1 | U | < 7.9 | U | < 8.2 | U | | |
| 2,4-Dinitrotoluene | 5 | µg/L | < 0.6 | U | < 0.61 | U | < 0.6 | U | < 0.63 | U | | |
| 2,6-Dinitrotoluene | 5 | µg/L | < 0.51 | U | < 0.52 | U | < 0.51 | U | < 0.53 | U | | |
| 2-Chloronaphthalene | 10 | µg/L | < 0.48 | U | < 0.49 | U | < 0.48 | U | < 0.5 | U | | |
| 2-Chlorophenol | NC | µg/L | < 0.46 | U | < 0.47 | U | < 0.46 | U | < 0.48 | U | | |
| 2-Methylnaphthalene | NC | µg/L | < 0.68 | U | < 0.69 | U | < 0.68 | U | < 0.71 | U | | |
| 2-Methylphenol (O-Cresol) | NC | µg/L | < 0.47 | U | < 0.47 | U | < 0.47 | U | < 0.48 | U | | |
| 2-Nitroaniline | 5 | µg/L | < 0.68 | U | < 0.69 | U | < 0.68 | U | < 0.71 | U | | |
| 2-Nitrophenol | NC | µg/L | < 0.5 | U | < 0.51 | U | < 0.5 | U | < 0.52 | U | | |
| 3- And 4- Methylphenol (Total) | NC | µg/L | < 0.45 | U | < 0.46 | U | < 0.45 | U | < 0.47 | U | | |
| 3,3'-Dichlorobenzidine | 5 | µg/L | < 0.7 | U | < 0.71 | U | < 0.7 | U | < 0.73 | U | | |
| 3-Nitroaniline | 5 | µg/L | < 0.58 | U | < 0.59 | U | < 0.58 | U | < 0.6 | U | | |
| 4,6-Dinitro-2-Methylphenol | NC | µg/L | < 6.9 | U | < 7 | U | < 6.9 | U | < 7.2 | U | | |
| 4-Bromophenyl Phenyl Ether | NC | µg/L | < 0.46 | U | < 0.47 | U | < 0.46 | U | < 0.48 | U | | |
| 4-Chloro-3-Methylphenol | NC | µg/L | < 0.55 | U | < 0.56 | U | < 0.55 | U | < 0.57 | U | | |
| 4-Chloroaniline | 5 | µg/L | < 0.56 | U | < 0.58 | U | < 0.56 | U | < 0.59 | U | | |
| 4-Chlorophenyl Phenyl Ether | NC | µg/L | < 0.47 | U | < 0.48 | U | < 0.47 | U | < 0.49 | U | | |
| 4-Nitroaniline | 5 | µg/L | < 0.59 | U | < 0.6 | U | < 0.59 | U | < 0.61 | U | | |
| 4-Nitrophenol | NC | µg/L | < 2.1 | U | < 2.1 | U | < 2.1 | U | < 2.1 | U | | |
| Acenaphthene | 20 | µg/L | < 0.51 | U | < 0.52 | U | < 0.51 | U | < 0.53 | U | | |
| Acenaphthylene | NC | µg/L | < 0.47 | U | < 0.48 | U | < 0.47 | U | < 0.49 | U | | |
| Acetophenone | NC | µg/L | < 0.52 | U | < 0.53 | U | < 0.52 | U | < 0.54 | U | | |
| Aniline | 5 | µg/L | < 0.68 | U | < 0.7 | U | < 0.68 | U | < 0.71 | U | | |
| Anthracene | 50 | µg/L | < 0.45 | U | < 0.46 | U | < 0.45 | U | **0.69** | **J** | | |
| Benzidine | 5 | µg/L | < 10 | U | < 10 | U | < 10 | U | < 11 | U | | |
| Benzo(A)Anthracene | 0.002 | µg/L | < 0.4 | U | < 0.41 | U | < 0.4 | U | < 0.42 | U | | |
| Benzo(A)Pyrene | ND | µg/L | < 0.56 | U | < 0.57 | U | < 0.56 | U | < 0.58 | U | | |
| Benzo(B)Fluoranthene | 0.002 | µg/L | < 0.46 | U | < 0.47 | U | < 0.46 | U | < 0.48 | U | | |
| Benzo(G,H,I)Perylene | NC | µg/L | < 0.6 | U | < 0.61 | U | < 0.6 | U | < 0.62 | U | | |
| Benzo(K)Fluoranthene | 0.002 | µg/L | < 0.48 | U | < 0.49 | U | < 0.48 | U | < 0.5 | U | | |
| Benzoic Acid | NC | µg/L | < 8.3 | U | < 8.4 | U | < 8.3 | U | < 8.6 | U | | |
| Benzyl Butyl Phthalate | 50 | µg/L | < 0.66 | U | < 0.67 | U | < 0.66 | U | < 0.69 | U | | |
| Bis(2-Chloroethoxy) Methane | 5 | µg/L | < 0.45 | U | < 0.46 | U | < 0.45 | U | < 0.47 | U | | |
| Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether) | 1 | µg/L | < 0.56 | U | < 0.57 | U | < 0.56 | U | < 0.58 | U | | |

**Table 6C**
**Waste Management Inc**
**Groundwater, Semi-volatile Organic Compound (SVOC) Results**

| | | | Client Sample ID: | | WM-OW-02-20220927 | | FIELD DUP-20220927 | | WM-OW-03-20220927 | | WM-OW-04-20220927 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Lab Sample ID: | | 22I1719-01 | | 22I1719-04 | | 22I1719-02 | | 22I1719-03 | |
| | | | Location ID: | | WM-OW-02 | | WM-OW-02 | | WM-OW-03 | | WM-OW-04 | |
| | | | Sample Date: | | 9/27/2022 | | 9/27/2022 | | 9/27/2022 | | 9/27/2022 | |
| | | | Sample Type Code: | | N | | FD | | N | | N | |
| Analyte | NYS Class GA[1] | Unit | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer |
| Bis(2-Chloroisopropyl) Ether | 5 | µg/L | < 0.67 | U | < 0.69 | U | < 0.67 | U | < 0.7 | U | | |
| Bis(2-Ethylhexyl) Phthalate | 5 | µg/L | < 0.82 | U | < 0.84 | U | < 0.82 | U | < 0.86 | U | | |
| Carbazole | NC | µg/L | < 0.42 | U | < 0.43 | U | < 0.42 | U | < 0.43 | U | | |
| Chrysene | 0.002 | µg/L | < 0.39 | U | < 0.4 | U | < 0.39 | U | < 0.4 | U | | |
| Dibenz(A,H)Anthracene | NC | µg/L | < 0.68 | U | < 0.69 | U | < 0.68 | U | < 0.7 | U | | |
| Dibenzofuran | NC | µg/L | < 0.48 | U | < 0.49 | U | < 0.48 | U | < 0.5 | U | | |
| Diethyl Phthalate | 50 | µg/L | < 0.41 | U | < 0.42 | U | < 0.41 | U | < 0.43 | U | | |
| Dimethyl Phthalate | 50 | µg/L | < 0.37 | U | < 0.38 | U | < 0.37 | U | < 0.38 | U | | |
| Di-N-Butyl Phthalate | 50 | µg/L | < 0.45 | U | < 0.46 | U | < 0.45 | U | < 0.47 | U | | |
| Di-N-Octylphthalate | 50 | µg/L | < 3.9 | U | < 3.9 | U | < 3.9 | U | < 4 | U | | |
| Fluoranthene | 50 | µg/L | < 0.42 | U | < 0.43 | U | < 0.42 | U | < 0.44 | U | | |
| Fluorene | 50 | µg/L | < 0.51 | U | < 0.52 | U | < 0.51 | U | **1.5** | **J** | | |
| Hexachlorobenzene | 0.04 | µg/L | < 0.5 | U | < 0.51 | U | < 0.5 | U | < 0.52 | U | | |
| Hexachlorobutadiene | 0.5 | µg/L | < 0.76 | U | < 0.77 | U | < 0.76 | U | < 0.79 | U | | |
| Hexachlorocyclopentadiene | 5 | µg/L | < 3.6 | U | < 3.7 | U | < 3.6 | U | < 3.8 | U | | |
| Hexachloroethane | 5 | µg/L | < 0.73 | U | < 0.74 | U | < 0.73 | U | < 0.75 | U | | |
| Indeno(1,2,3-C,D)Pyrene | 0.002 | µg/L | < 0.73 | U | < 0.74 | U | < 0.73 | U | < 0.76 | U | | |
| Isophorone | 50 | µg/L | < 0.54 | U | < 0.55 | U | < 0.54 | U | < 0.56 | U | | |
| Naphthalene | 10 | µg/L | < 0.6 | U | < 0.61 | U | < 0.6 | U | < 0.63 | U | | |
| Nitrobenzene | 0.4 | µg/L | < 0.61 | U | < 0.63 | U | < 0.61 | U | < 0.64 | U | | |
| N-Nitrosodimethylamine | NC | µg/L | < 0.77 | U | < 0.78 | U | < 0.77 | U | < 0.8 | U | | |
| N-Nitrosodi-N-Propylamine | NC | µg/L | < 0.6 | U | < 0.61 | U | < 0.6 | U | < 0.63 | U | | |
| N-Nitrosodiphenylamine | 50 | µg/L | < 0.37 | U | < 0.38 | U | < 0.37 | U | < 0.39 | U | | |
| Pentachloronitrobenzene | ND | µg/L | < 0.61 | U | < 0.62 | U | < 0.61 | U | < 0.64 | U | | |
| Pentachlorophenol | 1 | µg/L | < 3.4 | U | < 3.5 | U | < 3.4 | U | < 3.6 | U | | |
| Phenanthrene | 50 | µg/L | < 0.47 | U | < 0.48 | U | < 0.47 | U | < 0.49 | U | | |
| Phenol | 1 | µg/L | < 0.22 | U | < 0.23 | U | < 0.22 | U | < 0.23 | U | | |
| Pyrene | 50 | µg/L | < 0.6 | U | < 0.61 | U | < 0.6 | U | < 0.62 | U | | |
| Pyridine | 50 | µg/L | < 2.4 | U | < 2.5 | U | < 2.4 | U | < 2.5 | U | | |

Notes:

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

*New York State Drinking Water Maximum Contaminant Level

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

µg/L - microgram per liter = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

**Table 6D**
**Waste Management Inc**
**Groundwater, Polychlorinated Biphenyl (PCB) Results**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Client Sample ID: | | WM-OW-02-20220927 | | FIELD DUP-20220927 | | WM-OW-03-20220927 | | WM-OW-04-20220927 | |
| | Lab Sample ID: | | 22I1719-01 | | 22I1719-04 | | 22I1719-02 | | 22I1719-03 | |
| | Location ID: | | WM-OW-02 | | WM-OW-02 | | WM-OW-03 | | WM-OW-04 | |
| | Sample Date: | | 9/27/2022 | | 9/27/2022 | | 9/27/2022 | | 9/27/2022 | |
| | Sample Type Code: | | N | | FD | | N | | N | |
| Analyte | NYS Class GA[1] | Unit | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer |
| PCB-1260 (Aroclor 1260) | NC | µg/L | < 0.063 | U | < 0.061 | U | < 0.062 | U | < 0.061 | U |
| PCB-1254 (Aroclor 1254) | NC | µg/L | < 0.079 | U | < 0.076 | U | < 0.078 | U | < 0.076 | U |
| PCB-1268 (Aroclor 1268) | NC | µg/L | < 0.078 | U | < 0.076 | U | < 0.077 | U | < 0.076 | U |
| PCB-1221 (Aroclor 1221) | NC | µg/L | < 0.08 | U | < 0.077 | U | < 0.079 | U | < 0.077 | U |
| PCB-1232 (Aroclor 1232) | NC | µg/L | < 0.073 | U | < 0.071 | U | < 0.073 | U | < 0.071 | U |
| PCB-1248 (Aroclor 1248) | NC | µg/L | < 0.089 | U | < 0.087 | U | < 0.088 | U | < 0.087 | U |
| PCB-1016 (Aroclor 1016) | NC | µg/L | < 0.053 | U | < 0.052 | U | < 0.053 | U | < 0.052 | U |
| PCB-1262 (Aroclor 1262) | NC | µg/L | < 0.064 | U | < 0.062 | U | < 0.064 | U | < 0.062 | U |
| PCB-1242 (Aroclor 1242) | NC | µg/L | < 0.077 | U | < 0.075 | U | < 0.076 | U | < 0.075 | U |
| Total PCBs | 0.09 | µg/L | - | | - | | - | | - | |

Notes:

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

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

µg/L - microgram per liter = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

**Table 6E**
**Waste Management, Inc**
**Groundwater, Nitrate Nitrite Results**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Client Sample ID: | WM-OW-01-20220927 | | WM-OW-02-20220927 | | WM-OW-03-20220927 | | WM-OW-04-20220927 | |
| | | Lab Sample ID: | 22I1283-04 | | 22I1719-01 | | 22I1719-02 | | 22I1719-03 | |
| | | Location ID: | WM-OW-01 | | WM-OW-02 | | WM-OW-03 | | WM-OW-04 | |
| | | Sample Date: | 9/21/2022 | | 9/27/2022 | | 9/27/2022 | | 9/27/2022 | |
| | | Sample Type Code: | N | | N | | N | | N | |
| Analyte | NYS Class GA[1] | Unit | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer |
| Nitrate (as N) | 10 | mg/L | 0.17 | | 0.28 | | 0.082 | J | 0.062 | J |
| Nitrite (as N) | 1 | mg/L | <0.100 | U | <0.100 | U | <0.100 | U | <0.100 | U |

Notes:

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

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

mg/L - milligram per liter = parts per million (ppm)

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

**Table 6F**
**Waste Management, Inc**
**Groundwater, Artificial Sweetener Results**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Client Sample ID: | WM-OW-01-20220927 | | WM-OW-02-20220927 | | WM-OW-03-20220927 | | WM-OW-04-20220927 | |
| | | Lab Sample ID: | 22I1283-04 | | 22I1719-01 | | 22I1719-02 | | 22I1719-03 | |
| | | Location ID: | WM-OW-01 | | WM-OW-02 | | WM-OW-03 | | WM-OW-04 | |
| | | Sample Date: | 9/21/2022 | | 9/27/2022 | | 9/27/2022 | | 9/27/2022 | |
| | | Sample Type Code: | N | | N | | N | | N | |
| Analyte | Screening Criteria | Unit | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer |
| Acesulfame K | NC | µg/L | **0.98** | **H *-** | **0.13** | **H *-** | **0.054** | **H *-** | **0.6** | **H *-** |
| Sucralose | NC | µg/L | **2** | **H** | **0.77** | **H** | <0.025 | H U | **1.2** | **H** |

Notes:
Sample Type Code: N - Normal, FD -Field Duplicate
NC - No criteria currently exists
µg/L - microgram per liter = parts per billion
U - Compound was not detected at the reporting limit shown
H - Sample was prepped or analyzed beyond the specific holding time
*- -Lab Control Sample (LCS) and/or LCS Duplicate is outside acceptance limits, low biased
**Bold - Indicates the compound was detected**

# BORING LOGS

MONITORING WELL / BORING NO. **WM-SB-01**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 15, 2022

Location: Waste Management | 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: 2.0' (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

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

Screen Interval: _____ Slot Size: _____ Diameter: _____

Cased Interval: _____ Type: _____ Diameter: _____

Sand Pack Interval: _____ Type: _____ Wellhead Prot: _____

Bentonite Seal Interval: _____ Type: _____ Grouted Interval: _____

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**Soil Samples Collected:**

**No Samples Collected**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 2.0'<br>Rec: 2.0'/2.0' | 1.3 | 0' - 2.0' Light gray, dry, coarse to fine SAND and SILT, some asphalt fragments<br>Becomes heavily weathered shale fragments at 2.0 fbg EOB (refusal)<br>Groundwater was not encountered<br>No monitoring well installed |
| 2.0' | | | | |
| 5 | | | | |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **WM-SB-01A**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 15, 2022

Location: Waste Management | 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: see samples collected (Dia): N/A

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

Screen Interval: _____ Slot Size: _____ Diameter: _____

Cased Interval: _____ Type: _____ Diameter: _____

Sand Pack Interval: _____ Type: _____ Wellhead Prot: _____

Bentonite Seal Interval: _____ Type: _____ Grouted Interval: _____

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**Soil Samples Collected:**

**No Samples Collected**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 5.0'<br>Rec: 4.0'/5.0' | < 1.0 | 0' - 2.0' Light gray, dry, coarse to fine SAND and SILT, some asphalt fragments |
| | | | | 2.0' - 5.0' Becomes heavily weathered shale fragments at 2.0 fbg to EOB (refusal) at 5.0 fbg |
| 5 | | | | Groundwater was not encountered<br>No monitoring well installed |
| | | | | 5.0' |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **WM-SB-01B**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 15, 2022

Location: Waste Management | 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: 4.0' (Dia): 2" | Sampled TD: N/A (Dia): N/A

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

Screen Interval: | Slot Size: | Diameter:

Cased Interval: | Type: | Diameter:

Sand Pack Interval: | Type: | Wellhead Prot:

Bentonite Seal Interval: | Type: | Grouted Interval:

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**Soil Samples Collected:**

**No Sample Collected**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 4.0'<br>Rec: 4.0'/4.0' | <1.0 | 0' - 2.0' Light gray, dry, coarse to fine SAND and SILT (fill)<br>Becomes heavily weathered shale fragments at 2.0 fbg to EOB (refusal) at 4.0 fbg<br>Groundwater was not encountered<br>No monitoring well installed |
| 5 | | | | 4.0' |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **WM-SB-02**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 15, 2022

Location: Waste Management | 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: N/A (Dia): N/A

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

Screen Interval: | Slot Size: | Diameter:

Cased Interval: | Type: | Diameter:

Sand Pack Interval: | Type: | Wellhead Prot:

Bentonite Seal Interval: | Type: | Grouted Interval:

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Powered by partnership.

**Soil Samples Collected:**

**No soil sample collected**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 5.0'<br>Rec: 3.0'/5.0' | N/A | 0' - 5.0' Light gray, dry, weathered shale some coarse to fine sand |
| 5 | | | | Weathered shale bedrock in sampler shoe at 5.0 fbg EOB (refusal)<br>Groundwater was not encountered<br>No monitoring well installed |
| | | | | 5.0' |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **WM-SB-02A**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 15, 2022

Location: Waste Management | 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: N/A (Dia): N/A

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

Screen Interval: | Slot Size: | Diameter:

Cased Interval: | Type: | Diameter:

Sand Pack Interval: | Type: | Wellhead Prot:

Bentonite Seal Interval: | Type: | Grouted Interval:

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**Soil Samples Collected:**

**No soil sample collected**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 5.0'<br>Rec: 3.5'/5.0' | N/A | 0' - 5.0' Light gray, dry, weathered shale some coarse to fine sand |
| 5 | | | | Weathered shale bedrock in sampler shoe at 5.0 fbg EOB (refusal)<br>Groundwater was not encountered<br>No monitoring well installed |
| | | | | 5.0' |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **WM-SB-02B**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 15, 2022

Location: Waste Management | 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: 4.0' (Dia): 2" | Sampled TD: N/A (Dia): N/A

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

Screen Interval: | Slot Size: | Diameter:

Cased Interval: | Type: | Diameter:

Sand Pack Interval: | Type: | Wellhead Prot:

Bentonite Seal Interval: | Type: | Grouted Interval:

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**Soil Samples Collected:**

**No soil sample collected**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 4.0'<br>Rec: 3.5'/4.0' | < 1.0 | 0' - 4.0' Light gray, dry, weathered shale some coarse to fine sand<br>Weathered shale bedrock in sampler shoe at 4.0 fbg EOB (refusal)<br>Groundwater was not encountered<br>No monitoring well installed |
| 5 | | | | 4.0' |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **WM-SB-03**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 15, 2022

Location: Waste Management | 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: see samples collected (Dia): N/A

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

Screen Interval: _____ Slot Size: _____ Diameter: _____

Cased Interval: _____ Type: _____ Diameter: _____

Sand Pack Interval: _____ Type: _____ Wellhead Prot: _____

Bentonite Seal Interval: _____ Type: _____ Grouted Interval: _____

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**Soil Samples Collected:**

**WM-SB-03 2-12"**
**WM-SB-03 72"**

| 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" - 6.0' Light gray, dry, coarse to fine SAND and SILT, some fine Gravel and concrete fragments (fill material) to 4 fbg. |
| 5 | | S-2: 5'- 10' Rec: 3.0'/5.0' | < 1.0 | 6.0' - 6.5' Light gray, dry to moist, fine SAND and SILT, some Clay and organics (tree roots) to 6.5 fbg |
| | | | | 6.5' - 12' Gray, dry, weathered shale fragments to EOB (refusal) at 12 fbg |
| 10 | | S-3: 10' -12' Rec: 2.0'/2.0' | < 1.0 | Groundwater was not encountered<br>No monitoring well installed |
| | | | | 12' |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **WM-SB-04**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 15, 2022

Location: Waste Management | 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: see samples collected (Dia): N/A

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

Screen Interval: | Slot Size: | Diameter:

Cased Interval: | Type: | Diameter:

Sand Pack Interval: | Type: | Wellhead Prot:

Bentonite Seal Interval: | Type: | Grouted Interval:

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**Soil Samples Collected:**

**WM-SB-04 0-2"**
**WM-SB-04 2-12"**
**WM-SB-04 168-180"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | 0" - 1.0' Light gray, dry, organics and urban fill material |
| | | S-1: 0' - 5.0' Rec: 4.0'/5.0' | 2.8 | 1.0' - 15' Light gray to brown, dry, coarse to fine SAND and SILT, some weathered shale fragments |
| 5 | | S-2: 5'- 10' Rec: 4.0'/5.0' | < 1.0 | Trace Clay at 7 fbg |
| 10 | | S-3: 10' - 15' Rec: 2.0'/5.0' | < 1.0 | Dark gray/black seam SAND approximately 4-inches wide at 12 fbg. |
| 15 | | | | EOB (refusal) at 15 fbg<br>Groundwater was not encountered<br>No monitoring well installed<br>15' |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **WM-OW-01 / WM-SB-05**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 15, 2022

Location: Waste Management | 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: see samples collected (Dia): N/A

Well TD: 10' (Dia): N/A | Well Type: PVC

Screen Interval: 10' - 5' | Slot Size: 0.010" | Diameter: 2"

Cased Interval: 5' - grade | Type: PVC | Diameter: 2"

Sand Pack Interval: 10' - 3.5' | Type: #2 | Wellhead Prot: Flushmount

Bentonite Seal Interval: 3.5' - 2.5' | Type: Chips | Grouted Interval: N/A

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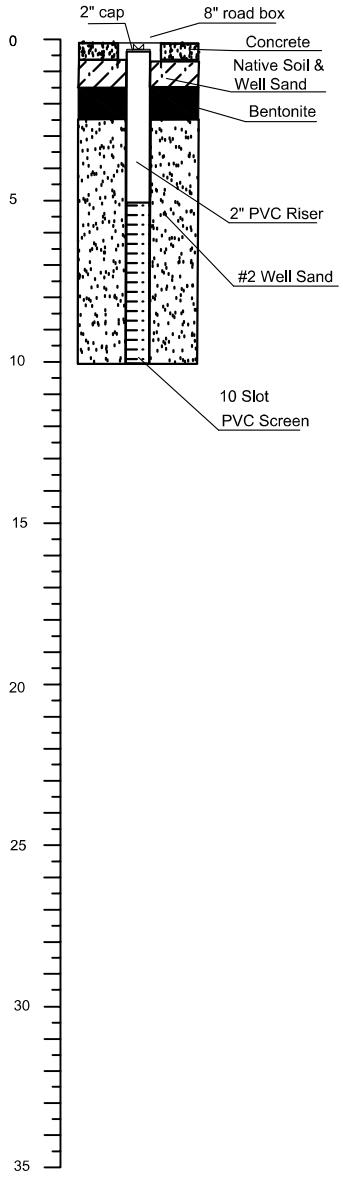
**Soil Samples Collected:**

**WM-SB-05 0-2"**
**WM-SB-05 84-120"**




| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| | | | | |
| | | S-1: 0' - 5.0' Rec: 2.0'/5.0' | < 1.0 | 0' - 7.0' Gray - brown, dry to moist, fine angular GRAVEL and coarse to fine SAND and SILT (fill material) |
| | | S-2: 5.0' - 10' Rec: 3.0'/5.0' | < 1.0 | 7.0' - 12' Light gray, moist, fine SAND, some Clay underlain by weathered gray shale fragments to EOB (refusal) at 12 fbg |
| | | S-3: 10' - 12' Rec: 2.0'/2.0' | < 1.0 | |
| | | | | 12' |

MONITORING WELL / BORING NO. **WM-OW-04 / WM-SB-06**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 16, 2022

Location: Waste Management | 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: see samples collected (Dia): N/A

Well TD: 13' (Dia): 2" | Well Type: PVC

Screen Interval: 13' - 3.0' | Slot Size: 0.010" | Diameter: 2"

Cased Interval: 3.0' - +2.0' | Type: PVC | Diameter: 2"

Sand Pack Interval: 13' - 2.0' | Type: #2 | Wellhead Prot: Stand pipe

Bentonite Seal Interval: 2.0' - 1.0' | Type: Chips | Grouted Interval: N/A

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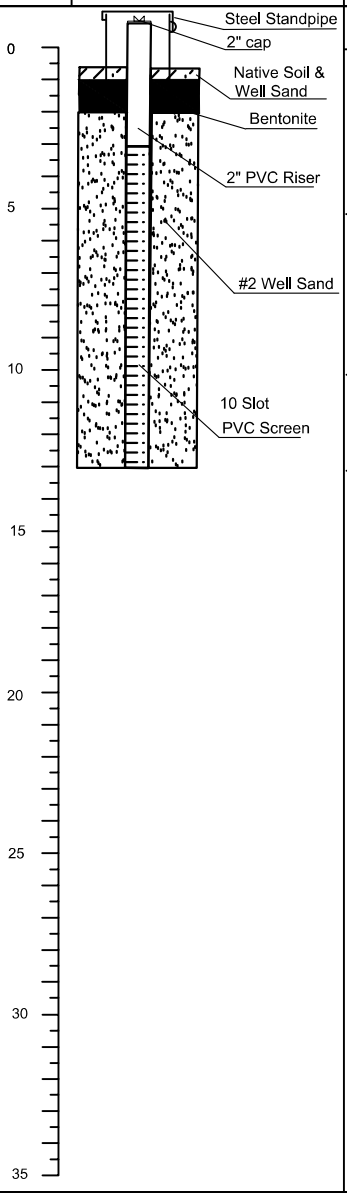
**Soil Samples Collected:**

**WM-SB-06 0-2"**
**WM-SB-06 2-12"**
**WM-SB-06 2-12" MS/MSD and DUPE Parent**
**WM-SB-06 36-48"**




| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| | | | | |
| | | S-1: 0' - 5.0' Rec: 3.5'/5.0' | 72<br>692 | 0' - 2.0' Dark brown, moist, organics (grass and tree roots), coarse to fine SAND and SILT (topsoil)<br>2.0' - 4.0' Brown to gray, dry to wet, coarse to fine SAND, some angular Gravel fragments becomes fine Sand, some Clay to 4 fbg (fill material)<br>4.0' - 8.0' Brown, wet-dry-wet, coarse to fine SAND and SILT, some rounded fine Gravel staining and strong odor of weathered petroleum, no sheen |
| | | S-2: 5.0' - 10' Rec: 5.0'/5.0' | 48 | 8.0' - 13' Brown, wet, fine SAND, SILT and CLAY underlain by coarse to fine Sand Silt and shale fragments to EOB (refusal) at 13 fbg, odor and staining continue |
| | | S-3: 10'-13' Rec: 3.0'/3.0' | not recorded | |
| | | | | 13' |

MONITORING WELL / BORING NO. **WM-OW-03 / WM-SB-07**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 16, 2022

Location: waste Manaegement | 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: see samples collected (Dia): N/A

Well TD: 14' (Dia): 2" | Well Type: PVC

Screen Interval: 14' - 4.0' | Slot Size: 0.010" | Diameter: 2"

Cased Interval: 4.0' - +2.0' | Type: PVC | Diameter: 2"

Sand Pack Interval: 14' - 2.0' | Type: #2 | Wellhead Prot: Stand pipe

Bentonite Seal Interval: 2.0' - 1.0' | Type: Chips | Grouted Interval: N/A

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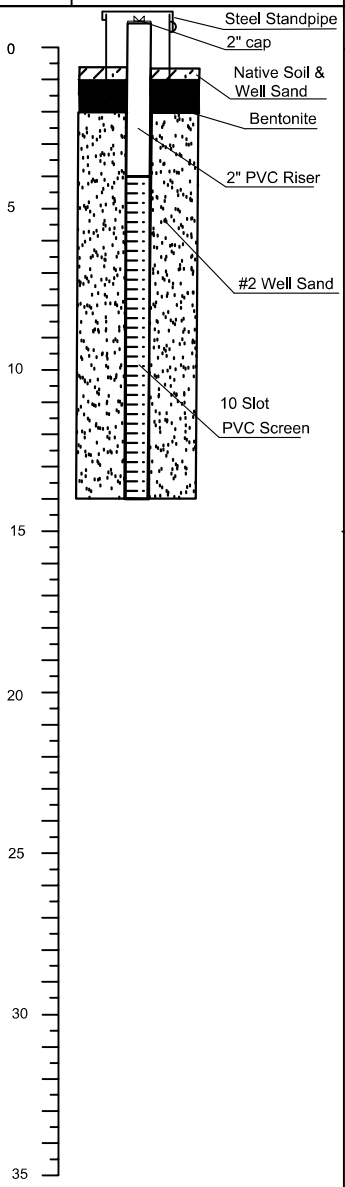
**Soil Samples Collected:**

**WM-SB-07 0-2"**
**WM-SB-07 2-12"**
**WM-SB-07 84- 96"**




| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| | | | | |
| | | S-1: 0' - 5.0' Rec: 3.5'/5.0' | 4.3 | 0' - 4.0' Gray, dry, coarse to fine SAND and SILT with organics and some rounded Gravel (topsoil and fill material) |
| | | | 1.8 | 4.0' - 8.0' Brown, dry to wet, shale fragments increasing in size with depth becomes fine Sand, some Clay (fill material) |
| | | S-2: 5.0' - 10' Rec: 3.0'/5.0' | < 1.0 | ▼ wet at 8 fbg |
| | | | | 8.0' - 15' Gray/brown bands, wet, coarse to fine SAND, SILT to 10 fbg increasing shale fragments to EOB (refusal) at 15 fbg |
| | | S-3: 10'-15' Rec: 5.0'/5.0' | < 1.0 | |
| | | | | 15' |

MONITORING WELL / BORING NO. **WM-OW-02 / WM-SB-08**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 16, 2022

Location: Waste Management | 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: see samples collected (Dia): N/A

Well TD: 13' (Dia): 2" | Well Type: PVC

Screen Interval: 13' - 3.0' | Slot Size: 0.010" | Diameter: 2"

Cased Interval: 3.0' - +2.0' | Type: PVC | Diameter: 2"

Sand Pack Interval: 13' - 2.0' | Type: #2 | Wellhead Prot: Stand pipe

Bentonite Seal Interval: 2.0' - 1.0' | Type: Chips | Grouted Interval: N/A

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**Soil Samples Collected:**

**WM-SB-08 0-2"**
**WM-SB-08 2-12"**
**WM-SB-08 120-132"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | Steel Standpipe; 2" cap; Native Soil & Well Sand; Bentonite; 2" PVC Riser; #2 Well Sand; 10 Slot PVC Screen | | | |
| | | S-1: 0' - 5.0' Rec: 3.0'/5.0' | < 1.0 | 0' - 2" Brown, dry, fine GRAVEL, organics and coarse to fine SAND and SILT<br>2" - 15' Brown, dry to moist, increasing moisture content with depth, coarse to fine SAND and SILT some rounded fine Gravel |
| 5 | | | | Note: 5.0' - 7.0' Fill interval (5.0' - 7.0') containing carpet, plastic sheeting, wood paneling in SAND/SILT material |
| | | S-2: 5.0' - 10' Rec: 4.0'/5.0' | < 1.0 | |
| 10 | | | | ▼ Wet at 10 fbg<br>Increasing shale content with depth to EOB (refusal) at 15 fbg |
| | | S-3: 10'-15' Rec: 5.0'/5.0' | < 1.0 | |
| 15 | | | | 15' |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

# WELL DEVELOPMENT LOGS

| | |
|---|---|
| **Site Name** | AMS - Waste Management |
| **Site Location** | Averill Park, NY |
| **Well ID** | WM-OW-01 |
| **Sampled By** | BB+NW |

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**Well Information**

| | |
|---|---|
| **Flush Mount or Riser** | Flush |
| **Measuring Point** | TOC |
| **Measuring Point Elevation** | |
| **Depth to Water (feet)** | 3.24 |
| **Depth to Bottom of Well** | 10.20 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:
± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

| | |
|---|---|
| **Date** | 8/30/2022 |
| **Weather** | Hot 90's Humid |
| **Purging Equipment** | Peristaltic |
| **Sampling Equipment** | Peristaltic/Horiba |
| **Decon Method** | Alconox |
| **Riser Diameter** | 2" |
| **Well Volume Calculation** | 1.14 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1440 | 8.5 manually | | | | | | | 3.24 | |
| 1448 | 12 using pump w/o horiba | | | | | | | 3.42 | |
| 1455 | 12.5 | 638 | 7.30 | 21.9 | 0.16 | 1.19 | -34 | 3.46 | |
| 1508 | 13.5 | 255 | 7.06 | 21.71 | 0.0 | 1.19 | -60 | 3.47 | |
| 1520 | 14.5 | 77.4 | 7.10 | 21.72 | 0.0 | 1.17 | -71 | 3.46 | |
| 1527 | 15 | 40.4 | 7.17 | 21.78 | 0.0 | 1.15 | -75 | 3.48 | |
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| | |
|---|---|
| **Site Name** | AMS - Waste Management |
| **Site Location** | Averill Park, NY |
| **Well ID** | WM-OW-02 |
| **Sampled By** | BB+NW |

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**Well Information**

| | |
|---|---|
| **Flush Mount or Riser** | Flush |
| **Measuring Point** | TOC |
| **Measuring Point Elevation** | |
| **Depth to Water (feet)** | 9.54 |
| **Depth to Bottom of Well** | 17.17 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:
± 0.1 change in pH
± 3% change in conductivity
± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

| | |
|---|---|
| **Date** | 8/30/2022 |
| **Weather** | Hot 90's Humid |
| **Purging Equipment** | Peristaltic |
| **Sampling Equipment** | Peristaltic/Horiba |
| **Decon Method** | Alconox |
| **Riser Diameter** | 2" |
| **Well Volume Calculation** | 1.24 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1150 | 7 gallons manually | | | | | | | 9.54 | |
| 1220 | pump start | | | | | | | | |
| 1235 | 9 | very trubid no horiba | | | | | | 9.72 | |
| 1245 | 11 | start horiba | | | | | | 9.62 | |
| 1300 | 12.5 | 303 | 7.46 | 15.26 | 1.58 | 1.08 | 135 | 9.71 | |
| 1310 | 14.5 | 102 | 7.36 | 15.15 | 0.0 | 1.09 | 146 | 9.71 | |
| 1320 | 16.5 | 47.2 | 7.43 | 15.10 | 0.0 | 1.10 | 143 | 9.69 | |
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|---|---|
| **Site Name** | AMS - Waste Management |
| **Site Location** | Averill Park, NY |
| **Well ID** | WM-OW-03 |
| **Sampled By** | BB+NW |

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**Well Information**

| | |
|---|---|
| **Flush Mount or Riser** | Riser |
| **Measuring Point** | TOC |
| **Measuring Point Elevation** | |
| **Depth to Water (feet)** | 10.83 |
| **Depth to Bottom of Well** | 17.08 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:
± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

| | |
|---|---|
| **Date** | 8/30/2022 |
| **Weather** | Hot 90's Humid |
| **Purging Equipment** | Peristaltic |
| **Sampling Equipment** | Peristaltic/Horiba |
| **Decon Method** | Alconox |
| **Riser Diameter** | 2" |
| **Well Volume Calculation** | 1.02 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1010 | 10 gallons manually | | | | | | | | |
| 1040 | pump start | | | | | | | 10.90 | |
| 1120 | 13 | Start Horiba | | | | | | 10.85 | |
| 1130 | 14 | 28 | 7.51 | 18.06 | 0.0700 | 1.63 | 5 | 10.87 | |
| 1140 | 15 | 42.4 | 7.44 | 18.34 | 0.0000 | 1.63 | 11 | 10.87 | |
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| | |
|---|---|
| **Site Name** | AMS - Waste Management |
| **Site Location** | Averill Park, NY |
| **Well ID** | WM-OW-04 |
| **Sampled By** | BB+NW |

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**Well Information**

| | |
|---|---|
| **Flush Mount or Riser** | Riser |
| **Measuring Point** | TOC |
| **Measuring Point Elevation** | |
| **Depth to Water (feet)** | 7.15 |
| **Depth to Bottom of Well** | 16.66 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:
± 0.1 change in pH
± 3% change in conductivity
± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |

Well Volume Gallons = Multiplier x Length of Water Column

| | |
|---|---|
| **Date** | 8/30/2022 |
| **Weather** | Hot 90's Humid |
| **Purging Equipment** | Peristaltic |
| **Sampling Equipment** | Peristaltic/Horiba |
| **Decon Method** | Alconox |
| **Riser Diameter** | 2" |
| **Well Volume Calculation** | 1.55 gal |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 830 | 6 gallons manually | | | | | | | | |
| 850 | pump start | | | | | | | 7.31 | |
| 905 | 7.5 | | | | | | | 7.27 | |
| 920 | ~9 | 1000+ | 7.65 | 17.02 | 0.15 | 1.7 | -7 | 7.32 | |
| 930 | ~11 | 1000 | 7.76 | 17.13 | 0.91 | 1.7 | -16 | 7.33 | |
| 940 | ~12.5 | 118 | 7.78 | 17.92 | 0.0 | 1.7 | -23 | 7.33 | |
| 950 | ~14 | 47.7 | 7.89 | 17.73 | 0.0 | 1.71 | -30 | 7.34 | |
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# LOW FLOW STABILIZATION SAMPLING LOGS

| | |
|---|---|
| Site Name | Waste Management |
| Site Location | Peekskill, NY |
| Well ID | WM-GW-01 |
| Sampled By | MW |

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Biosheen observed on groundwater during purge.

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP

± 10% change in DO and Turbidity

**Well Information**

| | |
|---|---|
| Flush Mount or Riser | flush |
| Measuring Point | TOC |
| Measuring Point Elevation | — |
| Depth to Water | 3.34 |
| Depth to Bottom of Well | 10.21 |

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

| | |
|---|---|
| Date | 9/21/22 |
| Weather | partly cloudy |
| Purging Equipment | peristaltic |
| Sampling Equipment | peristaltic |
| Decon Method | Alconox |
| Riser Diameter | 2 |
| Well Volume Calculation | 3.362 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (C) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1140 | | | | | | | | | 250 ml/min |
| 1145 | .25 | 56.9 | 7.41 | 19.99 | 0.0 | .814 | -102 | 3.35 | 250 ml/min |
| 1150 | .5 | 19.8 | 7.48 | 20.08 | 0.0 | .804 | -116 | 3.36 | 250 |
| 1155 | .75 | 5.6 | 7.42 | 20.08 | 0.0 | .807 | -116 | 3.38 | 250 |
| 1200 | 1.0 | 1.4 | 7.47 | 20.08 | 0.0 | .808 | -121 | 3.39 | 250 |
| 1205 | 1.25 | 0.0 | 7.44 | 20.11 | 0.0 | .808 | -120 | 3.38 | 250 |
| 1210 | 1.50 | 0.0 | 7.41 | 20.14 | 0.0 | .806 | -122 | 3.36 | 250 |
| 1215 | 1.75 | 0.0 | 7.39 | 20.12 | 0.0 | .806 | -123 | 3.39 | 250 |
| 1220 | 2.0 | 0.0 | 7.44 | 20.13 | 0.0 | .805 | -125 | 3.39 | 250 |
| 1225 | 2.25 | 0.0 | 7.41 | 20.11 | 0.0 | .806 | -125 | 3.39 | 250 |
| 1230 | 2.50 | 0.0 | 7.41 | 20.12 | 0.0 | .805 | -124 | 3.39 | 250 |
| 1235 | 2.75 | 0.0 | 7.41 | 20.12 | 0.0 | .804 | -125 | 3.40 | 250 |
| 1240 | 3.0 | 0.6 | 7.42 | 20.10 | 0.0 | .804 | -123 | 3.40 | 250 |
| 1245 | 3.25 | 1.8 | 7.43 | 20.11 | 0.0 | .805 | -125 | 3.40 | 250 |
| 1250 | 3.50 | 1.9 | 7.42 | 20.10 | 0.0 | .804 | -124 | 3.40 | 250 |
| 1255 | 3.75 | 0.0 | 7.43 | 20.08 | 0.0 | .804 | -124 | 3.40 | 250 |
| 1300 | Sample | | | | | | | | |

| | |
|---|---|
| Site Name | Waste Management |
| Site Location | Hostenkill, NY |
| Well ID | WM-OW-02 |
| Sampled By | SJW |

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**Well Information**

| | |
|---|---|
| Flush Mount or Riser | Riser |
| Measuring Point | TOC |
| Measuring Point Elevation | — |
| Depth to Water | 7.79 |
| Depth to Bottom of Well | 17.20 |

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |

Well Volume Gallons = Multiplier x Length of Water Column

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP

± 10% change in DO and Turbidity

| | |
|---|---|
| Date | 9/27/22 |
| Weather | Sunny |
| Purging Equipment | Peristaltic |
| Sampling Equipment | Peristaltic |
| Decon Method | alconox |
| Riser Diameter | 2" |
| Well Volume Calculation | 1.53 |

1130 Sampled WM-OW-02

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1030 | Began Purge | | | | | | | 7.79 | |
| 1035 | | 132 | 7.59 | 14.56 | 2.56 | 1.02 | -50 | 7.82 | |
| 1040 | | 74.0 | 7.31 | 14.66 | 0.93 | 1.02 | -30 | 7.84 | |
| 1045 | | 60.4 | 7.21 | 14.76 | 0.01 | 1.02 | -11 | 7.84 | |
| 1050 | | 59.9 | 7.20 | 14.79 | 0.00 | 1.02 | -8 | 7.84 | |
| 1055 | | 57.4 | 7.17 | 14.83 | 0.00 | 1.02 | 5 | 7.85 | |
| 1100 | | 56.6 | 7.16 | 14.87 | 0.00 | 1.02 | 8 | 7.85 | |
| 1105 | | 57.0 | 7.16 | 14.88 | 0.00 | 1.02 | 13 | 7.86 | |
| 1110 | | 56.0 | 7.15 | 14.95 | 0.00 | 1.02 | 18 | 7.86 | |
| 1115 | | 55.6 | 7.14 | 14.95 | 0.00 | 1.02 | 20 | 7.89 | |
| 1120 | | 55.7 | 7.14 | 14.93 | 0.00 | 1.02 | 22 | 7.90 | |
| 1125 | | 55.5 | 7.14 | 14.95 | 0.00 | 1.01 | 29 | 7.95 | |
| | Ended Purge | | | | | | | | |

| | |
|---|---|
| Site Name | WM |
| Site Location | Poestenkill, NY |
| Well ID | WM-OW-03 |
| Sampled By | TR |

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Well Information

| | |
|---|---|
| Flush Mount or Riser | RISER |
| Measuring Point | – |
| Measuring Point Elevation | TOC |
| Depth to Water | 8.92 |
| Depth to Bottom of Well | 17.15 |

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| | |
|---|---|
| Date | 9.27.22 |
| Weather | 56F + CLR |
| Purging Equipment | PERI |
| Sampling Equipment | PERISTALTIC PUMP |
| Decon Method | ALCONOX |
| Riser Diameter | 2" |
| Well Volume Calculation | 4 gal. |

°C

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (~~F~~) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1045 | 0 | 176 | 6.81 | 16.25 | 0.58 | 1.69 | -13 | 8.94 | |
| :50 | 0.25 | 121 | 6.66 | 16.62 | 0.03 | 1.66 | -31 | 8.95 | |
| :55 | 0.5 | 76.5 | 6.85 | 16.97 | 0.00 | 1.65 | -40 | 8.95 | |
| 11:00 | 0.75 | 29.2 | 6.90 | 17.19 | 0.00 | 1.64 | -42 | " | |
| :05 | 1.0 | 19.8 | 6.88 | 17.33 | 0.00 | 1.63 | -42 | " | |
| :10 | 1.25 | 9.4 | 6.87 | 17.37 | 0.00 | 1.62 | -45 | " | |
| :15 | 1.50 | 4.0 | 6.90 | 17.38 | 0.00 | 1.60 | -49 | " | |
| :20 | 1.75 | 2.2 | 6.88 | 17.48 | 0.00 | 1.59 | -51 | " | |
| :25 | 2.0 | 0.0 | 6.88 | 17.50 | 0.00 | 1.57 | -53 | " | |
| :30 | 2.25 | 0.0 | 6.87 | 17.49 | 0.00 | 1.57 | -53 | " | |
| :35 | 2.5 | 0.0 | 6.88 | 17.55 | 0.00 | 1.57 | -54 | " | |
| | SAMPLE MW-OW-03 @ 11:35 9.27.22 | | | | | | | | |
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| | |
|---|---|
| **Site Name** | ALGONQUIN |
| **Site Location** | WM |
| **Well ID** | WM-OW-04 |
| **Sampled By** | TR/SV |

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Well Information

| | |
|---|---|
| Flush Mount or Riser | RISER |
| Measuring Point | TOC |
| Measuring Point Elevation | ~~766~~ |
| Depth to Water | 4.34 |
| Depth to Bottom of Well | 16.69 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

| | |
|---|---|
| **Date** | 9.27.22 |
| **Weather** | partly cloudy |
| **Purging Equipment** | peristaltic |
| **Sampling Equipment** | peristaltic |
| **Decon Method** | alconox |
| **Riser Diameter** | 2" |
| **Well Volume Calculation** | 2.01 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1300 | 0 | >1K | 6.52 | 17.02 | 9.22 | 1.42 | -70 | 4.43 | |
| :05 | 0.25 | 183 | 6.63 | 16.89 | 6.71 | 1.42 | -73 | 4.44 | |
| :10 | 0.5 | 121 | 6.68 | 17.04 | 5.90 | 1.42 | -79 | 4.43 | |
| :15 | 0.75 | 55.1 | 6.71 | 17.24 | 5.31 | 1.42 | -78 | 4.43 | |
| :20 | 1.0 | 29.5 | 6.72 | 17.31 | 4.82 | 1.42 | -78 | 4.43 | |
| :25 | 1.25 | 16.6 | 6.71 | 17.34 | 4.09 | 1.42 | -79 | 4.43 | |
| 13:30 | 1.5 | 13.9 | 6.72 | 17.37 | 3.65 | 1.43 | -79 | 4.43 | |
| :35 | 1.75 | 14.7 | 6.73 | 17.36 | 2.94 | 1.42 | -80 | 4.49 | |
| :40 | 2.0 | 11.4 | 6.73 | 17.38 | 2.54 | 1.42 | -80 | 4.51 | |
| :45 | 2.25 | 11.7 | 6.72 | 17.37 | 2.38 | 1.42 | -81 | 4.51 | |
| :50 | 2.50 | 11.8 | 6.74 | 17.43 | 2.17 | 1.42 | -81 | 4.51 | |
| :55 | 2.75 | 9.8 | 6.71 | 17.58 | 1.98 | 1.42 | -80 | 4.51 | |
| | SAMPLED WM-OW-04 @ 1355 9-27-22 | | | | | | | | |
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# LABORATORY ANALYTICAL REPORTS

Aztech Environmental
TECHNOLOGIES
A LaBella Company

March 13, 2023 (Revised 4-18-2023)

Brittany O'Brien-Drake
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233

**RE: Site Summary Report (Rev. 4-18-2023)**
**Algonquin Middle School PFAS Assessment #2105197**
**Valente Lumber Yard, 8957 NY 66, Averill Park, NY**
**Tax parcel ID: 136.-8-11.1**

Aztech Environmental Technologies Inc. (Aztech), a LaBella company, has provided this report to document overburden soil and groundwater assessment methodologies and sampling results for the above referenced location. All field investigation activities were performed at the discretion of and in accordance with the scope of work (SOW) developed and provided by the New York State Department of Environmental Conservation (NYSDEC).

The property is partially utilized by L.J. Valente Lumber, Inc. (Valente Lumber) as a lumber yard, mill shop, and retail operation. Lumber yard operations primarily occupy the northern portion of the parcel. The approximate 64.83-acre parcel is located south of Ford Rd. and east of Reichards Lake Rd. The northern portion of the parcel (where the lumber operation is located) is in the Town of Poestenkill; the southern (undeveloped) portion of the parcel is within the Town of Sand Lake. A low-lying area is centrally located within the property with hills of slightly higher elevation located east and west. A small pond is located just south of the small rise toward the western portion of the property. The attached **Figure 1** depicts property features and boundaries.

Overburden soil encountered during drilling activities consisted primarily of coarse to fine sand and silt with varying amounts of shale fragments which typically increased in depth to tooling refusal. Shale fragments in the sampler shoe at terminal boring depth is noted on boring logs.

Prior to intrusive groundwork, a UDig NY utility clearance ticket was ordered for the property. Additionally, a private utility locating contractor performed utility clearance with ground penetrating radar (GPR) at each boring location on August 11, 2022. Boring locations confirmed as clear were painted white and marked with a white flag.

## SUMMARY OF FIELD INVESTIGATIONS:

### Air monitoring

Air monitoring was conducted during all ground-intrusive work at the property (August 17 and 18, 2022) in accordance with the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan (CAMP). One dedicated Dust Trak unit with photo-ionization detector (PID) was positioned upwind with a second dedicated unit placed downwind at each boring location. No exceedances for volatile organic compounds (VOCs) or particulates were recorded.

### Soil Boring and Monitoring Well Installation

On August 17 and 18, 2022, Clean Globe Environmental (CGE) advanced soil borings (VL-SB-01 through VL-SB-07) utilizing a Geoprobe 7822DT and direct-push techniques to terminal depths ranging from 10 to 20 feet below grade (fbg). Of the 7 total boring locations, 3 were converted to monitoring wells (VL-OW-01 through VL-OW-03). Aztech provided oversight of drilling activities and performed soil headspace screening, soil classification, and both soil and groundwater sampling.

Monitoring wells were installed by over-drilling the borehole utilizing 4 ¼" inner diameter (ID) hollow stem augers. The well assembly consisted of 2-inch polyvinyl chloride (PVC) 10-slot screen set to straddle the water table and casing to grade. A number 2 filtration sand was installed to fill the borehole annulus to approximately one (1) to two (2) feet above the screened interval. Bentonite chips were added atop the sand to seal the casing from surface water intrusion and subsequently hydrated with certified per-and polyfluoroalkyl substance (PFAS)-free water. Native soil and well sand were added as needed to the finish grade. Each well was finished within a flush mount road box. Each newly installed groundwater monitoring well was developed on August 30, 2022 by using a peristaltic pump and/or bailer to remove a targeted 10 well volumes. Monitoring well specifications are presented below in **Table 1.** Individual boring logs are attached. Monitoring well locations are depicted on the attached Figure 1.

**TABLE 1**

Monitoring Well Specifications

| Well ID | Borehole Depth (Feet) | Well Diameter (Inches) | Screened Interval (Feet) | Sand Packed Interval (Feet) | Bentonite Seal (Feet) | Observed DTW* (Feet) |
|---|---|---|---|---|---|---|
| VL-OW-01 | 15 | 2 | 15 - 5.0 | 15 - 3.0 | 3.0 - 2.0 | 2.1 |
| VL-OW-02 | 10 | 2 | 10 - 5.0 | 10 - 3.0 | 3.0 - 2.0 | 0** |
| VL-OW-03 | 15 | 2 | 13 - 3.0 | 13 - 2.0 | 2.0 - 1.0 | 2.41 |

Notes:

Wells drilled/installed by Clean Globe Environmental (CGE)

*Depth to Water (DTW) as measured on September 21, 2022 from top of casing (TOC)

** Observed DTW at top of casing

## Surface Water and Sediment Sampling

On August 17, 2022, two (2) surface water and two (2) sediment samples were collected. Surface water samples were obtained from the stormwater drainage culvert area at the north of the parcel (VL-SW-01) and from the pond (VL-SW-02) south of the lumber mill building and somewhat central to the property. Two (2) sediment samples were collected from the same locations as the surface water samples and designated as VL-SED-01-20220817 and VL-SED-02-20220817. A stainless-steel dip cup, that was decontaminated prior to sample collection, was used to obtain each sample. The samples were analyzed for PFAS compounds by analytical method 537M. Additional samples collected for quality assurance/quality control (QA/QC) purposes included two (2) duplicate samples and two (2) matrix spike/matrix spike duplicate (MS/MSD). The parent sample for each duplicate and the approximate locations of the sediment and surface water samples are depicted on Figure 1.

## Soil Sampling

Individual soil samples were visually classified and headspace screened with a photo-ionization detector (PID) calibrated to a 100 part per million (ppm) isobutylene calibrant gas. Soil samples from select boring locations were collected from the following depth intervals:

- Surface grade to 2 -inch below grade (BG), beneath vegetative cover,
- 2-inch BG to 12-inch BG, and
- Air/water interface (water table) as observed in borehole.

The actual number of soil samples was dependent on field conditions. A total of twenty-one (21) depth discrete subsurface soil samples were collected from the seven (7) soil borings and analyzed for PFAS compounds by analytical method 537M for soil. Select soil samples from the 2"BG to 12"BG interval were analyzed using the Synthetic Precipitation Leaching Procedure (SPLP) by EPA Method 1312 and the leachate was subsequently analyzed for PFAS compounds by analytical method 537M. SPLP PFAS

results are not considered reportable as it was determined that Con-Test (a Pace Analytical Laboratory at East Longmeadow, MA and the NYSDEC's contracted lab for this project) did not hold the appropriate ELAP certification for EPA Method 1312 at the time of analysis.

Additional QA/QC samples collected consisted of two (2) equipment blanks. The Equipment Blank samples were collected via a soil sampling bag and stainless-steel dip cup on September 17 and 18, 2022 respectively. Laboratory analytical for the equipment blank samples submitted did not record any compounds above the laboratory's minimum reporting limit (RL). Refer to **Table 2** for additional details.

Groundwater Sampling

Three (3) groundwater samples were collected on September 21, 2022 from the newly installed overburden groundwater monitoring wells. Samples were collected utilizing low-flow/low-stress sampling techniques with a peristaltic pump and associated HDPE and silicone tubing. Water quality field parameters (temperature, pH, specific conductance, oxygen-reduction potential (ORP), dissolved oxygen (DO), and turbidity) were recorded during the well purging at five (5) minute intervals up to the sample time. A copy of the stabilization logs is attached. Samples were immediately placed on ice and transferred to Pace Analytical and Eurofins/TestAmerica under chain of custody protocols. Groundwater samples were analyzed for PFAS compounds by EPA Method 537M, pharmaceutically active compounds-negative by analytical method L221, nitrate and nitrite anions by EPA Method 300.

Additional samples collected for QA/QC purposes consisted of one field equipment blank. The Equipment Blank sample was collected via HDPE and silicone tubing associated with the peristaltic pump. Laboratory analytical results for the equipment blank sample submitted September 21, 2022 did not record any compounds above the laboratory's minimum RL. Refer to Table 2 for additional details.

## DISCUSSION OF ANALYTICAL RESULTS

STANDARDS, CRITERIA, AND GUIDANCE VALUES

The following documents will be used to evaluate soil, groundwater, surface water, and sediment analytical results:

*Soil*

- Unrestricted Use and Residential Use soil guidance values from NYSDEC Sampling, Analysis, and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs, November 2022.

*Groundwater*

- Screening levels identified in NYSDEC Sampling, Analysis, and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs, November 2022
- New York State Drinking Water Maximum Contaminant Level (MCL) for PFOA (10 ppt), PFOS (10 ppt), and 1,4-dioxane (1 ppb)

*Surface Water*

- Screening levels identified in NYSDEC Sampling, Analysis, and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs, November 2022
- New York State Drinking Water Maximum Contaminant Level (MCL) for PFOA (10 ppt) and PFOS (10 ppt)

*Sediment*

- Standards, criteria, or guidance values do not currently exist for PFAS in sediment. Results will be discussed as provided by the laboratory.

It is noted that the NYSDEC Standards, Criteria, & Guidance Values are listed in concentrations of parts per trillion (ppt), parts per billion (ppb), and parts per million (ppm) while laboratory analytical results are reported in equivalent concentrations. For example,

- In soil:
  - 1 ppt = 1 nanogram per kilogram (ng/kg),
  - 1 ppb = 1 microgram per kilogram (µg/kg), and
  - 1 ppm = 1 milligram per kilogram (mg/kg)

- In water:
  - 1 ppt = 1 nanogram per liter (ng/L),
  - 1 ppb = 1 microgram per liter (µg/L), and
  - 1 ppm = 1 milligram per liter (mg/L).

Soil Results:

Of the 21 soil samples collected and analyzed for PFAS compounds by analytical method 537M, five (5) had one or more PFAS compounds detected. Perfluorooctanoic Acid (PFOA) was recorded in two (2) intervals at one (1) location (VL-SB-03) at concentrations of 2.0 µg/kg and 2.5 µg/kg that are both above the Unrestricted Use guidance value of 0.66 µg/kg. Perfluorooctane sulfonic acid (PFOS) was recorded at two (2) locations at identical estimated concentrations of 0.083 µg/kg. This concentration is below the Unrestricted Use guidance value of 0.88 µg/kg and, also, below the laboratory RL

The PFAS compound PFHxA was reported below the RL at an estimated concentration of 0.23 µg/kg (VL-SB-04) and does not have a corresponding guidance value. Refer to **Table 3** for additional details. Refer to **Appendix A** for the laboratory analytical reports.

Sediment Results:

Two (2) sediment samples were collected and analyzed for PFAS compounds. PFOS was reported in one sample (VL-SED-01) below the laboratory RL and is considered an estimated concentration at 0.072 µg/kg. No other PFAS compounds were reported above the RL. No standards, criteria, or guidance values (SCGs) for PFAS in sediment have been established. Refer to **Table 4** for additional details.

Surface Water Results:

Two (2) surface water samples were collected on August 17, 2022 and analyzed for PFAS compounds. Eleven (11) total compounds were recorded. PFOA was recorded at both locations at concentrations of 21 ng/L (VL-SW-01) and an estimated concentration of 4.1 ng/L (VL-SW-02). PFOS was recorded at both locations at concentrations of 14 ng/L and 12 ng/L. Three of the recorded concentrations for PFOA and PFOS are above the 10 ng/L (ppt) drinking water MCL which is currently used as a screening level for surface water and groundwater results. The remaining compounds, Perfluoro(2-ethoxyethane)sulfonic acid, FBSA, PFBS, PFBA, PFDA, PFHpA, PFHxS, PFHxA, PFNA, PFPeS, and PFPeA were recorded from an estimated concentration of 0.24 ng/L (FBSA) to 16 ng/L (PFHxA). No SCGs are available for the remaining compounds. Refer to **Table 5** for additional details.

Groundwater Results:

All three (3) groundwater samples collected September 21, 2022 recorded one or more PFAS compounds. PFOA was recorded at concentrations ranging from an estimated 1.2 ng/L (VL-OW-03) to 10 ng/L (VL-OW-02). PFOS was recorded at an estimated concentration of 1.1 ng/L (VL-OW-03) and 4.3 ng/L (VL-OW-02). The recorded concentrations for PFOA and PFOS are at or below the applicable screening level of 10 ng/L. Additionally, PFBS, PFBA, PFHpA, PFHxA, PFHxS, PFNA, and PFPeA were recorded ranging from an estimated concentration of 0.61 ng/L (PFNA) to 5.9 ng/L (PFBA). No SCGs are currently available for these compounds.

Groundwater samples were additionally analyzed for artificial sweeteners, including sucralose and acesulfame-k, and nitrate to assess the potential migration of septic derived wastewater to groundwater. Artificial sweetener results are used solely as qualitive screening levels by the NYSDEC to evaluate this potential. Acesulfame-K was detected in all groundwater samples with concentrations ranging from 0.13 ug/L (VL-OW-03) to 1.5 ug/L (VL-OW-01). Sucralose was detected in samples collected from two (2) monitoring wells and results ranged from 0.077 ug/L (VL-OW-03) to 0.12 ug/L

(VL-OW-01). The maximum detections of sucralose and acesulfame-k were both identified in monitoring well VL-OW-01. Nitrate was detected in all three (3) groundwater samples below the groundwater standard and results ranged from 0.29 mg/L (VL-OW-01) to 0.38 mg/L (VL-OW-03). Refer to **Table 6A-6C** for additional details. Refer to Appendix A for the laboratory analytical reports.

Further discussion on the findings and conclusions of the investigation of the Valente Lumber Yard property are discussed within the main PFAS assessment report provided by CDM Smith.

Respectfully submitted,

Aztech Environmental Technologies (a LaBella Company)

Todd Rollend
Environmental Scientist

I Randy Hoose certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10). All investigation and activities were performed in full accordance with the work plan provided by the NYSDEC.

Randy Hoose, P.G.
Senior Hydrogeologist

Attachments:
Figure 1 – Site Map
Table 2 – Equipment Blank, PFAS Results
Table 3 – Soil, PFAS Results
Table 4 – Sediment Results
Table 5 – Surface Water Results
Table 6A – Groundwater, PFAS Results
Table 6B – Groundwater, Artificial Sweetener Results
Table 6C – Groundwater, Nitrate & Nitrite Results
Boring Logs
Well Development Logs
Low-Flow Stabilization Sampling Logs
Appendix – A: Laboratory Analytical Reports

# FIGURE


## Legend

N

Algonquin Middle School

Tax Parcels

### Location Type

Overburden Monitoring Well/Soil Boring (with samples)

Soil Boring (with samples)

Surface Water/Sediment

0 87.5 175 350 Feet

Valente Lumber Yard

Figure 1
Sample Locations

Rensselaer County
Town of Poestenkill

**Algonquin Middle School**
**PFAS Assessment**
**#2105197**

NEW YORK STATE | Department of Environmental Conservation

# TABLES

**Table 2**
**Valente Lumber Yard**
**Equipment Blank, PFAS Results**

| | | | Client Sample ID: | Equipment Blank | | Equipment Blank-2 | | EQUIPMENT BLANK | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Lab Sample ID: | 22H1143-22 | | 22H1143-24 | | 480-201885-5 | |
| | | | Sample Date: | 8/17/2022 | | 8/17/2022 | | 9/21/2022 | |
| | | | Sample Type Code: | EB | | EB | | EB | |
| Analyte | Unit | NYSDEC Guidelines[1] | | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS) | ng/L | NC | | < 0.61 | U | < 0.59 | U | NA | |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | ng/L | NC | | < 0.58 | U | < 0.56 | U | < 1.8 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | ng/L | NC | | < 0.27 | U | < 0.26 | U | NA | |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | ng/L | NC | | < 0.35 | U | < 0.34 | U | < 4.4 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ng/L | NC | | < 0.33 | U | < 0.32 | U | NA | |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid (9Cl-PF3ONS) | ng/L | NC | | < 0.37 | U | < 0.36 | U | NA | |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | ng/L | NC | | < 0.23 | U | < 0.22 | U | NA | |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | ng/L | NC | | < 0.6 | U | < 0.58 | U | NA | |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | ng/L | NC | | < 0.72 | U | < 0.7 | U | NA | |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | ng/L | NC | | NA | | NA | | < 4.4 | U |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | ng/L | NC | | NA | | NA | | < 4.4 | U |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | ng/L | NC | | < 0.26 | U | < 0.26 | U | NA | |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | ng/L | NC | | < 0.22 | U | < 0.21 | U | NA | |
| Perfluoro-1-butanesulfonamide (FBSA) | ng/L | NC | | < 0.18 | U | < 0.18 | U | NA | |
| Perfluoro-1-hexanesulfonamide (FHxSA) | ng/L | NC | | < 0.29 | U | < 0.29 | U | NA | |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | ng/L | NC | | < 0.39 | U | < 0.38 | U | NA | |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | ng/L | NC | | < 0.32 | U | < 0.32 | U | NA | |
| Perfluorobutanesulfonic acid (PFBS) | ng/L | NC | | < 0.27 | U | < 0.26 | U | < 1.8 | U |
| Perfluorobutanoic Acid (PFBA) | ng/L | NC | | < 0.71 | U | < 0.69 | U | < 4.4 | U |
| Perfluorodecanesulfonic acid (PFDS) | ng/L | NC | | < 0.31 | U | < 0.3 | U | < 1.8 | U |
| Perfluorodecanoic acid (PFDA) | ng/L | NC | | < 0.46 | U | < 0.45 | U | < 1.8 | U |
| Perfluorododecanoic acid (PFDoA) | ng/L | NC | | < 0.42 | U | < 0.41 | U | < 1.8 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | ng/L | NC | | < 0.89 | U | < 0.87 | U | < 1.8 | U |
| Perfluoroheptanoic acid (PFHpA) | ng/L | NC | | < 0.33 | U | < 0.32 | U | < 1.8 | U |
| Perfluorohexanesulfonic acid (PFHxS) | ng/L | NC | | < 0.32 | U | < 0.31 | U | < 1.8 | U |
| Perfluorohexanoic acid (PFHxA) | ng/L | NC | | < 0.37 | U | < 0.36 | U | < 1.8 | U |
| Perfluorononanesulfonic Acid (PFNS) | ng/L | NC | | < 0.16 | U | < 0.16 | U | NA | |
| Perfluorononanoic acid (PFNA) | ng/L | NC | | < 0.33 | U | < 0.32 | U | < 1.8 | U |
| Perfluorooctane Sulfonamide (PFOSA) | ng/L | NC | | < 0.4 | U | < 0.39 | U | < 1.8 | U |
| Perfluorooctanesulfonic acid (PFOS) | ng/L | 10 | | < 0.57 | U | < 0.56 | U | < 1.8 | U |
| Perfluorooctanoic acid (PFOA) | ng/L | 10 | | < 0.65 | U | < 0.63 | U | < 1.8 | U |
| Perfluoropentanesulfonic Acid (PFPeS) | ng/L | NC | | < 0.24 | U | < 0.24 | U | NA | |
| Perfluoropentanoic Acid (PFPeA) | ng/L | NC | | < 0.37 | U | < 0.36 | U | < 1.8 | U |
| Perfluorotetradecanoic acid (PFTeDA) | ng/L | NC | | < 0.35 | U | < 0.34 | U | < 1.8 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | ng/L | NC | | < 0.26 | U | < 0.26 | U | < 1.8 | U |
| Perfluoroundecanoic Acid (PFUnA) | ng/L | NC | | < 0.35 | U | < 0.34 | U | < 1.8 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

Sample Type Code: EB - Equipment Blank

ng/L - nanogram per liter = parts per trillion (ppt)

NC - No criteria currently exists

NA - Compound was not analyzed for

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

**Table 3**
**Valente Lumber Yard**
**Soil, PFAS Results**

| | | | | Client Sample ID: | VL-SB-01 0-2IN | | VL-SB-01 2-12IN | | VL-SB-01 84-96IN | | VL-SB-02 0-2IN | | VL-SB-02 2-12IN | | DUPE-3 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | 22H1143-25 | | 22H1143-26 | | 22H1143-27 | | 22H1143-46 | | 22H1143-47 | | 22H1143-49 | |
| | | | | Location ID: | VL-SB-01 | | VL-SB-01 | | VL-SB-01 | | VL-SB-02 | | VL-SB-02 | | VL-SB-02 2-12IN | |
| | | | | Sample Date: | 8/17/2022 | | 8/17/2022 | | 8/17/2022 | | 8/17/2022 | | 8/17/2022 | | 8/17/2022 | |
| | | | | Sample Type Code: | N | | N | | N | | N | | N | | FD | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Residential Use Guidance Value[1] | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.12 | U | < 0.14 | U | < 0.16 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.11 | U | < 0.13 | U | < 0.15 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.081 | U | < 0.091 | U | < 0.1 | U | < 0.088 | U | < 0.084 | U | < 0.086 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.1 | U | < 0.11 | U | < 0.13 | U | < 0.11 | U | < 0.1 | U | < 0.11 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.14 | U | < 0.16 | U | < 0.18 | U | < 0.15 | U | < 0.15 | U | < 0.15 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.11 | U | < 0.12 | U | < 0.14 | U | < 0.12 | U | < 0.11 | U | < 0.12 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.21 | U | < 0.24 | U | < 0.27 | U | < 0.23 | U | < 0.22 | U | < 0.23 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.12 | U | < 0.14 | U | < 0.16 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.08 | U | < 0.09 | U | < 0.1 | U | < 0.087 | U | < 0.083 | U | < 0.085 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.068 | U | < 0.076 | U | < 0.088 | U | < 0.074 | U | < 0.071 | U | < 0.073 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.072 | U | < 0.081 | U | < 0.093 | U | < 0.078 | U | < 0.075 | U | < 0.077 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.14 | U | < 0.16 | U | < 0.18 | U | < 0.15 | U | < 0.15 | U | < 0.15 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.13 | U | < 0.15 | U | < 0.17 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.083 | U | < 0.093 | U | < 0.11 | U | < 0.09 | U | < 0.086 | U | < 0.088 | U |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.081 | U | < 0.091 | U | < 0.1 | U | < 0.088 | U | < 0.084 | U | < 0.086 | U |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.067 | U | < 0.075 | U | < 0.087 | U | < 0.073 | U | < 0.07 | U | < 0.072 | U |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | < 0.059 | U | < 0.066 | U | < 0.076 | U | < 0.064 | U | < 0.061 | U | < 0.062 | U |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | < 0.1 | U | < 0.11 | U | < 0.13 | U | < 0.11 | U | < 0.11 | U | < 0.11 | U |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | < 0.057 | U | < 0.063 | U | < 0.073 | U | < 0.061 | U | < 0.059 | U | < 0.06 | U |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.067 | U | < 0.075 | U | < 0.087 | U | < 0.073 | U | < 0.07 | U | < 0.072 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.13 | U | < 0.15 | U | < 0.17 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | < 0.063 | U | < 0.071 | U | < 0.082 | U | < 0.069 | U | < 0.066 | U | < 0.067 | U |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.07 | U | < 0.079 | U | < 0.091 | U | < 0.076 | U | < 0.073 | U | < 0.075 | U |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | < 0.082 | U | < 0.092 | U | < 0.11 | U | < 0.089 | U | < 0.085 | U | < 0.087 | U |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.12 | U | < 0.13 | U | < 0.15 | U | < 0.13 | U | < 0.12 | U | < 0.13 | U |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | < 0.072 | U | < 0.081 | U | < 0.093 | U | < 0.078 | U | < 0.075 | U | < 0.077 | U |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.086 | U | < 0.096 | U | < 0.11 | U | < 0.093 | U | < 0.089 | U | < 0.091 | U |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 8.8 | < 0.059 | U | < 0.067 | U | < 0.077 | U | < 0.065 | U | < 0.062 | U | < 0.063 | U |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 6.6 | < 0.12 | U | < 0.14 | U | < 0.16 | U | < 0.14 | U | < 0.13 | U | < 0.13 | U |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.064 | U | < 0.072 | U | < 0.083 | U | < 0.07 | U | < 0.067 | U | < 0.068 | U |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | < 0.067 | U | < 0.075 | U | < 0.087 | U | < 0.073 | U | < 0.07 | U | < 0.072 | U |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.084 | U | < 0.094 | U | < 0.11 | U | < 0.091 | U | < 0.087 | U | < 0.089 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.098 | U | < 0.11 | U | < 0.13 | U | < 0.11 | U | < 0.1 | U | < 0.1 | U |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | < 0.08 | U | < 0.09 | U | < 0.1 | U | < 0.087 | U | < 0.083 | U | < 0.085 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

µg/kg - microgram per kilogram = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above Unrestricted Use guidance value

Highlighted - Indicates the compound was detected above Residential Use guidance value

**Table 3**
**Valente Lumber Yard**
**Soil, PFAS Results**

| | | | | Client Sample ID: | | VL-SB-02 72-84IN | | VL-SB-03 0-2IN | | VL-SB-03 2-12IN | | VL-SB-03 156-168IN | | VL-SB-04 0-2IN | | VL-SB-04 2-12IN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | | 22H1143-48 | | 22H1218-01 | | 22H1218-02 | | 22H1218-03 | | 22H1143-32 | | 22H1143-33 | |
| | | | | Location ID: | | VL-SB-02 | | VL-SB-03 | | VL-SB-03 | | VL-SB-03 | | VL-SB-04 | | VL-SB-04 | |
| | | | | Sample Date: | | 8/17/2022 | | 8/18/2022 | | 8/18/2022 | | 8/18/2022 | | 8/17/2022 | | 8/17/2022 | |
| | | | | Sample Type Code: | | N | | N | | N | | N | | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Residential Use Guidance Value[1] | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.14 | U | < 0.15 | U | < 0.14 | U | < 0.13 | U | < 0.19 | U | < 0.17 | U | | |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.13 | U | < 0.14 | U | < 0.13 | U | < 0.12 | U | < 0.18 | U | < 0.16 | U | | |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.095 | U | < 0.1 | U | < 0.089 | U | < 0.086 | U | < 0.13 | U | < 0.11 | U | | |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.12 | U | < 0.12 | U | < 0.11 | U | < 0.11 | U | < 0.16 | U | < 0.14 | U | | |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.17 | U | < 0.17 | U | < 0.15 | U | < 0.15 | U | < 0.22 | U | < 0.2 | U | | |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.13 | U | < 0.14 | U | < 0.12 | U | < 0.12 | U | < 0.17 | U | < 0.15 | U | | |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.25 | U | < 0.26 | U | < 0.23 | U | < 0.23 | U | < 0.33 | U | < 0.29 | U | | |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.15 | U | < 0.15 | U | < 0.14 | U | < 0.13 | U | < 0.19 | U | < 0.17 | U | | |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.094 | U | < 0.099 | U | < 0.088 | U | < 0.085 | U | < 0.12 | U | < 0.11 | U | | |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.08 | U | < 0.084 | U | < 0.075 | U | < 0.073 | U | < 0.11 | U | < 0.095 | U | | |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.085 | U | < 0.089 | U | < 0.08 | U | < 0.077 | U | < 0.11 | U | < 0.1 | U | | |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.16 | U | < 0.17 | U | < 0.15 | U | < 0.15 | U | < 0.22 | U | < 0.19 | U | | |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.16 | U | < 0.16 | U | < 0.15 | U | < 0.14 | U | < 0.21 | U | < 0.18 | U | | |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.098 | U | < 0.1 | U | < 0.091 | U | < 0.089 | U | < 0.13 | U | < 0.12 | U | | |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.095 | U | < 0.1 | U | < 0.089 | U | < 0.086 | U | < 0.13 | U | < 0.11 | U | | |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.079 | U | < 0.083 | U | < 0.074 | U | < 0.072 | U | < 0.1 | U | < 0.094 | U | | |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | < 0.069 | U | < 0.072 | U | < 0.065 | U | < 0.063 | U | < 0.091 | U | < 0.082 | U | | |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | < 0.12 | U | < 0.13 | U | < 0.11 | U | < 0.11 | U | < 0.16 | U | < 0.14 | U | | |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | < 0.067 | U | < 0.07 | U | < 0.062 | U | < 0.06 | U | < 0.088 | U | < 0.079 | U | | |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.079 | U | < 0.083 | U | < 0.074 | U | < 0.072 | U | < 0.1 | U | < 0.094 | U | | |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.15 | U | < 0.16 | U | < 0.15 | U | < 0.14 | U | < 0.2 | U | < 0.18 | U | | |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | < 0.075 | U | < 0.078 | U | < 0.07 | U | < 0.068 | U | < 0.098 | U | < 0.088 | U | | |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.083 | U | < 0.087 | U | < 0.077 | U | < 0.075 | U | < 0.11 | U | < 0.098 | U | | |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | < 0.096 | U | < 0.1 | U | < 0.09 | U | < 0.088 | U | 0.23 | J | < 0.11 | U | | |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.14 | U | < 0.15 | U | < 0.13 | U | < 0.13 | U | < 0.18 | U | < 0.17 | U | | |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | < 0.085 | U | < 0.089 | U | < 0.08 | U | < 0.077 | U | < 0.11 | U | < 0.1 | U | | |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.1 | U | < 0.11 | U | < 0.095 | U | < 0.092 | U | < 0.13 | U | < 0.12 | U | | |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 8.8 | < 0.07 | U | 0.083 | J | < 0.066 | U | < 0.064 | U | < 0.092 | U | 0.083 | J | | |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 6.6 | < 0.15 | U | < 0.15 | U | 2 | | 2.5 | | < 0.19 | U | < 0.17 | U | | |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.076 | U | < 0.079 | U | < 0.071 | U | < 0.069 | U | < 0.1 | U | < 0.09 | U | | |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | < 0.079 | U | < 0.083 | U | < 0.074 | U | < 0.072 | U | < 0.1 | U | < 0.094 | U | | |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.099 | U | < 0.1 | U | < 0.093 | U | < 0.09 | U | < 0.13 | U | < 0.12 | U | | |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.12 | U | < 0.12 | U | < 0.11 | U | < 0.11 | U | < 0.15 | U | < 0.14 | U | | |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | < 0.094 | U | < 0.099 | U | < 0.088 | U | < 0.085 | U | < 0.12 | U | < 0.11 | U | | |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

µg/kg - microgram per kilogram = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above Unrestricted Use guidance value

Highlighted - Indicates the compound was detected above Residential Use guidance value

**Table 3**
**Valente Lumber Yard**
**Soil, PFAS Results**

| | | | | Client Sample ID: | VL-SB-04 120-132IN | | VL-SB-05 0-2IN | | VL-SB-05 2-12IN | | VL-SB-05 168-180IN | | VL-SB-06 0-2IN | | VL-SB-06 2-12IN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | 22H1143-34 | | 22H1143-43 | | 22H1143-44 | | 22H1143-45 | | 22H1143-35 | | 22H1143-36 | |
| | | | | Location ID: | VL-SB-04 | | VL-SB-05 | | VL-SB-05 | | VL-SB-05 | | VL-SB-06 | | VL-SB-06 | |
| | | | | Sample Date: | 8/17/2022 | | 8/17/2022 | | 8/17/2022 | | 8/17/2022 | | 8/17/2022 | | 8/17/2022 | |
| | | | | Sample Type Code: | N | | N | | N | | N | | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Residential Use Guidance Value[1] | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.15 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.17 | U | < 0.16 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.14 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U | < 0.16 | U | < 0.15 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.096 | U | < 0.084 | U | < 0.087 | U | < 0.088 | U | < 0.11 | U | < 0.11 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.12 | U | < 0.1 | U | < 0.11 | U | < 0.11 | U | < 0.14 | U | < 0.13 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.17 | U | < 0.15 | U | < 0.15 | U | < 0.15 | U | < 0.19 | U | < 0.19 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.13 | U | < 0.11 | U | < 0.12 | U | < 0.12 | U | < 0.15 | U | < 0.15 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.25 | U | < 0.22 | U | < 0.23 | U | < 0.23 | U | < 0.29 | U | < 0.28 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.15 | U | < 0.13 | U | < 0.13 | U | < 0.14 | U | < 0.17 | U | < 0.16 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.095 | U | < 0.083 | U | < 0.086 | U | < 0.087 | U | < 0.11 | U | < 0.11 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.081 | U | < 0.071 | U | < 0.074 | U | < 0.074 | U | < 0.094 | U | < 0.091 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.085 | U | < 0.075 | U | < 0.078 | U | < 0.079 | U | < 0.099 | U | < 0.096 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.17 | U | < 0.15 | U | < 0.15 | U | < 0.15 | U | < 0.19 | U | < 0.19 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.16 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U | < 0.18 | U | < 0.18 | U |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.098 | U | < 0.086 | U | < 0.089 | U | < 0.09 | U | < 0.11 | U | < 0.11 | U |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.096 | U | < 0.084 | U | < 0.087 | U | < 0.088 | U | < 0.11 | U | < 0.11 | U |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.08 | U | < 0.07 | U | < 0.073 | U | < 0.073 | U | < 0.093 | U | < 0.09 | U |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | < 0.069 | U | < 0.061 | U | < 0.063 | U | < 0.064 | U | < 0.081 | U | < 0.078 | U |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | < 0.12 | U | < 0.11 | U | < 0.11 | U | < 0.11 | U | < 0.14 | U | < 0.14 | U |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | < 0.067 | U | < 0.059 | U | < 0.061 | U | < 0.062 | U | < 0.078 | U | < 0.075 | U |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.08 | U | < 0.07 | U | < 0.073 | U | < 0.073 | U | < 0.093 | U | < 0.09 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.16 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U | < 0.18 | U | < 0.18 | U |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | < 0.075 | U | < 0.066 | U | < 0.068 | U | < 0.069 | U | < 0.087 | U | < 0.084 | U |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.083 | U | < 0.073 | U | < 0.076 | U | < 0.077 | U | < 0.097 | U | < 0.094 | U |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | < 0.097 | U | < 0.085 | U | < 0.088 | U | < 0.089 | U | < 0.11 | U | < 0.11 | U |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.14 | U | < 0.12 | U | < 0.13 | U | < 0.13 | U | < 0.16 | U | < 0.16 | U |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | < 0.085 | U | < 0.075 | U | < 0.078 | U | < 0.079 | U | < 0.099 | U | < 0.096 | U |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.1 | U | < 0.09 | U | < 0.093 | U | < 0.094 | U | < 0.12 | U | < 0.11 | U |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 8.8 | < 0.07 | U | < 0.062 | U | < 0.064 | U | < 0.065 | U | < 0.082 | U | < 0.079 | U |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 6.6 | < 0.15 | U | < 0.13 | U | < 0.13 | U | < 0.14 | U | < 0.17 | U | < 0.17 | U |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.076 | U | < 0.067 | U | < 0.069 | U | < 0.07 | U | < 0.089 | U | < 0.086 | U |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | < 0.08 | U | < 0.07 | U | < 0.073 | U | < 0.073 | U | < 0.093 | U | < 0.09 | U |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.099 | U | < 0.087 | U | < 0.09 | U | < 0.091 | U | < 0.12 | U | < 0.11 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.12 | U | < 0.1 | U | < 0.11 | U | < 0.11 | U | < 0.14 | U | < 0.13 | U |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | < 0.095 | U | < 0.083 | U | < 0.086 | U | < 0.087 | U | < 0.11 | U | < 0.11 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

µg/kg - microgram per kilogram = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above Unrestricted Use guidance value

Highlighted - Indicates the compound was detected above Residential Use guidance value

**Table 3**
**Valente Lumber Yard**
**Soil, PFAS Results**

| | | | | Client Sample ID: | VL-SB-06 84-96IN | | VL-SB-07 0-2IN | | VL-SB-07 2-12IN | | VL-SB-07 156-165IN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | 22H1143-37 | | 22H1143-40 | | 22H1143-41 | | 22H1143-42 | |
| | | | | Location ID: | VL-SB-06 | | VL-SB-07 | | VL-SB-07 | | VL-SB-07 | |
| | | | | Sample Date: | 8/17/2022 | | 8/17/2022 | | 8/17/2022 | | 8/17/2022 | |
| | | | | Sample Type Code: | N | | N | | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Residential Use Guidance Value[1] | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.13 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.12 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.086 | U | < 0.091 | U | < 0.095 | U | < 0.09 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.12 | U | < 0.11 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.15 | U | < 0.16 | U | < 0.17 | U | < 0.16 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.12 | U | < 0.12 | U | < 0.13 | U | < 0.12 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.22 | U | < 0.24 | U | < 0.25 | U | < 0.24 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.13 | U | < 0.14 | U | < 0.15 | U | < 0.14 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.085 | U | < 0.09 | U | < 0.094 | U | < 0.089 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.072 | U | < 0.077 | U | < 0.08 | U | < 0.076 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.076 | U | < 0.081 | U | < 0.085 | U | < 0.081 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.15 | U | < 0.16 | U | < 0.16 | U | < 0.16 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.14 | U | < 0.15 | U | < 0.16 | U | < 0.15 | U |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.088 | U | < 0.093 | U | < 0.098 | U | < 0.093 | U |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.086 | U | < 0.091 | U | < 0.095 | U | < 0.09 | U |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.071 | U | < 0.076 | U | < 0.079 | U | < 0.075 | U |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | < 0.062 | U | < 0.066 | U | < 0.069 | U | < 0.065 | U |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.12 | U | < 0.11 | U |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | < 0.06 | U | < 0.063 | U | < 0.067 | U | < 0.063 | U |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.071 | U | < 0.076 | U | < 0.079 | U | < 0.075 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.14 | U | < 0.15 | U | < 0.16 | U | < 0.15 | U |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | < 0.067 | U | < 0.071 | U | < 0.075 | U | < 0.071 | U |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.074 | U | < 0.079 | U | < 0.083 | U | < 0.078 | U |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | < 0.087 | U | < 0.092 | U | < 0.097 | U | < 0.091 | U |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.13 | U | < 0.13 | U | < 0.14 | U | < 0.13 | U |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | < 0.076 | U | < 0.081 | U | < 0.085 | U | < 0.081 | U |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.091 | U | < 0.096 | U | < 0.1 | U | < 0.096 | U |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 8.8 | < 0.063 | U | < 0.067 | U | < 0.07 | U | < 0.066 | U |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 6.6 | < 0.13 | U | < 0.14 | U | < 0.15 | U | < 0.14 | U |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.068 | U | < 0.072 | U | < 0.076 | U | < 0.072 | U |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | < 0.071 | U | < 0.076 | U | < 0.079 | U | < 0.075 | U |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.089 | U | < 0.094 | U | < 0.099 | U | < 0.094 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.1 | U | < 0.11 | U | < 0.12 | U | < 0.11 | U |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | < 0.085 | U | < 0.09 | U | < 0.094 | U | < 0.089 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

µg/kg - microgram per kilogram = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above Unrestricted Use guidance value

Highlighted - Indicates the compound was detected above Residential Use guidance value

**Table 4**
**Valente Lumber Yard**
**Sediment, PFAS Results**

| | | | Client Sample ID: | | DUPE-2 | | VL-SED-02 20220817 | |
|---|---|---|---|---|---|---|---|---|
| | | | Lab Sample ID: | | 22H1143-29 | | 22H1143-39 | |
| | | | Location ID: | | VL-SED-01 | | VL-SED-02 | |
| | | | Sample Date: | | 8/17/2022 | | 8/17/2022 | |
| | | | Sample Type Code: | | FD | | N | |
| Analyte | Unit | NYSDEC Guidelines[1] | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | < 0.15 | U | < 0.16 | U | < 0.36 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | < 0.14 | U | < 0.14 | U | < 0.33 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | < 0.097 | U | < 0.1 | U | < 0.23 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | < 0.12 | U | < 0.13 | U | < 0.29 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | < 0.17 | U | < 0.18 | U | < 0.41 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | < 0.13 | U | < 0.14 | U | < 0.32 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | < 0.25 | U | < 0.27 | U | < 0.61 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | < 0.15 | U | < 0.16 | U | < 0.36 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | < 0.096 | U | < 0.1 | U | < 0.23 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | < 0.082 | U | < 0.087 | U | < 0.2 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | < 0.087 | U | < 0.091 | U | < 0.21 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | < 0.17 | U | < 0.18 | U | < 0.4 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | < 0.16 | U | < 0.17 | U | < 0.38 | U |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | < 0.1 | U | < 0.11 | U | < 0.24 | U |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | < 0.097 | U | < 0.1 | U | < 0.23 | U |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | < 0.081 | U | < 0.085 | U | < 0.19 | U |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | < 0.07 | U | < 0.074 | U | < 0.17 | U |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | < 0.12 | U | < 0.13 | U | < 0.3 | U |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | < 0.068 | U | < 0.072 | U | < 0.16 | U |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | < 0.081 | U | < 0.085 | U | < 0.19 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | < 0.16 | U | < 0.17 | U | < 0.38 | U |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | < 0.076 | U | < 0.08 | U | < 0.18 | U |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | < 0.084 | U | < 0.089 | U | < 0.2 | U |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | < 0.098 | U | < 0.1 | U | < 0.24 | U |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | < 0.14 | U | < 0.15 | U | < 0.34 | U |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | < 0.087 | U | < 0.091 | U | < 0.21 | U |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | < 0.1 | U | < 0.11 | U | < 0.25 | U |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | NC | **0.072** | **J** | **0.14** | **J** | < 0.17 | U |
| Perfluorooctanoic acid (PFOA) | µg/kg | NC | < 0.15 | U | < 0.16 | U | < 0.36 | U |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | < 0.077 | U | < 0.082 | U | < 0.19 | U |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | < 0.081 | U | < 0.085 | U | < 0.19 | U |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | < 0.1 | U | < 0.11 | U | < 0.24 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | < 0.12 | U | < 0.12 | U | < 0.29 | U |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | < 0.096 | U | < 0.1 | U | < 0.23 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

µg/kg - microgram per kilogram = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

**Table 5**
**Valente Lumber Yard**
**Surface Water, PFAS Results**

| | | | Client Sample ID: | | DUPE-1 | | VL-SW-02 20220817 | |
|---|---|---|---|---|---|---|---|---|
| | | | Lab Sample ID: | | 22H1143-28 | | 22H1143-38 | |
| | | | Location ID: | | VL-SW-01 | | VL-SW-02 | |
| | | | Sample Date: | | 17 Aug 2022 | | 17 Aug 2022 | |
| | | | Sample Type Code: | | FD | | N | |
| Analyte | Unit | NYSDEC Guidelines[1] | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | ng/L | NC | < 0.58 | U | < 0.58 | U | < 1.3 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | ng/L | NC | < 0.55 | U | < 0.55 | U | < 1.3 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | ng/L | NC | < 0.26 | U | < 0.25 | U | < 0.58 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | ng/L | NC | < 0.33 | U | < 0.33 | U | < 0.75 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ng/L | NC | < 0.32 | U | < 0.31 | U | < 0.72 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | ng/L | NC | < 0.35 | U | < 0.35 | U | < 0.8 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | ng/L | NC | < 0.22 | U | < 0.22 | U | < 0.49 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | ng/L | NC | < 0.57 | U | < 0.57 | U | < 1.3 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | ng/L | NC | < 0.69 | U | < 0.69 | U | < 1.6 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | ng/L | NC | < 0.25 | U | < 0.25 | U | < 0.57 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | ng/L | NC | < 0.21 | U | < 0.21 | U | **1.7** | **J** |
| Perfluoro-1-butanesulfonamide (FBSA) | ng/L | NC | **0.25** | **J** | **0.24** | **J** | < 0.39 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | ng/L | NC | < 0.28 | U | < 0.28 | U | < 0.64 | U |
| Perfluoro-3-methoxypropanoic acid | ng/L | NC | < 0.38 | U | < 0.38 | U | < 0.86 | U |
| Perfluoro-4-methoxybutanoic acid | ng/L | NC | < 0.31 | U | < 0.31 | U | < 0.71 | U |
| Perfluorobutanesulfonic acid (PFBS) | ng/L | NC | **6.4** | | **6.2** | | **3.9** | **J** |
| Perfluorobutanoic Acid (PFBA) | ng/L | NC | **5.3** | | **6** | | < 1.5 | U |
| Perfluorodecanesulfonic acid (PFDS) | ng/L | NC | < 0.3 | U | < 0.29 | U | < 0.67 | U |
| Perfluorodecanoic acid (PFDA) | ng/L | NC | < 0.45 | U | **0.46** | **J** | < 1 | U |
| Perfluorododecanoic acid (PFDoA) | ng/L | NC | < 0.4 | U | < 0.4 | U | < 0.91 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | ng/L | NC | < 0.85 | U | < 0.85 | U | < 1.9 | U |
| Perfluoroheptanoic acid (PFHpA) | ng/L | NC | **3.5** | | **3.3** | | < 0.71 | U |
| Perfluorohexanesulfonic acid (PFHxS) | ng/L | NC | **1.9** | | **2.000** | | < 0.7 | U |
| Perfluorohexanoic acid (PFHxA) | ng/L | NC | < 0.35 | U | < 0.35 | U | **16** | |
| Perfluorononanesulfonic Acid (PFNS) | ng/L | NC | < 0.15 | U | < 0.15 | U | < 0.35 | U |
| Perfluorononanoic acid (PFNA) | ng/L | NC | **1.3** | **J** | **1.3** | **J** | < 0.71 | U |
| Perfluorooctane Sulfonamide (FOSA) | ng/L | NC | < 0.38 | U | < 0.38 | U | < 0.87 | U |
| Perfluorooctanesulfonic acid (PFOS) | ng/L | 10 | **21** | | **24** | | **4.1** | **J** |
| Perfluorooctanoic acid (PFOA) | ng/L | 10 | **14** | | **14** | | **12** | |
| Perfluoropentanesulfonic Acid (PFPeS) | ng/L | NC | < 0.23 | U | **0.39** | **J** | < 0.53 | U |
| Perfluoropentanoic Acid (PFPeA) | ng/L | NC | **6.4** | | **6.6** | | < 0.81 | U |
| Perfluorotetradecanoic acid (PFTA) | ng/L | NC | < 0.33 | U | < 0.33 | U | < 0.76 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | ng/L | NC | < 0.25 | U | < 0.25 | U | < 0.57 | U |
| Perfluoroundecanoic Acid (PFUnA) | ng/L | NC | < 0.34 | U | < 0.33 | U | < 0.76 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

ng/L - nanogram per liter = parts per trillion (ppt)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

**Table 6A**
**Valente Lumber Yard**
**Groundwater, PFAS Results**

| | | | Client Sample ID: | | VL-OW-01-20220921 | | VL-OW-02-20220921 | | VL-OW-03-20220921 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Lab Sample ID: | | 480-201885-1 | | 480-201885-2 | | 480-201885-3 | |
| | | | Location ID: | | VL-OW-01 | | VL-OW-02 | | VL-OW-03 | |
| | | | Sample Date: | | 9/21/2022 | | 9/21/2022 | | 9/21/2022 | |
| | | | Sample Type Code: | | N | | N | | N | |
| Analyte | Unit | NYSDEC Guidelines[1] | | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | ng/L | NC | | < 9.7 | U | < 1.8 | U | < 1.8 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | ng/L | NC | | < 24 | U | < 4.5 | U | < 4.6 | U |
| N-ethyl perfluorooctanesulfonamidoacetic acid | ng/L | NC | | < 24 | U | < 4.5 | U | < 4.6 | U |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | ng/L | NC | | < 24 | U | < 4.5 | U | < 4.6 | U |
| Perfluorobutanesulfonic acid (PFBS) | ng/L | NC | | < 9.7 | U | **0.76** | **J** | < 1.8 | U |
| Perfluorobutanoic Acid (PFBA) | ng/L | NC | | < 24 | U | **5.9** | | **1.9** | **J** |
| Perfluorodecanesulfonic acid (PFDS) | ng/L | NC | | < 9.7 | U | < 1.8 | U | < 1.8 | U |
| Perfluorodecanoic acid (PFDA) | ng/L | NC | | < 9.7 | U | < 1.8 | U | < 1.8 | U |
| Perfluorododecanoic acid (PFDoA) | ng/L | NC | | < 9.7 | U | < 1.8 | U | < 1.8 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | ng/L | NC | | < 9.7 | U | < 1.8 | U | < 1.8 | U |
| Perfluoroheptanoic acid (PFHpA) | ng/L | NC | | < 9.7 | U | **1.5** | **J** | **0.91** | **J** |
| Perfluorohexanesulfonic acid (PFHxS) | ng/L | NC | | < 9.7 | U | **1.6** | **J** | < 1.8 | U |
| Perfluorohexanoic acid (PFHxA) | ng/L | NC | | < 9.7 | U | **1.1** | **J** | **1.4** | **J** |
| Perfluorononanoic acid (PFNA) | ng/L | NC | | < 9.7 | U | **2.3** | | **0.61** | **J** |
| Perfluorooctane Sulfonamide (FOSA) | ng/L | NC | | < 9.7 | U | < 1.8 | U | < 1.8 | U |
| Perfluorooctanesulfonic acid (PFOS) | ng/L | 10 | | < 9.7 | U | **4.3** | | **1.1** | **J** |
| Perfluorooctanoic acid (PFOA) | ng/L | 10 | | **6.2** | **J** | **10** | | **1.2** | **J** |
| Perfluoropentanoic Acid (PFPeA) | ng/L | NC | | < 9.7 | U | **1.1** | **J** | **1.6** | **J** |
| Perfluorotetradecanoic acid (PFTA) | ng/L | NC | | < 9.7 | U | < 1.8 | U | < 1.8 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | ng/L | NC | | < 9.7 | U | < 1.8 | U | < 1.8 | U |
| Perfluoroundecanoic Acid (PFUnA) | ng/L | NC | | < 9.7 | U | < 1.8 | U | < 1.8 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

ng/L - nanogram per liter = parts per trillion (ppt)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

**Table 6B**
**Valente Lumber Yard**
**Groundwater, Artificial Sweetener Results**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Client Sample ID: | VL-OW-01-20220921 | | VL-OW-02-20220921 | | VL-OW-03-20220921 | |
| | | Lab Sample ID: | 22I1283-01 | | 22I1283-02 | | 22I1283-03 | |
| | | Location ID: | VL-OW-01 | | VL-OW-02 | | VL-OW-03 | |
| | | Sample Date: | 9/21/2022 | | 9/21/2022 | | 9/21/2022 | |
| | | Sample Type Code: | N | | N | | N | |
| Analyte | Screening Criteria | Unit | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| Acesulfame K | NC | µg/L | **1.5** | **H *-** | **0.16** | **H *-** | **0.13** | **H *-** |
| Sucralose | NC | µg/L | **0.12** | **H** | <0.025 | H U | **0.077** | **H** |

Notes:
Sample Type Code: N - Normal, FD -Field Duplicate
µg/L - microgram per liter = parts per billion
NC - No criteria currently exists
U - Compound was not detected at the reporting limit shown
H - Sample was prepped or analyzed beyond the specific holding time
*- -Lab Control Sample (LCS) and/or LCS Duplicate is outside acceptance limits, low biased
**Bold - Indicates the compound was detected**

**Table 6C**
**Valente Lumber Yard**
**Groundwater, Nitrate Nitrite Results**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Client Sample ID: | | VL-OW-01-20220921 | | VL-OW-02-20220921 | | VL-OW-03-20220921 | |
| | Lab Sample ID: | | 22I1283-01 | | 22I1283-02 | | 22I1283-03 | |
| | Location ID: | | VL-OW-01 | | VL-OW-02 | | VL-OW-03 | |
| | Sample Date: | | 9/21/2022 | | 9/21/2022 | | 9/21/2022 | |
| | Sample Type Code: | | N | | N | | N | |
| Analyte | NYS Class GA[1] | Unit | Result | Qualifer | Result | Qualifer | Result | Qualifer |
| Nitrate (as N) | 10 | mg/L | 0.29 | | 0.3 | | 0.38 | |
| Nitrite (as N) | 1 | mg/L | <0.100 | U | <0.100 | U | <0.100 | U |

Notes:

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

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

mg/L - milligram per liter = parts per million (ppm)

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

# BORING LOGS

MONITORING WELL / BORING NO. **VL-OW-01 / VL-SB-01**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 17, 2022

Location: Valente Lumber Yard | 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: See samples collected (Dia): 2"

Well TD: 15' (Dia): 2" | Well Type: PVC

Screen Interval: 15' - 5.0' | Slot Size: 0.010" | Diameter: 2-inch

Cased Interval: 5.0' - grade | Type: PVC | Diameter: 2-inch

Sand Pack Interval: 15' - 3.0' | Type: #2 | Wellhead Prot: Flush Mount

Bentonite Seal Interval: 3.0' - 2.0' | Type: Chips | Grouted Interval: N/A

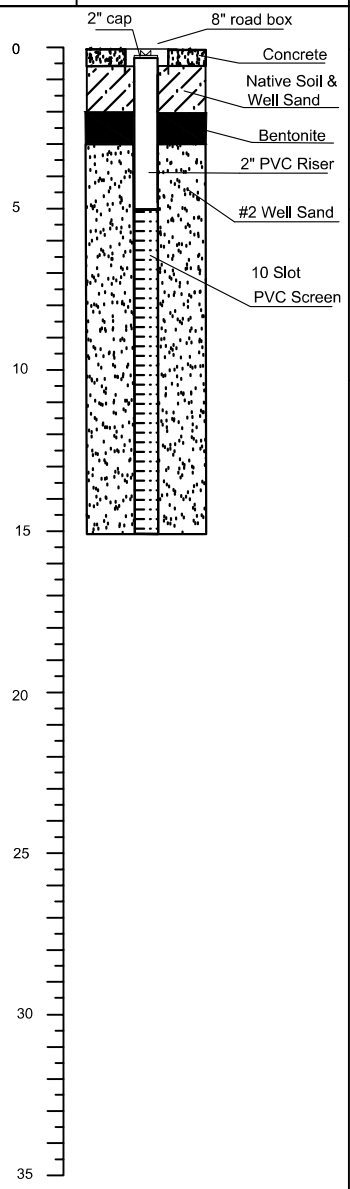
LaBella Powered by partnership.

**Soil Samples Collected:**

**VL-SB-01 0-2"**

**VL-SB-01 2-12"**

**VL-SB-01 84-96"**




| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| | | | | |
| | | S-1: 0" - 5.0' Hand cleared | 6.1 | 0" - 2.0" Gray, dry, fine GRAVEL (fill material) |
| | | | < 1.0 | 2.0" - 5.0' Gray, dry, coarse to fine SAND and fine to medium GRAVEL |
| | | S-2: 5.0' - 10' Rec: 5.0'/5.0' | < 1.0 | 5.0' - 8.0' Dark brown, moist, organics (wood chips), coarse to fine SAND and SILT, some rounded Gravel<br>▼ Wet at 8 fbg. Brown, wet, coarse to fine SAND and SILT, trace Clay, to 8.5'<br>8.5' - 15' Brown, wet, coarse to fine SAND and SILT some rounded Gravel and shale fragments to refusal, weathered bedrock (shale) fragments in sampler shoe |
| | | S-3: 10' - 15' Rec: 5.0'/5.0' | < 1.0 | |
| | | | | 15' |

MONITORING WELL / BORING NO. **VL-OW-02 / VL-SB-02**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 17, 2022

Location: Valente Lumber Yard | 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: See samples collected (Dia):

Well TD: 10' (Dia): 2" | Well Type: PVC

Screen Interval: 10' - 5.0' | Slot Size: 0.010" | Diameter: 2"

Cased Interval: 5.0' - Grade | Type: PVC | Diameter: 2"

Sand Pack Interval: 10' - 3.0' | Type: #2 | Wellhead Prot: Flush Mount

Bentonite Seal Interval: 3.0' - 2.0' | Type: chips | Grouted Interval: N/A

LaBella
Powered by partnership

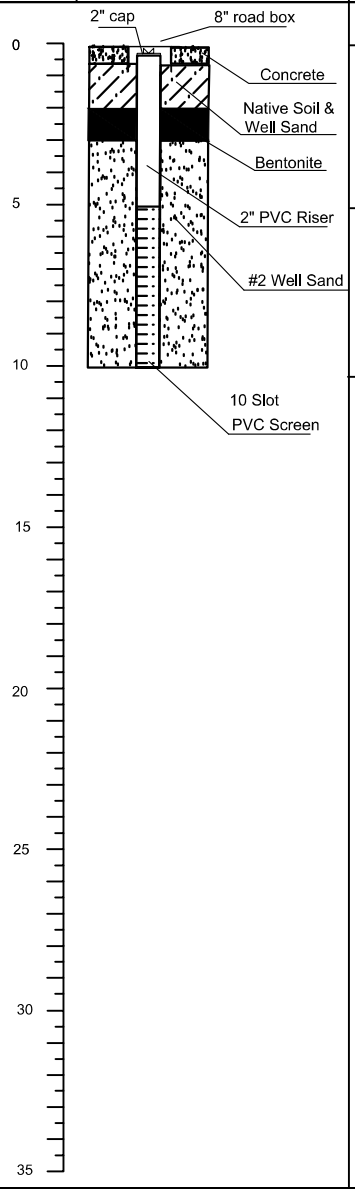
**Soil Samples Collected:**

**VL-SB-02 0"-2"**

**VL-SB-02 2"-12"**

**VL -SB-02 72"- 84"**

**DUPE-3 parent VL-SB-02 2"-12"**




| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| | | | | |
| | | S-1: 0" - 5.0' Hand cleared | < 1.0 | 0" - 1.0' Brown-Gray, moist, coarse to fine SAND and fine GRAVEL (fill material)<br>1.0' - 5.0' Brown, moist, coarse to fine SAND and SILT, trace Clay. Large tree root at approximately 3 fbg |
| | | S-2: 5.0' - 10' Rec: 4.0'/5.0' | < 1.0 | 5.0' - 10' Brown, wet, coarse to fine SAND and SILT, some fine angular Gravel shale fragments to EOB (refusal) at 10 fbg<br>Wet at 7.0' |
| | | | | 10' |

MONITORING WELL / BORING NO. **VL-OW-03 / VL-SB-03**

Site Name: Algonquin Middle School | Date Drilled: August 18, 2022

Location: Valente Lumber Yard | 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: See samples collected (Dia):

Well TD: 13' (Dia): 2" | Well Type: PVC

Screen Interval: 13' - 3.0' | Slot Size: 0.010" | Diameter: 2-inch

Cased Interval: 3.0' - Grade | Type: Sch 40 PVC | Diameter: 2-inch

Sand Pack Interval: 13' - 2.0' fbg | Type: #2 | Wellhead Prot: Flush Mount

Bentonite Seal Interval: 2.0' - 1.0' | Type: Benchips | Grouted Interval: NA

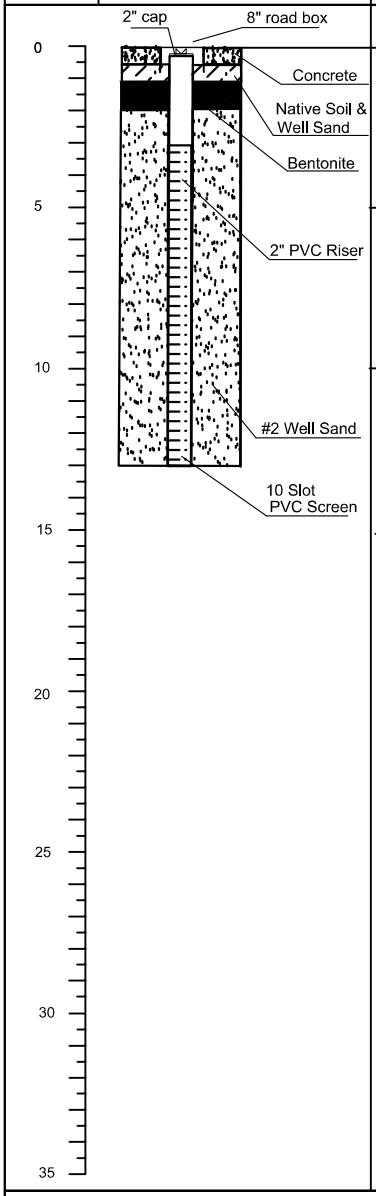
LaBella Powered by partnership.

**Soil Samples Collected:**

**VL-SB-03 0"-2"**

**VL-SB-03 2"-12"**

**VL-SB-03 156"-168"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 |  | S-1: 0 - 5.0' Hand Cleared | 1.6<br>5.2 | 0.0' - 2.0" Brown, moist, organics, coarse to fine SAND and SILT (topsoil)<br>2.0" - 1.0' Brown, moist, coarse to fine SAND, SILT, fine GRAVEL (fill material)<br>1.0' - 9.0' Brown, dry, layers of coarse to fine SAND, SILT and angular Gravel (roadbase fill material). Layers of wood chips at 8 fbg and 9 fbg |
| 5 | | S-2: 5.0' - 10' Rec: 5.0'/5.0' | 1.2 | 9.0' - 10' Brown, moist, CLAY trace Silt |
| 10 | | S-3: 10' - 15' Rec: 5.0'/5.0' | < 1.0 | 10' - 15' Brown, moist, fine SAND and SILT, little Clay, some rounded Gravel increasing weathered shale fragments with depth to EOB (refusal) at 15 fbg<br>Well set at 13 fbg due to collapse |
| 15 | | | | 15' |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **VL-SB-04**

Site Name: Algonquin Middle School | Date Drilled: August 17, 2022

Location: Valente Lumber Yard | 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: See samples collected (Dia):

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

Screen Interval: | Slot Size: | Diameter:

Cased Interval: | Type: | Diameter:

Sand Pack Interval: | Type: | Wellhead Prot:

Bentonite Seal Interval: | Type: | Grouted Interval:

LaBella Powered by partnership.

**Soil Samples Collected:**

**VL-SB-04 0"-2"**

**VL-SB-04 2"-12"**

**VL-SB-04 120" - 132"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | S-1: 0 - 5.0' Hand cleared | 5.8 | 0.0' - 8.0' Dark brown, moist, organics (tree bark) coarse to fine SAND and SILT to 8 fbg |
| 5 | | S-2: 5.0' - 10' Rec: 4.0'/5.0' | < 1.0 | |
| 10 | | S-3: 10' - 15' Rec: 4.0'/5.0' | < 1.0 | 8.0' - 20' Brown, wet at 11 fbg, coarse to fine SAND and SILT. Well sorted to poorly sorted layers to 9 fbg. Becomes fine SAND and SILT to end of boring (refusal) at 20 fbg. Tree root encountered at 11 fbg. Wet at 11' |
| 15 | | S-4: 15' - 20' Rec: 5.0'/5.0' | < 1.0 | |
| 20 | | | | No monitoring well installed |
| 25 | | | | 20' |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **VL-SB-05**

Site Name: NYSDEC - Algonquin Middle School  Date Drilled: August 17, 2022

Location: Valente Lumber Yard  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: see samples collected (Dia):

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

Screen Interval:  Slot Size:  Diameter:

Cased Interval:  Type:  Diameter:

Sand Pack Interval:  Type:  Wellhead Prot:

Bentonite Seal Interval:  Type:  Grouted Interval:

LaBella Powered by partnership.

**Soil Samples Collected:**

**VL-SB-06 0-2"**

**VL-SB-06 2-12"**

| 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' Dark Brown to black, moist, organics, fine SAND and SILT (topsoil) |
| | | | < 1.0 | 1.0' - 10' Brown, dry, coarse to fine SAND and SILT, some rounded fine Gravel with increasing Silt and Clay to 10 fbg. |
| 5 | | S-2: 5.0' - 10' Rec: 2.0'/5.0' | < 1.0 | |
| 10 | | S-3: 10' - 15' Rec: 4.0'/5.0' | < 1.0 | 10' - 15' Brown, dry, coarse to fine SAND, SILT and fine GRAVEL (shale fragments) with shale quantity increasing with depth to EOB (refusal) at 15 fbg<br><br>Groundwater was not encountered<br>No monitoring well installed |
| 15 | | | | 15' |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **VL-SB-06**

Site Name: NYSDEC - Algonquin Middle School  Date Drilled: August 17, 2022

Location: Valente Lumber Yard  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: see samples collected (Dia):

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

Screen Interval:  Slot Size:  Diameter:

Cased Interval:  Type:  Diameter:

Sand Pack Interval:  Type:  Wellhead Prot:

Bentonite Seal Interval:  Type:  Grouted Interval:

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Powered by partnership.

**Soil Samples Collected:**

**VL-SB-06 0"- 2"**

**VL-SB-06 2"-12"**

**VL-SB-06 84"- 96"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0 - 5.0' Hand Cleared | 10 | 0" - 3.0' Black, moist, organics, coarse to fine SAND and SILT |
| | | | < 1.0 | 3.0' - 5.0' Brown, dry, coarse to fine SAND and SILT, some fine rounded to angular Gravel. Becomes interbedded: layers of Gravel, coarse to fine SAND and fine Gravel, and coarse to fine SAND (fill material) |
| 5 | | S-2: 5.0' - 10' Rec: 4.0'/5.0' | < 1.0 | 5.0' - 10' Brown, moist, medium to fine SAND and SILT, some rounded fine Gravel (till) to EOB (refusal) at 10 fbg |
| | | | | Groundwater was not encountered<br>No monitoring well installed |
| 10 | | | | 10' |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **VL-SB-07**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 17, 2022

Location: Valente Lumber Yard | 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: see samples collected (Dia):

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

Screen Interval: | Slot Size: | Diameter:

Cased Interval: | Type: | Diameter:

Sand Pack Interval: | Type: | Wellhead Prot:

Bentonite Seal Interval: | Type: | Grouted Interval:

LaBella Powered by partnership

**Soil Samples Collected:**

**VL-SB-07 0"- 2"**

**VL-SB-07 2"- 12" MS/MSD**

**VL-SB-07 156" - 168"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | Hand cleared | < 1.0 | 0.0' - 1.0' Black, moist, organics, coarse to fine SAND and SILT (topsoil) |
| | | S-1: 0 - 5.0' Rec: 2.5'/5.0' | < 1.0 | |
| 5 | | S-2: 5.0' - 10' Rec: 4.0'/5.0' | < 1.0 | 8.0' - 14' Coarse to fine SAND and SILT with fine gravel shale fragments to EOB (refusal) at 14 fbg |
| 10 | | S-3: 10' - 14' Rec: 2.0'/4.0' | < 1.0 | Groundwater was not encountered<br>No monitoring well installed |
| 15 | | | | 14' |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

# WELL DEVELOPMENT LOGS

| | |
|---|---|
| **Site Name** | AMS - Valente Lumber |
| **Site Location** | Averill Park, NY |
| **Well ID** | VL-OW-01 |
| **Sampled By** | BB+NW |

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**Well Information**

| | |
|---|---|
| **Flush Mount or Riser** | Flush |
| **Measuring Point** | TOC |
| **Measuring Point Elevation** | |
| **Depth to Water (feet)** | 2.6 |
| **Depth to Bottom of Well** | 12.31 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:
± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

| | |
|---|---|
| **Date** | 8/30/2022 |
| **Weather** | Hot 90's Humid |
| **Purging Equipment** | Peristaltic |
| **Sampling Equipment** | Peristaltic/Horiba |
| **Decon Method** | Alconox |
| **Riser Diameter** | 2" |
| **Well Volume Calculation** | 1.6 gal |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (C) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1245 | Start | | | | | | | 2.31 | |
| | Purged 7.5 gallons of very sandy water w/ bits of plastic | | | | | | | | |
| 1415 | Start after 7.5 gallons | | | | | | | 3.60 | |
| 1426 | ~9.0 | 150 | 6.69 | 19.53 | 0.0 | 0.421 | -28 | 3.81 | |
| 1435 | 10.5 | 48.4 | 6.70 | 19.35 | 0.0 | 0.421 | -29 | 3.91 | |
| | 10.5 Gallons total | | | | | | | | |
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| | |
|---|---|
| **Site Name** | AMS - Valente Lumber |
| **Site Location** | Averill Park, NY |
| **Well ID** | VL-OW-02 |
| **Sampled By** | BB+NW |

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**Well Information**

| | |
|---|---|
| **Flush Mount or Riser** | Flush |
| **Measuring Point** | TOC |
| **Measuring Point Elevation** | |
| **Depth to Water (feet)** | 3.51 |
| **Depth to Bottom of Well** | 8.53 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:
± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

| | |
|---|---|
| **Date** | 8/30/2022 |
| **Weather** | Hot 90's Humid |
| **Purging Equipment** | Peristaltic |
| **Sampling Equipment** | Peristaltic/Horiba |
| **Decon Method** | Alconox |
| **Riser Diameter** | 2" |
| **Well Volume Calculation** | 0.82 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1015 | | | | | | | | 3.51 | |
| 1030 | ~1.5 | 1000+ | 7.48 | 17.03 | 5.15 | 0.525 | 45 | 7.94 | |
| 1040 | well drawdown exceeding recharge | | | | | | | 8.31 | |
| 1050 | ~1.5 | 960 | 7.29 | 18.8 | 6.54 | 0.5 | 88 | 8.35 | |
| 1115 | ~3.5 | 105 | 7.58 | 19.04 | 2.78 | 0.486 | 85 | 7.25 | |
| 1140 | ~4.0 | 92 | 7.14 | 18.29 | 3.35 | 0.483 | 111 | 7.26 | |
| 1143 | dry allowed to recharge | | | | | | | | |
| 1200 | restart | | | | | | | 7.1 | |
| 1215 | dry | 62.5 | | | | | | | |
| 1220 | restart | | | | | | | 7.0 | |
| 1230 | ~5.5 | 49.9 | 7.22 | 19.54 | 2.77 | 0.471 | 113 | 7.24 | |
| | | | | | | | | | |
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| | |
|---|---|
| **Site Name** | AMS - Valente Lumber |
| **Site Location** | Averill Park, NY |
| **Well ID** | |
| **Sampled By** | BB+NW |

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**Well Information**

| | |
|---|---|
| **Flush Mount or Riser** | Flush |
| **Measuring Point** | TOC |
| **Measuring Point Elevation** | |
| **Depth to Water (feet)** | 4.01 |
| **Depth to Bottom of Well** | 12.81 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:
± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

| | |
|---|---|
| **Date** | 8/30/2022 |
| **Weather** | Hot 90's Humid |
| **Purging Equipment** | Peristaltic |
| **Sampling Equipment** | Peristaltic/Horiba |
| **Decon Method** | Alconox |
| **Riser Diameter** | 2" |
| **Well Volume Calculation** | 1.44 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 835 | 0 | | | | | | | 4.01 | |
| 855 | ~2.0 | 442 | 8.26 | 18.91 | 1.69 | 1.07 | -43 | 5.94 | |
| 920 | Meter Maintenace | | | | | | | | |
| 930 | ~4.5 | 260 | 8.25 | 16.53 | 0.0 | 1.12 | -37 | 7.04 | |
| 945 | ~6.0 | 112 | 8.14 | 15.87 | 0.0 | 1.15 | -51 | 7.56 | |
| | ~8.5 | 49.9 | 8.15 | 15.93 | 0.0 | 1.15 | -66 | 8.22 | |
| | | | | | | | | | |
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# LOW FLOW STABILIZATION SAMPLING LOGS

| | |
|---|---|
| Site Name | Valente Lumber |
| Site Location | ~~VL-OW-01~~ Peekskill, NY |
| Well ID | VL-OW-01 |
| Sampled By | SJV |

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**Well Information**

| | |
|---|---|
| Flush Mount or Riser | Flush |
| Measuring Point | TOC |
| Measuring Point Elevation | — |
| Depth to Water | 2.10 |
| Depth to Bottom of Well | 13.34 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |

Well Volume Gallons = Multiplier x Length of Water Column

| | |
|---|---|
| Date | 7/21/22 |
| Weather | Overcast |
| Purging Equipment | Peristaltic |
| Sampling Equipment | Peristaltic |
| Decon Method | alconox |
| Riser Diameter | 2" |
| Well Volume Calculation | 1.63 |

1145 VL-OW-01 Sampled for:
EPA 537 PFAS
L221 PAC-Negative
EPA 300 Nitrogen, Nitrate/Nitrite

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1035 | Began Purge | | | | | | | | |
| 1040 | | 278 | 7.20 | 18.12 | 0.83 | 0.431 | -82 | | |
| 1045 | 0.5 | 241 | 7.12 | 17.87 | 0.00 | 0.430 | -94 | | |
| 1050 | | 222 | 7.18 | 17.87 | 0.00 | 0.438 | -93 | | |
| 1055 | 1.0 | 192 | 7.08 | 17.52 | 0.00 | 0.432 | -99 | | |
| 1100 | | 168 | 7.00 | 17.56 | 0.02 | 0.432 | -96 | | |
| 1105 | 1.5 | 143 | 6.89 | 17.56 | 0.00 | 0.430 | -91 | | |
| 1110 | | 105 | 6.57 | 17.56 | 0.00 | 0.432 | -95 | | |
| 1115 | 2.0 | 78.0 | 6.51 | 17.62 | 0.00 | 0.435 | -73 | | |
| 1120 | | 85.8 | 6.57 | 17.59 | 0.00 | 0.438 | -77 | | |
| 1125 | 2.5 | 68.7 | 6.68 | 17.85 | 0.00 | 0.438 | -81 | | |
| 1130 | | 65.2 | 6.63 | 17.84 | 0.00 | 0.439 | -81 | | |
| 1135 | 3.0 | 60.9 | 6.70 | 17.91 | 0.00 | 0.439 | -86 | | |
| 1140 | | 60.0 | 6.71 | 17.93 | 0.00 | 0.439 | -84 | | |
| | Ended purge | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| | |
|---|---|
| Site Name | Valente Lumber |
| Site Location | Poestenkill, NY |
| Well ID | VL-OW-02 |
| Sampled By | NW |

well appears to have sunk, bentonite above TOC, water at TOC mixed slightly at purge start

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Septic/leech field odor

**Well Information**

| | |
|---|---|
| Flush Mount or Riser | flush |
| Measuring Point | TOC |
| Measuring Point Elevation | — |
| Depth to Water | 0 - at toc |
| Depth to Bottom of Well | 8.54 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP

± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |

Well Volume Gallons = Multiplier x Length of Water Column

| | |
|---|---|
| Date | 9/21 |
| Weather | overcast |
| Purging Equipment | peristaltic |
| Sampling Equipment | peristaltic |
| Decon Method | Alconox |
| Riser Diameter | 2" |
| Well Volume Calculation | 4.18 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (C) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 0835 | Purge Start | | | | | | | | 300 ml/min |
| 0840 | .25 | 230 | 6.63 | 18.31 | .54 | .475 | 37 | 1.24 | |
| 0845 | .4 | 186 | 6.60 | 17.73 | 0.0 | .481 | 46 | 1.51 | |
| 0850 | .6 | 186 | 6.56 | 17.50 | 0.0 | .486 | 54 | 1.70 | |
| 0855 | .8 | 182 | 6.61 | 17.21 | 0.0 | .486 | 50 | 1.91 | |
| 0900 | 1.0 | 184 | 6.55 | 16.55 | 0.0 | .488 | 57 | 2.15 | |
| 0905 | 1.2 | 82 | 6.49 | 16.35 | 0.0 | .491 | 64 | 2.42 | |
| 0910 | 1.4 | 38.0 | 6.46 | 16.04 | 0.0 | .493 | 56 | 3.06 | |
| 0915 | 1.6 | 54.0 | 6.58 | 16.18 | 0.0 | .492 | 45 | 3.45 | |
| 0920 | 1.8 | 66.1 | 6.53 | 16.16 | 0.0 | .490 | 43 | 3.80 | |
| 0925 | 2.0 | 44.8 | 6.56 | 16.19 | 0.0 | .489 | 38 | 4.05 | |
| 0930 | 2.2 | 33.0 | 6.64 | 16.35 | 0.0 | .486 | 27 | 4.31 | |
| 0935 | 2.4 | 32.1 | 6.61 | 16.39 | 0.0 | .486 | 28 | 4.41 | |
| 0940 | 2.6 | 27.4 | 6.58 | 16.44 | 0.0 | .485 | 30 | 4.50 | |
| 0945 | 2.8 | 18.1 | 6.65 | 16.43 | 0.0 | .483 | 31 | 4.55 | |
| 0950 | 3.0 | 18.0 | 6.66 | 16.35 | 0.0 | .482 | 34 | 4.70 | |
| 0955 | 3.2 | 17.2 | 6.67 | 16.52 | 0.0 | .479 | 35 | 4.83 | |

pump rate slowed

| | |
|---|---|
| Site Name | Valente Lumber |
| Site Location | Keeseville, NY |
| Well ID | VL-OW-02 |
| Sampled By | NW |

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Well Information

| | |
|---|---|
| Flush Mount or Riser | Flush |
| Measuring Point | TOC |
| Measuring Point Elevation | — |
| Depth to Water | 0 - at TOC |
| Depth to Bottom of Well | 8.54 |

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |
| Well Volume Gallons = Multiplier x Length of Water Column | |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| | |
|---|---|
| Date | 9/21/22 |
| Weather | overcast |
| Purging Equipment | peristaltic |
| Sampling Equipment | peristaltic |
| Decon Method | alconox |
| Riser Diameter | 2" |
| Well Volume Calculation | 4.18 |

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 1000 | 3.4 | 16.4 | 6.64 | 16.54 | 0.0 | .479 | 40 | 4.90 | |
| 1005 | Sample | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ |

| | |
|---|---|
| Site Name | Valente Lumber |
| Site Location | Peekskill, NY |
| Well ID | VL-OW-03 |
| Sampled By | SJV |

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**Well Information**

| | |
|---|---|
| Flush Mount or Riser | Flush |
| Measuring Point | TOC |
| Measuring Point Elevation | — |
| Depth to Water | 2.41 |
| Depth to Bottom of Well | 12.82 |

Stabilization is achieved when the following changes are noted over three consecutive 3-5 minute readings:

± 0.1 change in pH

± 3% change in conductivity

± 10 millivolt change in ORP
± 10% change in DO and Turbidity

| Dia. Well | Well Volume Multiplier |
|---|---|
| 1 | 0.0408 |
| 1.5 | 0.0918 |
| 2 | 0.1631 |
| 3 | 0.3670 |
| 4 | 0.6525 |
| 5 | 1.0195 |
| 6 | 1.4681 |
| 8 | 2.6100 |
| 10 | 4.0782 |
| 12 | 5.8726 |

Well Volume Gallons = Multiplier x Length of Water Column

| | |
|---|---|
| Date | 9/21/22 |
| Weather | overcast |
| Purging Equipment | peristaltic |
| Sampling Equipment | peristaltic |
| Decon Method | alconox |
| Riser Diameter | 2" |
| Well Volume Calculation | 1.76 |

0935 VL-OW-03 sampled for:
EPA 537 PFAS
L221 PAC-Negative
EPA 300 Nitrogen, Nitrate/Nitrite

| Time | Volume Removed (Gallons) | Turbidity (NTU) | pH | Temperature (F) | Dissolved O2 (mg/L) | Conductivity (mS/cm) | ORP (mV) | Depth to Water | Pumping Rate |
|---|---|---|---|---|---|---|---|---|---|
| 0825 | Began Purge | | | | | | | 2.41 | |
| 0830 | | 119 | 7.58 | 19.10 | 0.95 | 0.715 | -53 | 2.86 | |
| 0835 | 0.5 | 110 | 7.40 | 18.92 | 0.00 | 0.725 | -83 | 3.12 | |
| 0840 | | 95.2 | 7.39 | 18.61 | 0.00 | 0.734 | -84 | 3.30 | |
| 0845 | 1.0 | 85.6 | 7.37 | 18.63 | 0.01 | 0.734 | -85 | 3.37 | |
| 0850 | | 80.6 | 7.36 | 18.81 | 0.00 | 0.737 | -86 | 3.46 | |
| 0855 | 1.5 | 75.6 | 7.28 | 18.57 | 0.03 | 0.740 | -83 | 3.62 | |
| 0900 | | 74.5 | 7.28 | 18.57 | 0.00 | 0.740 | -87 | 3.77 | |
| 0905 | 2.0 | 73.4 | 7.27 | 18.54 | 0.00 | 0.740 | -88 | 3.91 | |
| 0910 | | 66.2 | 7.23 | 18.46 | 0.01 | 0.742 | -85 | 4.03 | |
| 0915 | 2.5 | 65.0 | 7.22 | 18.39 | 0.00 | 0.741 | -86 | 4.16 | |
| 0920 | | 66.8 | 7.21 | 18.33 | 0.00 | 0.743 | -87 | 4.22 | |
| 0925 | 3.0 | 66.9 | 7.21 | 18.32 | 0.01 | 0.740 | -88 | 4.26 | |
| 0930 | | 65.4 | 7.19 | 18.29 | 0.00 | 0.740 | -87 | 4.31 | |
| | Ended purge | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

# LABORATORY ANALYTICAL REPORTS

Aztech Environmental
TECHNOLOGIES
A LaBella Company

March 13, 2023 (Revised 4-18-2023)

Brittany O'Brien-Drake
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233

**RE: Site Summary Report (Rev. 4-18-2023)**
**Algonquin Middle School PFAS Assessment #2105197**
**Cooper Tire, 20 Chain Mountain Way, Poestenkill, NY**
**Tax parcel ID: 136.-9-33**

Aztech Environmental Technologies Inc. (Aztech), a LaBella company, has provided this report to document overburden soil and groundwater assessment methodologies and sampling results for the above referenced location. All field investigation activities were performed at the discretion of and in accordance with the scope of work (SOW) developed and provided by the New York State Department of Environmental Conservation (NYSDEC).

The property is currently utilized by Cooper Tire (CT) as a used auto parts business with operations located on the majority of the property. The approximate 14.02-acre parcel is located along the eastern side of Chain Mountain Way and west of NY RT 351. The property has a downward gradient from east to west, towards Chain Mountain Way and the central portion of the property is relatively flat. A garage/residence is located on the southern portion of the property. The attached **Figure 1** depicts property features and boundaries.

Overburden soil encountered during drilling activities consisted primarily of fine sand and silt with some gravel and clay. Various amounts of shale fragments typically increased in depth to tooling refusal. Shale fragments in the sampler shoe at terminal boring depth is noted on boring logs. The property contains numerous exposures of fractured shale bedrock and has been excavated in areas to create flat surfaces for auto parts storage.

Prior to intrusive groundwork, a UDig NY utility clearance ticket was ordered for the property. Additionally, a private utility locating contractor performed utility clearance with ground penetrating radar (GPR) at each boring location on August 9, 2022. Boring locations confirmed as clear were painted white and marked with a white flag.

## SUMMARY OF FIELD INVESTIGATIONS:

### Air monitoring

Air monitoring was conducted during all ground-intrusive work at the property (August 19, 2022) in accordance with the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan (CAMP). One dedicated Dust Trak unit with photo-ionization detector (PID) was positioned upwind with a second dedicated unit placed downwind at each boring location. No exceedances for volatile organic compounds (VOCs) or particulates were recorded.

### Soil Boring and Monitoring Well Installation

On August 19, 2022, Clean Globe Environmental (CGE) advanced soil borings (CT-SB-01 through CT-SB-07) utilizing a Geoprobe 7822DT and direct-push techniques to terminal depths ranging from 1.0 to 21.5 feet below grade (fbg). All boring locations, with the exception of CT-SB-02, confirmed shallow depth to bedrock at 9 fbg or less. CT-SB-02 was advanced in a mixture of clay, gravel, and wood to refusal drill

tooling refusal at 19 fbg. At the request of NYSDEC, CT-SB-02 was side-stepped at 19 fbg and macro cored until refusal at 21.5 fbg. Fill material, consisting of organic matter, wood, cobbles, and glass fragments, was encountered in soil boring CT-SB-02 ranging in depth from 3.0 to 21.5 fbg. Of the seven (7) total boring locations, one (1) was converted to a monitoring well (CT-SB-01). Aztech provided oversight of drilling activities and performed soil headspace screening, soil classification, and both soil and groundwater sampling.

The monitoring well (CT-OW-01) was installed by over-drilling the borehole utilizing 4 ¼" inner diameter (ID) hollow stem augers. The well assembly consisted of 2-inch polyvinyl chloride (PVC) 10-slot screen set to straddle the water table and casing to grade. A number 2 filtration sand was installed to fill the borehole annulus to approximately one (1) to two (2) feet above the screened interval. Bentonite chips were added atop the sand to seal the casing from surface water intrusion and subsequently hydrated with certified per-and polyfluoroalkyl substance (PFAS)-free water. Native soil and well sand were added as needed to the finish grade. The well was finished within a steel stick-up. The newly installed groundwater monitoring well was not developed at that time due to an insufficient amount of groundwater present. The monitoring well specifications are presented below in **Table 1.** Individual boring logs are attached. The monitoring well location is depicted on the attached Figure 1. An attempt to develop CT-OW-01 was made on September 28, 2022 using a bailer to remove a targeted 10 well volumes. However, the monitoring well went dry at approximately 0.5 gallons.

**TABLE 1**
Monitoring Well Specifications

| Well ID | Borehole Depth (Feet) | Well Diameter (Inches) | Screened Interval (Feet) | Sand Packed Interval (Feet) | Bentonite Seal (Feet) | Observed DTW* (Feet) |
|---|---|---|---|---|---|---|
| WM-OW-01 | 9 | 2 | 9.0 - 4.0 | 9.0 - 2.0 | 2.0 - 1.0 | Dry |

Notes:
Well drilled/installed by Clean Globe Environmental (CGE)
*Depth to Water (DTW) as measured on September 28, 2022 from top of casing (TOC)

## Surface Soil Sampling

On August 19, 2022, one (1) surface soil sample (CT-SS-01) was collected with a decontaminated stainless-steel trowel from the naturally formed stormwater swale. The surface soil sample was analyzed for PFAS compounds by analytical method 537M. The approximate location of the sample is depicted on Figure 1.

## Soil Sampling

Individual soil samples were visually classified and headspace screened with a PID calibrated to a 100 part per million (ppm) isobutylene calibrant gas. Soil samples from select boring locations were collected from the following depth intervals:

- Surface grade to 2 -inch below grade (BG), beneath vegetative cover,
- 2-inch BG to 12-inch BG, and
- Air/water interface (water table) as observed in borehole.

The actual number of soil samples was dependent on field conditions. A total of sixteen (16) depth discrete subsurface soil samples were collected from the seven (7) soil borings and analyzed for PFAS compounds by analytical method 537M for soil. A soil sample collected from the 2-12" interval of boring CT-SB-02 was analyzed using the Synthetic Precipitation Leaching Procedure (SPLP) by Environmental Protection Agency (EPA) Method 1312 and the leachate subsequently analyzed for PFAS compounds by analytical method 537M. SPLP PFAS results are not considered reportable as it was determined that Con-

Test (a Pace Analytical Laboratory at East Longmeadow, MA and the NYSDEC's contracted lab for this project) did not hold the appropriate ELAP certification for EPA Method 1312 at the time of analysis.

Additional samples collected for the purpose of quality assurance/quality control (QA/QC) included one (1) equipment blank, one (1) matrix spike/matrix spike duplicate (MS/MSD), and one (1) field duplicate. The attached boring logs reference the parent sample for the field duplicate. The equipment blank collected on August 19, 2022 via the stainless-steel soil mixing bowl. Laboratory analytical results for the equipment blank sample did not record any compounds above the laboratory's minimum reporting limit (RL). Refer to **Table 2** for additional details.

Groundwater Sampling

One (1) groundwater sample was collected on September 28, 2022 from the newly installed overburden groundwater monitoring well, CT-OW-01. Due to an insufficient volume of groundwater in the monitoring well, purging and water quality field parameters (temperature, pH, specific conductance, oxygen-reduction potential (ORP), dissolved oxygen (DO), and turbidity) could not be conducted prior to sample collection. Aztech collected one groundwater sample from CT-OW-01 using a bailer prior to the monitoring well going dry. The sample was immediately placed on ice and transferred to Eurofins TestAmerica under chain of custody protocols. The groundwater sample was analyzed for PFAS compounds by EPA Method 537M.

## DISCUSSION OF ANALYTICAL RESULTS

STANDARDS, CRITERIA, & GUIDANCE VALUES:

The following documents will be used to evaluate soil, groundwater, surface water, and sediment analytical results:

*Soil*

- Unrestricted Use and Residential Use soil guidance values from NYSDEC Sampling, Analysis, and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs, November 2022.

*Groundwater*

- Screening levels identified in NYSDEC Sampling, Analysis, and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs, November 2022
- New York State Department of Environmental Conservation, Technical and Operational Guidance Series (1.1.1), Class GA Standards and Guidance Values, Revised (TOGS 1.1.1), June 1998
- New York State Drinking Water Maximum Contaminant Level (MCL) for PFOA (10 ppt), PFOS (10 ppt), and 1,4-dioxane (1 ppb)

It is noted that the NYSDEC Standards, Criteria, & Guidance Values are listed in concentrations of parts per trillion (ppt), parts per billion (ppb), and parts per million (ppm) while laboratory analytical results are reported in equivalent concentrations. For example,

- In soil:
  - 1 ppt = 1 nanogram per kilogram (ng/kg),
  - 1 ppb = microgram per kilogram (µg/kg), and
  - 1 ppm = milligram per kilogram (mg/kg)
- In water:
  - 1 ppt = nanogram per liter (ng/L),
  - 1 ppb = microgram per liter (µg/L), and
  - 1 ppm = milligram per liter (mg/L).

Soil Results:

A total of 17 soil samples were collected and analyzed for PFAS compounds by analytical method 537M. Sixteen samples had one or more compounds detected. PFOA was recorded in three (3) samples at concentrations that are in excess of the Unrestricted Use guidance value of 0.66 ug/kg. These are CT-SB-01 (0.91 ug/kg), CT-SB-05 (3.4 ug/kg), and CT-SS-01 (1.8 ug/kg). PFOA was recorded in 11 soil samples

at concentrations ranging from an estimated 0.18 µg/kg to 0.66 µg/kg. Each of these concentrations are equal to or below the Unrestricted Use guidance value of 0.66 µg/kg. PFOS was recorded in 12 samples and ranged in concentration from an estimated 0.17 µg/kg to 0.6 µg/kg. Each of these concentrations are below the Unrestricted Use guidance value of 0.88 µg/kg.

PFAS compounds that were detected but do not have corresponding criteria include: 1H,1H,2H,2H-perfluorodecane sulfonic acid, PFBA, PDFA, PFHpA, PFHxA, PFNA, PFPeA, and PFUnA. The maximum concentration recorded for compounds without criteria was 1H,1H,2H,2H-perfluorodecane sulfonic acid at 0.69 µg/kg. Refer to **Table 3** for additional details. Refer to **Appendix A** for the laboratory analytical reports.

**Groundwater Results:**

The groundwater sample collected from the monitoring well CT-OW-01 on September 28, 2022 reported all PFAS compound concentrations below the laboratory RL and the 10 ng/L (ppt) drinking water MCL which is currently used as a screening level for surface water and groundwater results. However, reporting limits were elevated, ranging from 47 ng/L (ppt) to 120 ng/L (ppt), due to the turbidity of the sample. Refer to **Table 4** for additional details. Refer to Appendix A for the laboratory analytical reports

Further discussion on the findings and conclusions of the investigation of the Cooper Tire property are discussed within the main PFAS assessment report provided by CDM Smith.

This report was prepared by Aztech with review and editorial input by the NYSDEC.

Respectfully submitted,

Aztech Environmental Technologies (a LaBella Company)

Sierra Vaverchak
Environmental Geologist

I Randy Hoose certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10). All investigation and activities were performed in full accordance with the work plan provided by the NYSDEC.

Randy Hoose, P.G.
Senior Hydrogeologist

Attachments:
Figure 1 – Site Map
Table 2 – Equipment Blank, PFAS Results
Table 3 – Soil, PFAS Results
Table 4 – Groundwater, PFAS Results
Boring Logs
Appendix – A: Laboratory Analytical Reports

# FIGURE


## Legend

N

Tax Parcels

### Location Type

Overburden Monitoring Well/Soil Boring (with samples)

Soil Boring (with samples)

Surface Soil

0 75 150 300 Feet

Cooper Tire

Figure 1
Sample Locations

Rensselaer County
Town of Poestenkill

**Algonquin Middle School**
**PFAS Assessment**
**#2105197**

NEW YORK STATE | Department of Environmental Conservation

# TABLES

**Table 2**
**Cooper Tire Disposal Area**
**Equipment Blank, PFAS Results**

| | | | Client Sample ID: | Equipment Blank |
|---|---|---|---|---|
| | | | Lab Sample ID: | 22H1262-17 |
| | | | Sample Date: | 8/19/2022 |
| | | | Sample Type Code: | EB |
| Analyte | Unit | NYSDEC Guidelines[1] | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS) | ng/L | NC | < 0.55 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | ng/L | NC | < 0.52 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | ng/L | NC | < 0.24 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | ng/L | NC | < 0.32 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ng/L | NC | < 0.3 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid (9Cl-PF3ONS) | ng/L | NC | < 0.34 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | ng/L | NC | < 0.21 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | ng/L | NC | < 0.54 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | ng/L | NC | < 0.66 | U |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | ng/L | NC | NA | |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | ng/L | NC | NA | |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | ng/L | NC | < 0.24 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | ng/L | NC | < 0.2 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | ng/L | NC | < 0.16 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | ng/L | NC | < 0.27 | U |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | ng/L | NC | < 0.36 | U |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | ng/L | NC | < 0.29 | U |
| Perfluorobutanesulfonic acid (PFBS) | ng/L | NC | < 0.24 | U |
| Perfluorobutanoic Acid (PFBA) | ng/L | NC | < 0.64 | U |
| Perfluorodecanesulfonic acid (PFDS) | ng/L | NC | < 0.28 | U |
| Perfluorodecanoic acid (PFDA) | ng/L | NC | < 0.42 | U |
| Perfluorododecanoic acid (PFDoA) | ng/L | NC | < 0.38 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | ng/L | NC | < 0.81 | U |
| Perfluoroheptanoic acid (PFHpA) | ng/L | NC | < 0.3 | U |
| Perfluorohexanesulfonic acid (PFHxS) | ng/L | NC | < 0.29 | U |
| Perfluorohexanoic acid (PFHxA) | ng/L | NC | < 0.33 | U |
| Perfluorononanesulfonic Acid (PFNS) | ng/L | NC | < 0.14 | U |
| Perfluorononanoic acid (PFNA) | ng/L | NC | < 0.3 | U |
| Perfluorooctane Sulfonamide (PFOSA) | ng/L | NC | < 0.36 | U |
| Perfluorooctanesulfonic acid (PFOS) | ng/L | 10 | < 0.52 | U |
| Perfluorooctanoic acid (PFOA) | ng/L | 10 | < 0.59 | U |
| Perfluoropentanesulfonic Acid (PFPeS) | ng/L | NC | < 0.22 | U |
| Perfluoropentanoic Acid (PFPeA) | ng/L | NC | < 0.34 | U |
| Perfluorotetradecanoic acid (PFTeDA) | ng/L | NC | < 0.32 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | ng/L | NC | < 0.24 | U |
| Perfluoroundecanoic Acid (PFUnA) | ng/L | NC | < 0.32 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

Sample Type Code: EB - Equipment Blank

ng/L - nanogram per liter = parts per trillion (ppt)

NC - No criteria currently exists

NA - Compound was not analyzed for

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

**Table 3**
**Cooper Tire Disposal Area**
**Soil, PFAS Results**

| | | | | Client Sample ID: | CT-SB-01 0-12IN | | CT-SB-01 2-12IN | | CT-SB-01 96-108IN | | CT-SB-02 0-2IN | | CT-SB-02 2-12IN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | 22H1262-01 | | 22H1262-02 | | 22H1262-03 | | 22H1262-07 | | 22H1262-08 | |
| | | | | Location ID: | CT-SB-01 | | CT-SB-01 | | CT-SB-01 | | CT-SB-02 | | CT-SB-02 | |
| | | | | Sample Date: | 8/19/2022 | | 8/19/2022 | | 8/19/2022 | | 8/19/2022 | | 8/19/2022 | |
| | | | | Sample Type Code: | N | | N | | N | | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Residential Use Guidance Value[1] | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.13 | U | < 0.13 | U | < 0.14 | U | < 0.13 | U | < 0.13 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.12 | U | < 0.12 | U | < 0.13 | U | < 0.12 | U | < 0.12 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.084 | U | < 0.084 | U | < 0.09 | U | < 0.087 | U | < 0.088 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.1 | U | < 0.1 | U | < 0.11 | U | < 0.11 | U | < 0.11 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.15 | U | < 0.15 | U | < 0.16 | U | < 0.15 | U | < 0.15 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.22 | U | < 0.22 | U | < 0.23 | U | < 0.23 | U | < 0.23 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.13 | U | < 0.13 | U | < 0.14 | U | < 0.13 | U | < 0.13 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.083 | U | < 0.083 | U | < 0.089 | U | < 0.086 | U | < 0.086 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.071 | U | < 0.071 | U | < 0.076 | U | < 0.073 | U | < 0.074 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.075 | U | < 0.075 | U | < 0.08 | U | < 0.078 | U | < 0.078 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.14 | U | < 0.15 | U | < 0.15 | U | < 0.15 | U | < 0.15 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.14 | U | < 0.14 | U | < 0.15 | U | < 0.14 | U | < 0.14 | U |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.086 | U | < 0.086 | U | < 0.092 | U | < 0.089 | U | < 0.09 | U |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.084 | U | < 0.084 | U | < 0.09 | U | < 0.087 | U | < 0.088 | U |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.07 | U | < 0.07 | U | < 0.075 | U | < 0.072 | U | < 0.073 | U |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | **0.51** | | < 0.061 | U | < 0.065 | U | < 0.063 | U | < 0.063 | U |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.11 | U | < 0.11 | U | < 0.11 | U |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | **0.076** | **J** | < 0.059 | U | < 0.063 | U | **0.09** | **J** | < 0.061 | U |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.07 | U | < 0.07 | U | < 0.075 | U | < 0.072 | U | < 0.073 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.14 | U | < 0.14 | U | < 0.15 | U | < 0.14 | U | < 0.14 | U |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | **0.26** | **J** | < 0.066 | U | < 0.07 | U | < 0.068 | U | < 0.069 | U |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.073 | U | < 0.073 | U | < 0.078 | U | < 0.076 | U | < 0.076 | U |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | **0.22** | **J** | < 0.085 | U | < 0.091 | U | < 0.088 | U | < 0.089 | U |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.12 | U | < 0.12 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | **0.26** | **J** | < 0.075 | U | < 0.08 | U | **0.11** | **J** | **0.086** | **J** |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.089 | U | < 0.089 | U | < 0.095 | U | < 0.092 | U | < 0.093 | U |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 8.8 | **0.43** | **J** | < 0.062 | U | < 0.066 | U | **0.46** | **J** | **0.29** | **J** |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 6.6 | **0.91** | | **0.18** | **J** | < 0.14 | U | **0.22** | **J** | **0.19** | **J** |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.067 | U | < 0.067 | U | < 0.071 | U | < 0.069 | U | < 0.07 | U |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | **0.25** | **J** | < 0.07 | U | < 0.075 | U | **0.1** | **J** | < 0.073 | U |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.087 | U | < 0.087 | U | < 0.093 | U | < 0.09 | U | < 0.091 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.1 | U | < 0.1 | U | < 0.11 | U | < 0.11 | U | < 0.11 | U |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | < 0.083 | U | < 0.083 | U | < 0.089 | U | < 0.086 | U | < 0.086 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

µg/kg - microgram per kilogram = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above Unrestricted Use guidance value

Highlighted - Indicates the compound was detected above Residential Use guidance value

**Table 3**
**Cooper Tire Disposal Area**
**Soil, PFAS Results**

| | | | | Client Sample ID: | CT-SB-02 240-246IN | | CT-SB-03 0-2IN | | CT-SB-03 2-12IN | | CT-SB-03 60-72IN | | CT-SB-04 0-2IN | | CT-SB-05 0-2IN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | 22H1262-09 | | 22H1262-04 | | 22H1262-05 | | 22H1262-06 | | 22H1262-15 | | 22H1262-13 | |
| | | | | Location ID: | CT-SB-02 | | CT-SB-03 | | CT-SB-03 | | CT-SB-03 | | CT-SB-04 | | CT-SB-05 | |
| | | | | Sample Date: | 8/19/2022 | | 8/19/2022 | | 8/19/2022 | | 8/19/2022 | | 8/19/2022 | | 8/19/2022 | |
| | | | | Sample Type Code: | N | | N | | N | | N | | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Residential Use Guidance Value[1] | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.15 | U | < 0.14 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.14 | U | < 0.13 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.097 | U | < 0.091 | U | < 0.088 | U | < 0.084 | U | < 0.084 | U | < 0.087 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.12 | U | **0.69** | | < 0.11 | U | < 0.1 | U | < 0.1 | U | < 0.11 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.17 | U | < 0.16 | U | < 0.15 | U | < 0.15 | U | < 0.15 | U | < 0.15 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.13 | U | < 0.12 | U | < 0.12 | U | < 0.11 | U | < 0.11 | U | < 0.12 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.25 | U | < 0.24 | U | < 0.23 | U | < 0.22 | U | < 0.22 | U | < 0.23 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.15 | U | < 0.14 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.096 | U | < 0.09 | U | < 0.086 | U | < 0.083 | U | < 0.083 | U | < 0.086 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.082 | U | < 0.077 | U | < 0.074 | U | < 0.071 | U | < 0.071 | U | < 0.073 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.087 | U | < 0.081 | U | < 0.078 | U | < 0.075 | U | < 0.075 | U | < 0.077 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.17 | U | < 0.16 | U | < 0.15 | U | < 0.14 | U | < 0.14 | U | < 0.15 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.16 | U | < 0.15 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.1 | U | < 0.093 | U | < 0.09 | U | < 0.086 | U | < 0.086 | U | < 0.089 | U |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.097 | U | < 0.091 | U | < 0.088 | U | < 0.084 | U | < 0.084 | U | < 0.087 | U |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.081 | U | < 0.076 | U | < 0.073 | U | < 0.07 | U | < 0.07 | U | < 0.072 | U |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | < 0.07 | U | **0.22** | **J** | **0.098** | **J** | < 0.061 | U | < 0.06 | U | **0.22** | **J** |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | < 0.12 | U | < 0.12 | U | < 0.11 | U | < 0.11 | U | < 0.11 | U | < 0.11 | U |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | < 0.068 | U | **0.098** | **J** | < 0.061 | U | < 0.059 | U | < 0.058 | U | **0.08** | **J** |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.081 | U | < 0.076 | U | < 0.073 | U | < 0.07 | U | < 0.07 | U | < 0.072 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.16 | U | < 0.15 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | **0.08** | **J** | **0.14** | **J** | **0.18** | **J** | **0.087** | **J** | < 0.065 | U | **0.14** | **J** |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.084 | U | < 0.079 | U | < 0.076 | U | < 0.073 | U | < 0.073 | U | < 0.075 | U |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | < 0.098 | U | **0.28** | **J** | **0.19** | **J** | **0.096** | **J** | < 0.085 | U | **0.11** | **J** |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.14 | U | < 0.13 | U | < 0.13 | U | < 0.12 | U | < 0.12 | U | < 0.13 | U |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | **0.23** | **J** | **0.20** | **J** | < 0.078 | U | < 0.075 | U | < 0.075 | U | **0.17** | **J** |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.1 | U | < 0.096 | U | < 0.093 | U | < 0.089 | U | < 0.089 | U | < 0.092 | U |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 8.8 | **0.45** | **J** | **0.49** | **J** | **0.20** | **J** | **0.17** | **J** | < 0.061 | U | **0.39** | **J** |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 6.6 | **0.52** | **J** | **0.52** | | **0.66** | | **0.39** | **J** | **0.18** | **J** | **0.58** | |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.077 | U | < 0.072 | U | < 0.07 | U | < 0.067 | U | < 0.066 | U | < 0.069 | U |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | < 0.081 | U | **0.24** | **J** | **0.20** | **J** | **0.11** | **J** | < 0.07 | U | **0.16** | **J** |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.1 | U | < 0.094 | U | < 0.091 | U | < 0.087 | U | < 0.087 | U | < 0.09 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.12 | U | < 0.11 | U | < 0.11 | U | < 0.1 | U | < 0.1 | U | < 0.11 | U |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | < 0.096 | U | **0.12** | **J** | < 0.086 | U | < 0.083 | U | < 0.083 | U | < 0.086 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

µg/kg - microgram per kilogram = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above Unrestricted Use guidance value

Highlighted - Indicates the compound was detected above Residential Use guidance value

**Table 3**
**Cooper Tire Disposal Area**
**Soil, PFAS Results**

| | | | | Client Sample ID: | DUP 20220819 | | CT-SB-05 2-12IN | | CT-SB-06 0-2IN | | CT-SB-07 0-2IN | | CT-SB-07 2-12IN | | CT-SS-01 20220819 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | 22H1262-18 | | 22H1262-14 | | 22H1262-10 | | 22H1262-11 | | 22H1262-12 | | 22H1262-16 | |
| | | | | Location ID: | CT-SB-05 0-2IN | | CT-SB-05 | | CT-SB-06 | | CT-SB-07 | | CT-SB-07 | | CT-SS-01 | |
| | | | | Sample Date: | 8/19/2022 | | 8/19/2022 | | 8/19/2022 | | 8/19/2022 | | 8/19/2022 | | 8/19/2022 | |
| | | | | Sample Type Code: | FD | | N | | N | | N | | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Residential Use Guidance Value[1] | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer | Result | Qualifer |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.12 | U | < 0.13 | U | < 0.13 | U | < 0.12 | U | < 0.13 | U | < 0.13 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.12 | U | < 0.12 | U | < 0.12 | U | < 0.11 | U | < 0.12 | U | < 0.12 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.082 | U | < 0.085 | U | < 0.087 | U | < 0.082 | U | < 0.083 | U | < 0.082 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.1 | U | < 0.11 | U | < 0.11 | U | < 0.1 | U | < 0.1 | U | < 0.1 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.14 | U | < 0.15 | U | < 0.15 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.11 | U | < 0.12 | U | < 0.12 | U | < 0.11 | U | < 0.11 | U | < 0.11 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.21 | U | < 0.22 | U | < 0.23 | U | < 0.21 | U | < 0.22 | U | < 0.22 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.12 | U | < 0.13 | U | < 0.13 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.081 | U | < 0.084 | U | < 0.086 | U | < 0.081 | U | < 0.082 | U | < 0.081 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.069 | U | < 0.072 | U | < 0.073 | U | < 0.069 | U | < 0.07 | U | < 0.07 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.073 | U | < 0.076 | U | < 0.077 | U | < 0.073 | U | < 0.074 | U | < 0.074 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.14 | U | < 0.15 | U | < 0.15 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.13 | U | < 0.14 | U | < 0.14 | U | < 0.13 | U | < 0.14 | U | < 0.14 | U |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.084 | U | < 0.087 | U | < 0.089 | U | < 0.084 | U | < 0.084 | U | < 0.084 | U |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.082 | U | < 0.085 | U | < 0.087 | U | < 0.082 | U | < 0.083 | U | < 0.082 | U |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.068 | U | < 0.071 | U | < 0.072 | U | < 0.068 | U | < 0.069 | U | < 0.069 | U |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | 0.081 | J | < 0.061 | U | < 0.063 | U | < 0.059 | U | < 0.06 | U | < 0.06 | U |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | < 0.1 | U | < 0.11 | U | < 0.11 | U | < 0.1 | U | < 0.1 | U | < 0.1 | U |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | 0.085 | J | < 0.059 | U | < 0.061 | U | < 0.057 | U | < 0.058 | U | < 0.058 | U |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.068 | U | < 0.071 | U | < 0.072 | U | < 0.068 | U | < 0.069 | U | < 0.069 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.13 | U | < 0.14 | U | < 0.14 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | 0.12 | J | < 0.067 | U | < 0.068 | U | < 0.064 | U | < 0.065 | U | < 0.065 | U |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.071 | U | < 0.074 | U | < 0.075 | U | < 0.071 | U | < 0.072 | U | < 0.072 | U |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | 0.096 | J | < 0.086 | U | < 0.088 | U | < 0.083 | U | < 0.084 | U | < 0.083 | U |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.12 | U | < 0.12 | U | < 0.13 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | 0.13 | J | < 0.076 | U | < 0.077 | U | < 0.073 | U | < 0.074 | U | < 0.074 | U |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.087 | U | < 0.09 | U | < 0.092 | U | < 0.086 | U | < 0.087 | U | < 0.087 | U |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 8.8 | 0.35 | J | < 0.062 | U | **0.60** | | **0.19** | **J** | **0.18** | **J** | < 0.061 | U |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 6.6 | 0.55 | | **3.4** | | < 0.13 | U | < 0.13 | U | **0.36** | **J** | **1.8** | |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.065 | U | < 0.068 | U | < 0.069 | U | < 0.065 | U | < 0.066 | U | < 0.066 | U |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | < 0.068 | U | < 0.071 | U | < 0.072 | U | < 0.068 | U | < 0.069 | U | < 0.069 | U |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.085 | U | < 0.088 | U | < 0.09 | U | < 0.085 | U | < 0.085 | U | < 0.085 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.1 | U | < 0.1 | U | < 0.11 | U | < 0.099 | U | < 0.1 | U | < 0.1 | U |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | 0.082 | J | < 0.084 | U | < 0.086 | U | < 0.081 | U | < 0.082 | U | < 0.081 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

µg/kg - microgram per kilogram = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above Unrestricted Use guidance value

Highlighted - Indicates the compound was detected above Residential Use guidance value

**Table 4**
**Cooper Tire Disposal Area**
**Groundwater, PFAS Results**

| | | | | |
|---|---|---|---|---|
| | | Client Sample ID: | CT-OW-01-20220928 | |
| | | Lab Sample ID: | 480-202196-2 | |
| | | Location ID: | CT-OW-01 | |
| | | Sample Date: | 9/28/2022 | |
| | | Sample Type Code: | N | |
| Analyte | Unit | NYSDEC Guidelines[1] | Result | Qualifier |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | ng/L | NC | < 47 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | ng/L | NC | < 120 | U |
| N-ethyl perfluorooctanesulfonamidoacetic acid | ng/L | NC | < 120 | U |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | ng/L | NC | < 120 | U |
| Perfluorobutanesulfonic acid (PFBS) | ng/L | NC | < 47 | U |
| Perfluorobutanoic Acid (PFBA) | ng/L | NC | < 120 | U |
| Perfluorodecanesulfonic acid (PFDS) | ng/L | NC | < 47 | U |
| Perfluorodecanoic acid (PFDA) | ng/L | NC | < 47 | U |
| Perfluorododecanoic acid (PFDoA) | ng/L | NC | < 47 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | ng/L | NC | < 47 | U |
| Perfluoroheptanoic acid (PFHpA) | ng/L | NC | < 47 | U |
| Perfluorohexanesulfonic acid (PFHxS) | ng/L | NC | < 47 | U |
| Perfluorohexanoic acid (PFHxA) | ng/L | NC | < 47 | U |
| Perfluorononanoic acid (PFNA) | ng/L | NC | < 47 | U |
| Perfluorooctane Sulfonamide (FOSA) | ng/L | NC | < 47 | U |
| Perfluorooctanesulfonic acid (PFOS) | ng/L | 10 | < 47 | U |
| Perfluorooctanoic acid (PFOA) | ng/L | 10 | < 47 | U |
| Perfluoropentanoic Acid (PFPeA) | ng/L | NC | < 47 | U |
| Perfluorotetradecanoic acid (PFTA) | ng/L | NC | < 47 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | ng/L | NC | < 47 | U |
| Perfluoroundecanoic Acid (PFUnA) | ng/L | NC | < 47 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

ng/L - nanogram per liter = parts per trillion (ppt)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

# BORING LOGS

MONITORING WELL / BORING NO. **CT-OW-01 / CT-SB-01**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 19, 2022

Location: Cooper Tire | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 9' (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: 9' (Dia): 2" | Well Type: PVC

Screen Interval: 9' - 4' | Slot Size: 0.010" | Diameter: 2"

Cased Interval: 4' - 2'+ grade | Type: PVC | Diameter: 2"

Sand Pack Interval: 9' - 2' | Type: #2 | Wellhead Prot: Steel stick up

Bentonite Seal Interval: 2' - 1' | Type: Chips | Grouted Interval: N/A

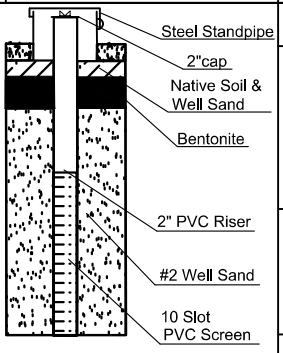
LaBella
Powered by partnership

**Soil Samples Collected:**

**CT-SB-01 0-2"**

**CT-SB-01 2-12"**

**CT-SB-01 96-108"**




| Depth (Feet) | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|
| 0 | | | |
| | S-1: 0' - 5.0' Rec: 5.0'/5.0' | < 1.0 | 0' - 3.0' Brown fine SAND and SILT, some weathered shale fragments and gravel |
| | | 3.5 | 3.0' - 4.0' Cobble<br>4.0' - 5.0' Brown fine SAND and SILT, some Gravel |
| 5 | S-2: 5.0' - 9' Rec: 4.0'/4.0' | 3.8 | 5.0' - 9.0' Brown fine SAND, SILT, and GRAVEL with lenses of fine Gravel |
| 10 | | | End of boring (refusal), weathered shale bedrock in sampler shoe @ 9.0'<br>Groundwater was not encountered<br>CT-OW-01 monitoring well installed |
| | | | 9.0' |
| 15 | | | |
| 20 | | | |
| 25 | | | |
| 30 | | | |
| 35 | | | |

MONITORING WELL / BORING NO. **CT-SB-02**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 19, 2022

Location: Cooper Tire | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 21.5' (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

LaBella
Powered by partnership.

**Soil Samples Collected:**

**CT-SB-02 0-2"**

**CT-SB-02 0-2" MS/MSD**

**CT-SB-02 2-12"**

**CT-SB-02 240-246"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 5.0' Rec: 2.0'/5.0' | 2.5 | 0' - 3.0' Brown fine SAND and SILT, some fine Gravel |
| | | | <1.0 | 3.0' - 6.0' Brown SILT and CLAY, some fine Sand, cinders, concrete, brick, and wood |
| 5 | | S-2: 5.0' - 10' Rec: 2.0'/5.0' | 3.7 | 6.0' - 17.5' Brown fine SAND and GRAVEL, trace Silt, wood, cobble, concrete, and glass |
| 10 | | S-3: 10' - 15' Rec: 2.0'/5.0' | <1.0 | Cinders noted @ 10' - 17.5' |
| 15 | | S-4: 15' - 19' Rec: 2.0'/4.0' | 1.9 | 17.5' - 20.5' CLAY, some Gravel and wood<br>Refusal @ 19'* |
| 20 | | S-5: 19' - 21.5' Rec: 1.5/2.5' | 5.1 | 20.5' - 21.5' Weathered shale fragments<br>End of boring (refusal), weathered shale bedrock in sampler shoe @ 21.5'<br>Groundwater was not encountered<br>No monitoring well installed |
| 25 | | | | 21.5' |
| 30 | | | | *Note: At the request of the onsite NYSDEC representative, drilling stepped aside approximately 3', drive pointed to 19', and macro cored the 19' to 21.5' interval until refusal. |
| 35 | | | | |

MONITORING WELL / BORING NO. **CT-SB-03**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 19, 2022

Location: Cooper Tire | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 6.0' (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

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**Soil Samples Collected:**

**CT-SB-03 0-2"**

**CT-SB-03 2-12"**

**CT-SB-03 60-72"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 5.0' Rec: 2.0'/5.0' | 2.5 | 0' - 5.5' Brown SAND and SILT, some fine Gravel and weathered shale fragments |
| 5 | | S-2: 5.0' - 6' Rec: 1.0'/1.0' | 3.7 | 5.5' - 6.0' Brown SAND and SILT, fine Gravel and lenses of weathered shale |
| | | | | End of boring (refusal), weathered shale bedrock in sampler shoe @ 6.0'<br>Groundwater was not encountered<br>No monitoring well installed |
| 10 | | | | 6.0' |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **CT-SB-04**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 19, 2022

Location: Cooper Tire | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 1.0' (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

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**Soil Samples Collected:**

**CT-SB-04 0-2"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 1.0'<br>Rec: 1.0'/1.0' | 0.9 | 0' - 1.0' Light brown fine SAND and SILT, weathered shale fragments |
| | | | | End of boring (refusal), weathered shale bedrock in sampler shoe @ 1.0'<br>Groundwater was not encountered<br>No monitoring well installed |
| 5 | | | | 1.0' |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **CT-SB-05**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 19, 2022

Location: Cooper Tire | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 4.0' (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

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**Soil Samples Collected:**

**CT-SB-05 0-2"**

**CT-SB-05 2-12"**

**Duplicate Parent CT-SB-05 0-2"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 4.0'<br>Rec: 4.0'/4.0' | 1.1 | 0' - 3.0' Light brown fine SAND and SILT, some fine Gravel |
| | | | 3.7 | 3.0' - 4.0' Weathered shale fragments |
| 5 | | | | End of boring (refusal), weathered shale bedrock in sampler shoe @ 4.0'<br>Groundwater was not encountered<br>No monitoring well installed |
| | | | | 4.0' |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **CT-SB-06**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 19, 2022

Location: Cooper Tire | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 1.0' (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

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**Soil Samples Collected:**

**CT-SB-06 0-2"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 1.0'<br>Rec: 1.0'/1.0' | 11.6<br>8.3 | 0' - 0.5' Brown fine SAND and SILT, weathered shale fragments<br>0.5' - 1.0' Gray weathered shale fragments<br>End of boring (refusal), weathered shale bedrock in sampler shoe @ 1.0'<br>Groundwater was not encountered<br>No monitoring well installed |
| 5 | | | | 1.0' |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **CT-SB-07**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 19, 2022

Location: Cooper Tire | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 4.0' (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

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**Soil Samples Collected:**

**CT-SB-07 0-2"**

**CT-SB-07 2-12"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 4.0'<br>Rec: 4.0'/4.0' | 1.5 | 0' - 1.0' Brown fine SAND and SILT, weathered shale fragments |
| | | | 3.3 | 1.0' - 4.0' Weathered shale fragments |
| 5 | | | | End of boring (refusal), weathered shale bedrock in sampler shoe @ 4.0'<br>Groundwater was not encountered<br>No monitoring well installed |
| | | | | 4.0' |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

# LABORATORY ANALYTICAL REPORTS

Aztech Environmental
TECHNOLOGIES
A LaBella Company

March 13, 2023 (Revised 4-18-2023)

Brittany O'Brien-Drake
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233

**RE: Site Summary Report (Rev. 4-18-2023)**
**Algonquin Middle School PFAS Assessment #2105197**
**Former Car Wash, 338 NY-351, Poestenkill, NY**
**Tax parcel ID: 136.-8-2**

Aztech Environmental Technologies Inc. (Aztech), a LaBella company, has provided this report to document overburden soil and groundwater assessment methodologies and sampling results for the above referenced location. All field investigation activities were performed at the discretion of and in accordance with the scope of work (SOW) developed and provided by the New York State Department of Environmental Conservation (NYSDEC).

The property is currently a residence and was formerly utilized as a former car wash (CW). The approximate 1.93-acre parcel is located along the eastern side of Reichards Lake Road (NY Rt 351) and south of Averill Park Road (Rt 66). A low-lying area is located on the eastern portion of the property with a rise toward the western portion of the property. The residential structure is located on the western portion of the property. The attached **Figure 1** depicts property features and boundaries.

Overburden soil encountered during drilling activities consisted primarily of fine sand and silt with varying amounts of shale fragments typically increasing in depth to drill tooling refusal. Shale fragments in the sampler shoe at terminal boring depths ranging from 4 feet below grade (fbg) (CW-SB-02) to 13 fbg (CW-SB-05), is noted on the boring logs.

Prior to intrusive groundwork, a UDig NY utility clearance ticket was ordered for the property. Additionally, a private utility locating contractor performed utility clearance with ground penetrating radar (GPR) at each boring location on August 8, 2022. Boring locations confirmed as clear were painted white and marked with a white flag.

## SUMMARY OF FIELD INVESTIGATIONS:

### Air monitoring

Air monitoring was conducted during all ground-intrusive work at the property (August 18, 2022) in accordance with the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan (CAMP). One dedicated Dust Trak unit with photo-ionization detector (PID) was positioned upwind with a second dedicated unit placed downwind at each boring location. No exceedances for volatile organic compounds (VOCs) or particulates were recorded.

### Soil Boring

On August 18, 2022, Clean Globe Environmental (CGE) advanced soil borings (CW-SB-01 through CW-SB-05) utilizing a Geoprobe 7822DT and direct-push techniques. All boring locations were used to confirm depth to shallow bedrock. Due to the lack of groundwater water encountered at the property, soil borings were not converted to monitoring wells. Aztech provided oversight of drilling activities and performed soil headspace screening, soil classification, and soil sampling. Soil boring locations are depicted on the attached **Figure 1**.

## Soil Sampling

Individual soil samples were visually classified and headspace screened with a PID calibrated to a 100 part per million (ppm) isobutylene calibrant gas. Soil samples from select boring locations were collected from the following depth intervals:

- Surface grade to 2 -inch below grade (BG), beneath vegetative cover, and
- 2-inch BG to 12-inch BG

The actual number of soil samples was dependent on field conditions. A total of ten (10) depth discrete subsurface soil samples were collected from the five (5) soil borings and analyzed for PFAS compounds by analytical method 537M for soil. Select soil samples from the 2-12" interval were analyzed using the Synthetic Precipitation Leaching Procedure (SPLP) by Environmental Protection Agency (EPA) Method 1312 and the leachate was subsequently analyzed for PFAS compounds by analytical method 537M to assess the mobility of contaminants in soil. SPLP PFAS results are not considered reportable as it was determined that Con-Test (a Pace Analytical Laboratory at East Longmeadow, MA and the NYSDEC's contracted lab for this project) did not hold the appropriate ELAP certification for EPA Method 1312 at the time of analysis.

Additional samples collected for the purpose of quality assurance/quality control (QA/QC) included one matrix spike /matrix spike duplicate (MS/MSD) and one field duplicate. The attached boring logs reference the parent sample for the duplicate sample however, the sample was not received at the laboratory and as such, results are not reported.

## DISCUSSION OF ANALYTICAL RESULTS

### STANDARDS, CRITERIA, & GUIDANCE VALUES:

The following documents will be used to evaluate soil, groundwater, surface water, and sediment analytical results:

*Soil*

- Unrestricted Use and Residential Use soil guidance values from NYSDEC Sampling, Analysis, and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs, November 2022.

It is noted that the NYSDEC Standards, Criteria, & Guidance Values are listed in concentrations of parts per trillion (ppt), parts per billion (ppb), and parts per million (ppm) while laboratory analytical results are reported in equivalent concentrations. For example,

- In soil:
  - 1 ppt = 1 nanogram per kilogram (ng/kg),
  - 1 ppb = 1 microgram per kilogram (µg/kg), and
  - 1 ppm = 1 milligram per kilogram (mg/kg)
- In water:
  - 1 ppt = 1 nanogram per liter (ng/L),
  - 1 ppb = 1 microgram per liter (µg/L), and
  - 1 ppm = 1 milligram per liter (mg/L).

## Soil Results:

A total of 10 soil samples were collected from the five (5) borings installed on the property. Of the 10 soil samples collected and analyzed for PFAS compounds by analytical method 537M, each sample had one or more compounds detected. Exceedances of the Unrestricted Use guidance value for Perfluorooctanoic Acid (PFOA) (0.66 µg/kg) were identified at six (6) soil sample locations. These include CW-SB-01 0-2", CW-SB-02 0-2", CW-SB-03 60-72", CW-SB-04 0-2", CW-SB-04 2-12", and CW-SB-05 0-2". Additionally, PFOA was identified in excess of the Residential Use guidance value of 6.6 µg/kg in the CW-SB-04 0-2" sample. Perfluorooctanesulfonic acid (PFOS) was identified in excess of the Unrestricted Use guidance

value of 0.88 µg/kg in sample CW-SB-04 0-2". **Table 1** below provides a summary of the PFOA and PFOS laboratory analytical results. For further detail, refer to the attached **Table 2**.

Table 1
Summary of PFOA and PFOS

| Compound | Concentration | Unrestricted Use Guidance Value | Residential Use Guidance Value | Sample Location | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | CW-SB-01 0-2IN | CW-SB-02 0-2IN | CW-SB-03 0-2IN | CW-SB-03 2-12IN | CW-SB-03 60-72IN | CW-SB-04 0-2IN | CW-SB-04 2-12IN | CW-SB-05 0-2IN | CW-SB-05 132-144IN | CW-SB-05 2-12IN |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 8.8 | **0.37** | **0.13** | **0.13** | - | - | **1.9** | **0.52** | **0.23** | **0.11** | **0.11** |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 6.6 | **0.85** | **1.0** | - | **0.20** | **4.5** | **11** | **0.97** | **1.8** | - | **0.55** |

Notes:
µg/kg - microgram per kilogram = parts per billion (ppb)
(-) Compound not detected above the laboratory minum detection limit

PFAS compounds that were detected but do not have corresponding criteria include: PFBA, PFDS, PFDA, PFHpA, PFHxA, PFNA, PFPeA, and PFUnA. The maximum concentration recorded for compounds without criteria was PFNA at an estimated concentration of 0.29 µg/kg (CW-SB-04). Refer to Table 2 for additional details. Refer to **Appendix A** for the laboratory analytical reports.

Further discussion on the findings and conclusions of the investigation of the Former Car Wash property are discussed within the main PFAS assessment report provided by CDM Smith.

This report was prepared by Aztech with review and editorial input by the NYSDEC.

Respectfully submitted,

Aztech Environmental Technologies (a LaBella Company)

Sierra Vaverchak
Environmental Geologist

Todd Rollend
Environmental Scientist

I Randy Hoose certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10). All investigation and activities were performed in full accordance with the work plan provided by the NYSDEC.

Randy Hoose, P.G.
Senior Hydrogeologist

Attachments: Figure 1 – Site Map
Table 2 – Soil, PFAS Results
Boring Logs
Appendix – A: Laboratory Analytical Reports

# FIGURE


## Legend

N

Algonquin Middle School

Tax Parcels

### Location Type

Soil Boring (with samples)

0 37.5 75 150 Feet

Former Car Wash

Sample Locations

Rensselaer County
Town of Poestenkill

**Algonquin Middle School**
**PFAS Assessment**
**#2105197**

NEW YORK STATE | Department of Environmental Conservation

# TABLES

**Table 2**
**Former Car Wash**
**Soil, PFAS Results**

| | | | | Client Sample ID: | | CW-SB-01 0-2IN | | CW-SB-02 0-2IN | | CW-SB-03 0-2IN | | CW-SB-03 2-12IN | | CW-SB-03 60-72IN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | | 22H1218-11 | | 22H1218-12 | | 22H1218-18 | | 22H1218-20 | | 22H1218-21 | |
| | | | | Location ID: | | CW-SB-01 | | CW-SB-02 | | CW-SB-03 | | CW-SB-03 | | CW-SB-03 | |
| | | | | Sample Date: | | 8/18/2022 | | 8/18/2022 | | 8/18/2022 | | 8/18/2022 | | 8/18/2022 | |
| | | | | Sample Type Code: | | N | | N | | N | | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Residential Use Guidance Value[1] | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.12 | U | < 0.13 | U | | |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.12 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U | | |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.087 | U | < 0.086 | U | < 0.088 | U | < 0.082 | U | < 0.083 | U | | |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.11 | U | < 0.1 | U | < 0.1 | U | | |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.15 | U | < 0.15 | U | < 0.15 | U | < 0.14 | U | < 0.14 | U | | |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.12 | U | < 0.12 | U | < 0.12 | U | < 0.11 | U | < 0.11 | U | | |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.23 | U | < 0.23 | U | < 0.23 | U | < 0.21 | U | < 0.22 | U | | |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U | | |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.086 | U | < 0.085 | U | < 0.087 | U | < 0.081 | U | < 0.082 | U | | |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.073 | U | < 0.073 | U | < 0.074 | U | < 0.069 | U | < 0.07 | U | | |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.078 | U | < 0.077 | U | < 0.079 | U | < 0.073 | U | < 0.074 | U | | |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.15 | U | < 0.15 | U | < 0.15 | U | < 0.14 | U | < 0.14 | U | | |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.14 | U | < 0.14 | U | < 0.14 | U | < 0.13 | U | < 0.14 | U | | |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.089 | U | < 0.088 | U | < 0.09 | U | < 0.084 | U | < 0.085 | U | | |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.087 | U | < 0.086 | U | < 0.088 | U | < 0.082 | U | < 0.083 | U | | |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.072 | U | < 0.072 | U | < 0.073 | U | < 0.068 | U | < 0.069 | U | | |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | 0.14 | J | < 0.062 | U | 0.09 | J | 0.069 | J | < 0.06 | U | | |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.11 | U | < 0.1 | U | < 0.1 | U | | |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | 0.09 | J | < 0.06 | U | 0.066 | J | < 0.057 | U | < 0.058 | U | | |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.072 | U | < 0.072 | U | < 0.073 | U | < 0.068 | U | < 0.069 | U | | |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.14 | U | < 0.14 | U | < 0.14 | U | < 0.13 | U | < 0.13 | U | | |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | 0.077 | J | < 0.068 | U | 0.083 | J | < 0.064 | U | < 0.065 | U | | |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.076 | U | < 0.075 | U | < 0.077 | U | < 0.071 | U | < 0.072 | U | | |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | < 0.088 | U | < 0.087 | U | < 0.089 | U | < 0.083 | U | < 0.084 | U | | |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.12 | U | < 0.12 | U | | |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | 0.15 | J | < 0.077 | U | < 0.079 | U | < 0.073 | U | < 0.074 | U | | |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.092 | U | < 0.091 | U | < 0.094 | U | < 0.087 | U | < 0.088 | U | | |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 8.8 | 0.37 | J | 0.13 | J | 0.13 | J | < 0.06 | U | < 0.061 | U | | |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 6.6 | 0.85 | | 1.0 | | < 0.14 | U | 0.20 | J | 4.5 | | | |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.069 | U | < 0.069 | U | < 0.07 | U | < 0.065 | U | < 0.066 | U | | |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | 0.083 | J | < 0.072 | U | 0.085 | J | 0.087 | J | < 0.069 | U | | |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.09 | U | < 0.089 | U | < 0.091 | U | < 0.085 | U | < 0.086 | U | | |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.11 | U | < 0.1 | U | < 0.11 | U | < 0.099 | U | < 0.1 | U | | |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | 0.10 | J | < 0.085 | U | < 0.087 | U | < 0.081 | U | < 0.082 | U | | |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

µg/kg - microgram per kilogram = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above Unrestricted Use guidance value

Highlighted - Indicates the compound was detected above Residential Use guidance value

**Table 2**
**Former Car Wash**
**Soil, PFAS Results**

| | | | | Client Sample ID: | CW-SB-04 0-2IN | | CW-SB-04 2-12IN | | CW-SB-05 0-2IN | | CW-SB-05 132-144IN | | CW-SB-05 2-12IN | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | 22H1218-13 | | 22H1218-14 | | 22H1218-15 | | 22H1218-17 | | 22H1218-16 | |
| | | | | Location ID: | CW-SB-04 | | CW-SB-04 | | CW-SB-05 | | CW-SB-05 | | CW-SB-05 | |
| | | | | Sample Date: | 8/18/2022 | | 8/18/2022 | | 8/18/2022 | | 8/18/2022 | | 8/18/2022 | |
| | | | | Sample Type Code: | N | | N | | N | | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Residential Use Guidance Value[1] | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.15 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.12 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.14 | U | < 0.12 | U | < 0.12 | U | < 0.12 | U | < 0.11 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.097 | U | < 0.084 | U | < 0.083 | U | < 0.085 | U | < 0.08 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.12 | U | < 0.1 | U | < 0.1 | U | < 0.11 | U | < 0.1 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.17 | U | < 0.15 | U | < 0.14 | U | < 0.15 | U | < 0.14 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.13 | U | < 0.11 | U | < 0.11 | U | < 0.12 | U | < 0.11 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.25 | U | < 0.22 | U | < 0.22 | U | < 0.22 | U | < 0.21 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.15 | U | < 0.13 | U | < 0.13 | U | < 0.13 | U | < 0.12 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.096 | U | < 0.083 | U | < 0.082 | U | < 0.084 | U | < 0.079 | U |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.082 | U | < 0.071 | U | < 0.07 | U | < 0.072 | U | < 0.068 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.087 | U | < 0.075 | U | < 0.074 | U | < 0.076 | U | < 0.072 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.17 | U | < 0.14 | U | < 0.14 | U | < 0.15 | U | < 0.14 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.16 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U | < 0.13 | U |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.099 | U | < 0.086 | U | < 0.085 | U | < 0.087 | U | < 0.082 | U |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.097 | U | < 0.084 | U | < 0.083 | U | < 0.085 | U | < 0.08 | U |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.081 | U | < 0.07 | U | < 0.069 | U | < 0.071 | U | < 0.067 | U |
| Perfluorobutanoic Acid (PFBA) | µg/kg | NC | NC | 0.13 | J | < 0.061 | U | < 0.06 | U | 0.093 | J | < 0.058 | U |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | 0.14 | J | < 0.11 | U | < 0.11 | U | < 0.11 | U | < 0.1 | U |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | 0.15 | J | < 0.059 | U | 0.074 | J | < 0.06 | U | < 0.056 | U |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.081 | U | < 0.07 | U | < 0.069 | U | < 0.071 | U | < 0.067 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.16 | U | < 0.14 | U | < 0.14 | U | < 0.14 | U | < 0.13 | U |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | 0.078 | J | < 0.066 | U | < 0.065 | U | 0.076 | J | < 0.063 | U |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.084 | U | < 0.073 | U | < 0.072 | U | < 0.074 | U | < 0.07 | U |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | 0.13 | J | < 0.085 | U | < 0.084 | U | 0.09 | J | < 0.081 | U |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.14 | U | < 0.12 | U | < 0.12 | U | < 0.13 | U | < 0.12 | U |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | 0.11 | J | 0.29 | J | < 0.074 | U | < 0.076 | U | < 0.072 | U |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.1 | U | < 0.089 | U | < 0.088 | U | < 0.09 | U | < 0.085 | U |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 8.8 | 1.9 | | 0.52 | | 0.23 | J | 0.11 | J | 0.11 | J |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 6.6 | 11 | | 0.97 | | 1.8 | | < 0.13 | U | 0.55 | |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.077 | U | < 0.067 | U | < 0.066 | U | < 0.068 | U | < 0.064 | U |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | 0.15 | J | < 0.07 | U | < 0.069 | U | 0.12 | J | < 0.067 | U |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.1 | U | < 0.087 | U | < 0.086 | U | < 0.088 | U | < 0.083 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.12 | U | < 0.1 | U | < 0.1 | U | < 0.1 | U | < 0.098 | U |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | < 0.096 | U | 0.26 | J | < 0.082 | U | < 0.084 | U | < 0.079 | U |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

µg/kg - microgram per kilogram = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above Unrestricted Use guidance value

Highlighted - Indicates the compound was detected above Residential Use guidance value

# BORING LOGS

MONITORING WELL / BORING NO. **CW-SB-01**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 18, 2022

Location: Former Car Wash | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 8' (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

LaBella
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**Soil Samples Collected:**

**CW-SB-01 0-2"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 5.0'<br>Rec: 2"/5.0' | 1.8 | 0' - 2" Brown fine SAND and SILT, some weathered shale fragments<br>2" - 8.0' Weathered shale fragments |
| 5 | | S-2: 5.0' - 8'<br>Rec: 0.0'/3.0' | | |
| 10 | | | | End of boring (refusal), weathered shale bedrock in sampler shoe @ 8.0'<br>Groundwater was not encountered<br>No monitoring well installed<br>8.0' |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **CW-SB-02**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 18, 2022

Location: Former Car Wash | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 4' (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

LaBella Powered by partnership.

**Soil Samples Collected:**

**CW-SB-02 0-2"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 5.0'<br>Rec: 2"/4.0' | 3.5 | 0' - 2" Brown fine SAND and SILT, some weathered shale fragments<br>2" - 4.0' Weathered shale fragments |
| 5 | | | | End of boring (refusal), weathered shale bedrock in sampler shoe @ 4.0'<br>Groundwater was not encountered<br>No monitoring well installed |
| | | | | 4.0' |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **CW-SB-03**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 18, 2022

Location: Former Car Wash | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 7' (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

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Powered by partnership.

**Soil Samples Collected:**

**CW-SB-03 0-2"**

**CW-SB-03 2-12"**

**CW-SB-03 60-72"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 5.0' Rec: 3.5'/5.0' | 3.7 | 0' - 6.0' Brown fine SAND and SILT, some weathered shale fragments |
| 5 | | S-2: 5.0' - 7.0' Rec: 2.0'/2.0' | 2.7 | 6.0' - 7.0' Weathered shale fragments |
| | | | | End of boring (refusal), weathered shale bedrock in sampler shoe @ 7.0'<br>Groundwater was not encountered<br>No monitoring well installed |
| 10 | | | | 7.0' |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **CW-SB-04**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 18, 2022

Location: Former Car Wash | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 8' (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

LaBella Powered by partnership.

**Soil Samples Collected:**

**CW-SB-04 0-2"**

**CW-SB-04 0-2" MS/MSD**

**CW-SB-04 2-12"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 5.0' Rec: 4.0'/5.0' | 0.9 | 0' - 2.0' Brown fine SAND and SILT, some weathered shale fragments |
| | | | 2.9 | 2.0' - 6.0' Brown fine SAND, some Silt, Clay, and weathered shale fragments |
| 5 | | S-2: 5.0' - 8.0' Rec: 3.0'/3.0' | <1.0 | 6.0' - 8.0' Weathered shale fragments |
| | | | | End of boring (refusal), weathered shale bedrock in sampler shoe @ 8.0' Groundwater was not encountered No monitoring well installed |
| 10 | | | | 8.0' |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **CW-SB-05**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 18, 2022

Location: Former Car Wash | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 13' (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

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**Soil Samples Collected:**

**CW-SB-05 0-2"**

**CW-SB-05 2-12"**

**CW-SB-05 132-144"**

**Duplicate Parent CW-SB-05 0-2"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 5.0' Rec: 4.0'/5.0' | 7.4 | 0" - 2" Brown fine SAND, some Silt and weathered shale fragments<br>2" - 13' Brown fine SAND and SILT, some weathered shale fragments |
| 5 | | S-2: 5.0' - 10' Rec: 4.0'/5.0' | 3.8 | |
| 10 | | S-3: 10' - 13' Rec: 3.0'/3.0' | 0.9 | |
| 15 | | | | End of boring (refusal), weathered shale bedrock in sampler shoe @ 13'<br>Groundwater was not encountered<br>No monitoring well installed |
| | | | | 13' |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

# LABORATORY ANALYTICAL REPORTS

Aztech Environmental
TECHNOLOGIES
A LaBella Company

March 13, 2023 (Revised 4-18-2023)

Brittany O'Brien-Drake
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233

**RE: Site Summary Report (Rev. 4-18-2023)**
**Algonquin Middle School PFAS Assessment #2105197**
**Hass Manufacturing, 371 NY-351, Poestenkill, NY**
**Tax parcel ID: 136.-7-6.2**

Aztech Environmental Technologies Inc. (Aztech), a LaBella company, has provided this report to document overburden soil and groundwater assessment methodologies and sampling results for the above referenced location. All field investigation activities were performed at the discretion of and in accordance with the scope of work (SOW) developed and provided by the New York State Department of Environmental Conservation (NYSDEC).

The property is currently utilized by Hass Manufacturing (HM) as a valve manufacturing business with operations primarily located on the north-northeast portion of the site. The approximate 3.23-acre parcel is located along the western side of White Church Road (NY Rt 351) and north of Averill Park Road (Rt 66). A portion of the property is mainly flat with a downward gradient from east to west. Bedrock outcropping is visible along the southwestern property boundary. The manufacturing structure is located on the north-northeastern portion of the property. The attached **Figure 1** depicts property features and boundaries.

The property contained very minimal overburden and shallow bedrock was generally encountered within 1 foot below ground surface (bgs). Overburden soil encountered during drilling activities consisted primarily of fine sand. Various amounts of shale fragments typically increased in depth to tooling refusal. Shale fragments in the sampler shoe at terminal boring depths from approximately 0.5 feet below grade (fbg) (HM-SB-04, HM-SB-05 and HM-SB-08) to 3.5 fbg (HM-SB-07) is noted on boring logs.

Prior to intrusive groundwork, a UDig NY utility clearance ticket was ordered for the property. Additionally, a private utility locating contractor performed utility clearance with ground penetrating radar (GPR) at each boring location on August 8, 2022. Boring locations confirmed as clear were painted white and marked with a white flag.

## SUMMARY OF FIELD INVESTIGATIONS:

### Air monitoring

Air monitoring was conducted during all ground-intrusive work at the property (August 18, 2022) in accordance with the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan (CAMP). One dedicated Dust Trak unit with photo-ionization detector (PID) was positioned upwind with a second dedicated unit placed downwind at each boring location. No exceedances for volatile organic compounds (VOCs) or particulates were recorded.

Soil Boring and Monitoring Well Installation

On August 18, 2022, Clean Globe Environmental (CGE) advanced soil borings (HM-SB-01 through HM-SB-08) utilizing a Geoprobe 7822DT and direct-push techniques to terminal depths ranging from 5 inches below grade (BG) to 3.5 fbg. All boring locations were used to confirm depth to shallow bedrock. Due to the lack of groundwater encountered at the property, soil borings were not converted to monitoring wells. Aztech provided oversight of drilling activities and performed soil headspace screening, soil classification, and soil sampling. Soil boring locations are depicted on the attached **Figure 1**.

Soil Sampling

Individual soil samples were visually classified and headspace screened with a PID calibrated to a 100 part per million (ppm) isobutylene calibrant gas. Soil samples from select boring locations were collected from the surface grade to 2-inch BG interval.

The actual number of soil samples was dependent on field conditions. A total of six (6) depth discrete subsurface soil samples were collected from the eight (8) soil borings and analyzed for PFAS compounds by analytical method 537M for soil. Soil samples were not collected from HM-SB-02 and HM-SB-06.

An additional sample collected for quality assurance/quality control (QA/QC) purposes included one (1) equipment blank. The equipment blank was collected via the stainless-steel soil mixing trowel on August 18, 2022. Laboratory analytical results for the equipment blank sample recorded PFOA below the laboratory reporting limit (RL) at an estimated concentration of 0.62 nanograms per liter (ng/L). Refer to **Table 1** for additional details.

## DISCUSSION OF ANALYTICAL RESULTS

STANDARDS, CRITERIA, & GUIDANCE VALUES:

The following documents will be used to evaluate soil, groundwater, surface water, and sediment analytical results:

*Soil*

- Unrestricted Use and Residential Use soil guidance values from NYSDEC Sampling, Analysis, and Assessment of PFAS Under NYSDEC's Part 375 Remedial Programs, November 2022.

It is noted that the NYSDEC Standards, Criteria, & Guidance Values are listed in concentrations of parts per trillion (ppt), parts per billion (ppb), and parts per million (ppm) while laboratory analytical results are reported in equivalent concentrations. For example,

- In soil:
  - 1 ppt = 1 nanogram per kilogram (ng/kg),
  - 1 ppb = 1 microgram per kilogram (µg/kg), and
  - 1 ppm = 1 milligram per kilogram (mg/kg)

Soil Results:

Of the six (6) soil samples collected and analyzed for PFAS compounds by analytical method 537M, each sample had one or more compounds detected. PFOA was recorded in the 0-2" BG depth interval within four (4) boring locations at estimated concentrations ranging from 0.14 µg/kg (HM-SB-03) to 0.22 µg/kg (HM-SB-07). These concentrations are below the Unrestricted Use guidance value of 0.66 µg/kg. PFOS was recorded within each of the six (6) boring locations at estimated concentrations

ranging from 0.13 µg/kg (HM-SB-04) to 0.4 µg/kg (HM-SB-03). These concentrations are below the Unrestricted Use guidance value of 0.88 µg/kg.

PFAS compounds that were detected but do not have corresponding guidance values include: PFBA, PFDA, PFHpA, PFHxA, PFNA, PFPeA, and PFUnA. The maximum concentration recorded for compounds without criteria was PFUnA at an estimated concentration of 0.17 µg/kg.

Refer to **Table 2** for additional details. Refer to **Appendix A** for the laboratory analytical reports.

Further discussion on the findings and conclusions of the investigation of the Hass Manufacturing property are discussed within the main PFAS assessment report provided by CDM Smith.

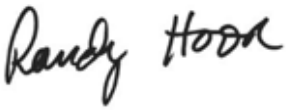
This report was prepared by Aztech with review and editorial input by the NYSDEC.

Respectfully submitted,

Aztech Environmental Technologies (a LaBella Company)

Sierra Vaverchak
Environmental Geologist

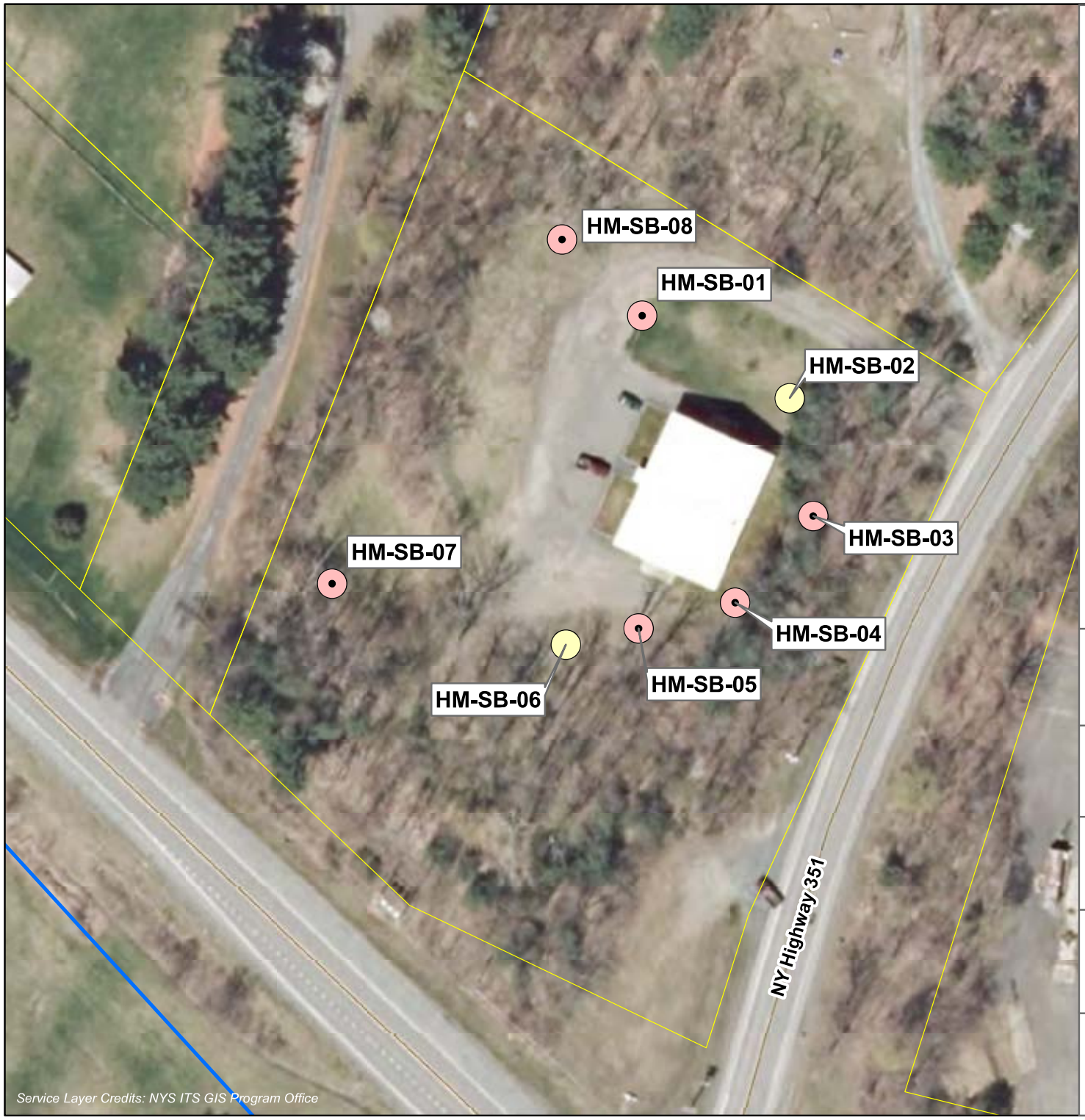
I Randy Hoose certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10). All investigation and activities were performed in full accordance with the work plan provided by the NYSDEC.



Randy Hoose, PG
Senior Hydrogeologist

Attachments:
Figure 1 – Site Map
Table 1 – Equipment Blank, PFAS Results
Table 2 – Soil, PFAS Results
Boring Logs
Appendix – A: Laboratory Analytical Reports

# FIGURE




## Legend

N

Algonquin Middle School

Tax Parcels

### Location Type

Soil Boring (with samples)

Soil Boring (no samples)

0 37.5 75 150 Feet

Hass Manufacturing

Figure 1
Sample Locations

Rensselaer County
Town of Poestenkill

**Algonquin Middle School**
**PFAS Assessment**
**#2105197**

NEW YORK STATE | Department of Environmental Conservation

# TABLES

**Table 1**
**Hass Manufacturing**
**Equipment Blank, PFAS Results**

| | | | Client Sample ID: | equipment blank |
|---|---|---|---|---|
| | | | Lab Sample ID: | 22H1218-04 |
| | | | Sample Date: | 8/18/2022 |
| | | | Sample Type Code: | EB |
| Analyte | Unit | NYSDEC Guidelines[1] | Result | Qualifier |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS) | ng/L | NC | < 0.55 | U |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | ng/L | NC | < 0.52 | U |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | ng/L | NC | < 0.24 | U |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | ng/L | NC | < 0.31 | U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | ng/L | NC | < 0.3 | U |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid (9Cl-PF3ONS) | ng/L | NC | < 0.33 | U |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | ng/L | NC | < 0.2 | U |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | ng/L | NC | < 0.54 | U |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | ng/L | NC | < 0.65 | U |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | ng/L | NC | NA | |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | ng/L | NC | NA | |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | ng/L | NC | < 0.24 | U |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | ng/L | NC | < 0.2 | U |
| Perfluoro-1-butanesulfonamide (FBSA) | ng/L | NC | < 0.16 | U |
| Perfluoro-1-hexanesulfonamide (FHxSA) | ng/L | NC | < 0.27 | U |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | ng/L | NC | < 0.36 | U |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | ng/L | NC | < 0.29 | U |
| Perfluorobutanesulfonic acid (PFBS) | ng/L | NC | < 0.24 | U |
| Perfluorobutanoic Acid (PFBA) | ng/L | NC | < 0.64 | U |
| Perfluorodecanesulfonic acid (PFDS) | ng/L | NC | < 0.28 | U |
| Perfluorodecanoic acid (PFDA) | ng/L | NC | < 0.42 | U |
| Perfluorododecanoic acid (PFDoA) | ng/L | NC | < 0.38 | U |
| Perfluoroheptanesulfonic acid (PFHpS) | ng/L | NC | < 0.8 | U |
| Perfluoroheptanoic acid (PFHpA) | ng/L | NC | < 0.29 | U |
| Perfluorohexanesulfonic acid (PFHxS) | ng/L | NC | < 0.29 | U |
| Perfluorohexanoic acid (PFHxA) | ng/L | NC | < 0.33 | U |
| Perfluorononanesulfonic Acid (PFNS) | ng/L | NC | < 0.14 | U |
| Perfluorononanoic acid (PFNA) | ng/L | NC | < 0.3 | U |
| Perfluorooctane Sulfonamide (PFOSA) | ng/L | NC | < 0.36 | U |
| Perfluorooctanesulfonic acid (PFOS) | ng/L | 10 | < 0.51 | U |
| Perfluorooctanoic acid (PFOA) | ng/L | 10 | 0.62 | J |
| Perfluoropentanesulfonic Acid (PFPeS) | ng/L | NC | < 0.22 | U |
| Perfluoropentanoic Acid (PFPeA) | ng/L | NC | < 0.34 | U |
| Perfluorotetradecanoic acid (PFTeDA) | ng/L | NC | < 0.31 | U |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | ng/L | NC | < 0.24 | U |
| Perfluoroundecanoic Acid (PFUnA) | ng/L | NC | < 0.32 | U |

Notes:
[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022
Sample Type Code: EB - Equipment Blank
ng/L - nanogram per liter = parts per trillion (ppt)
NC - No criteria currently exists
NA - Compound was not analyzed for
U - Compound was not detected at the reporting limit shown
J - An estimated value
**Bold - Indicates the compound was detected**
Highlighted - Indicates the compound was detected above applicable NYSDEC Standards, Criteria, & Guidance Values

**Table 2**
**Hass Manufacturing**
**Soil, PFAS Results**

| | | | | Client Sample ID: | | HM-SB-01 0-2IN | | HM-SB-03 0-2IN | | HM-SB-04 0-2IN | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | | 22H1218-08 | | 22H1218-07 | | 22H1218-06 | |
| | | | | Location ID: | | HM-SB-01 | | HM-SB-03 | | HM-SB-04 | |
| | | | | Sample Date: | | 8/18/2022 | | 8/18/2022 | | 8/18/2022 | |
| | | | | Sample Type Code: | | N | | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Residential Use Guidance Value[1] | Result | Qualifier | Result | Qualifier | Result | Qualifier | | |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.14 | U | < 0.13 | U | < 0.13 | U | | |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.13 | U | < 0.12 | U | < 0.12 | U | | |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.09 | U | < 0.087 | U | < 0.087 | U | | |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.11 | U | | |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.16 | U | < 0.15 | U | < 0.15 | U | | |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.12 | U | < 0.12 | U | < 0.12 | U | | |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.24 | U | < 0.23 | U | < 0.23 | U | | |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.14 | U | < 0.13 | U | < 0.13 | U | | |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.089 | U | < 0.086 | U | < 0.086 | U | | |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.076 | U | < 0.073 | U | < 0.073 | U | | |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.081 | U | < 0.077 | U | < 0.078 | U | | |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.16 | U | < 0.15 | U | < 0.15 | U | | |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.15 | U | < 0.14 | U | < 0.14 | U | | |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.093 | U | < 0.089 | U | < 0.089 | U | | |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.09 | U | < 0.087 | U | < 0.087 | U | | |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.075 | U | < 0.072 | U | < 0.072 | U | | |
| Perfluorobutanoic Acid | µg/kg | NC | NC | < 0.065 | U | 0.11 | J | < 0.063 | U | | |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.11 | U | | |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | 0.1 | J | 0.13 | J | < 0.061 | U | | |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.075 | U | < 0.072 | U | < 0.072 | U | | |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.15 | U | < 0.14 | U | < 0.14 | U | | |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | < 0.071 | U | 0.088 | J | < 0.068 | U | | |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.078 | U | < 0.075 | U | < 0.075 | U | | |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | < 0.092 | U | 0.13 | J | < 0.088 | U | | |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.13 | U | < 0.13 | U | < 0.13 | U | | |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | 0.084 | J | 0.16 | J | < 0.078 | U | | |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.096 | U | < 0.092 | U | < 0.092 | U | | |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 8.8 | 0.15 | J | 0.4 | J | 0.13 | J | | |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 6.6 | < 0.14 | U | 0.14 | J | 0.16 | J | | |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.072 | U | < 0.069 | U | < 0.069 | U | | |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | 0.11 | J | < 0.072 | U | < 0.072 | U | | |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.094 | U | < 0.09 | U | < 0.09 | U | | |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.11 | U | | |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | 0.11 | J | 0.17 | J | < 0.086 | U | | |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

µg/kg - microgram per kilogram = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above Unrestricted Use guidance value

Highlighted - Indicates the compound was detected above Residential Use guidance value

**Table 2**
**Hass Manufacturing**
**Soil, PFAS Results**

| | | | | Client Sample ID: | | HM-SB-05 0-2IN | | HM-SB-07 0-2IN | | HM-SB-08 0-2IN | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Lab Sample ID: | | 22H1218-05 | | 22H1218-09 | | 22H1218-10 | |
| | | | | Location ID: | | HM-SB-05 | | HM-SB-07 | | HM-SB-08 | |
| | | | | Sample Date: | | 8/18/2022 | | 8/18/2022 | | 8/18/2022 | |
| | | | | Sample Type Code: | | N | | N | | N | |
| Analyte | Unit | Unrestricted Use Guidance Value[1] | Residential Use Guidance Value[1] | Result | Qualifier | Result | Qualifier | Result | Qualifier | | |
| 11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.14 | U | < 0.14 | U | < 0.13 | U | | |
| 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | µg/kg | NC | NC | < 0.13 | U | < 0.13 | U | < 0.12 | U | | |
| 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | µg/kg | NC | NC | < 0.091 | U | < 0.093 | U | < 0.087 | U | | |
| 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | µg/kg | NC | NC | < 0.11 | U | < 0.12 | U | < 0.11 | U | | |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | µg/kg | NC | NC | < 0.16 | U | < 0.16 | U | < 0.15 | U | | |
| 9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid | µg/kg | NC | NC | < 0.12 | U | < 0.13 | U | < 0.12 | U | | |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) | µg/kg | NC | NC | < 0.24 | U | < 0.24 | U | < 0.23 | U | | |
| N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.14 | U | < 0.14 | U | < 0.13 | U | | |
| N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid | µg/kg | NC | NC | < 0.09 | U | < 0.092 | U | < 0.086 | U | | |
| Nonafluoro-3,6-dioxaheptanoic acid | µg/kg | NC | NC | < 0.077 | U | < 0.078 | U | < 0.073 | U | | |
| Perfluoro(2-ethoxyethane)sulfonic acid | µg/kg | NC | NC | < 0.081 | U | < 0.083 | U | < 0.077 | U | | |
| Perfluoro-1-butanesulfonamide (FBSA) | µg/kg | NC | NC | < 0.16 | U | < 0.16 | U | < 0.15 | U | | |
| Perfluoro-1-hexanesulfonamide (FHxSA) | µg/kg | NC | NC | < 0.15 | U | < 0.15 | U | < 0.14 | U | | |
| Perfluoro-3-methoxypropanoic acid | µg/kg | NC | NC | < 0.093 | U | < 0.095 | U | < 0.089 | U | | |
| Perfluoro-4-methoxybutanoic acid | µg/kg | NC | NC | < 0.091 | U | < 0.093 | U | < 0.087 | U | | |
| Perfluorobutanesulfonic acid (PFBS) | µg/kg | NC | NC | < 0.075 | U | < 0.077 | U | < 0.072 | U | | |
| Perfluorobutanoic Acid | µg/kg | NC | NC | < 0.066 | U | 0.14 | J | < 0.063 | U | | |
| Perfluorodecanesulfonic acid (PFDS) | µg/kg | NC | NC | < 0.11 | U | < 0.12 | U | < 0.11 | U | | |
| Perfluorodecanoic acid (PFDA) | µg/kg | NC | NC | < 0.063 | U | 0.088 | J | 0.08 | J | | |
| Perfluorododecanoic acid (PFDoA) | µg/kg | NC | NC | < 0.075 | U | < 0.077 | U | < 0.072 | U | | |
| Perfluoroheptanesulfonic acid (PFHpS) | µg/kg | NC | NC | < 0.15 | U | < 0.15 | U | < 0.14 | U | | |
| Perfluoroheptanoic acid (PFHpA) | µg/kg | NC | NC | < 0.071 | U | 0.08 | J | < 0.068 | U | | |
| Perfluorohexanesulfonic acid (PFHxS) | µg/kg | NC | NC | < 0.079 | U | < 0.081 | U | < 0.075 | U | | |
| Perfluorohexanoic acid (PFHxA) | µg/kg | NC | NC | < 0.092 | U | < 0.094 | U | < 0.088 | U | | |
| Perfluorononanesulfonic Acid (PFNS) | µg/kg | NC | NC | < 0.13 | U | < 0.14 | U | < 0.13 | U | | |
| Perfluorononanoic acid (PFNA) | µg/kg | NC | NC | < 0.081 | U | 0.12 | J | < 0.077 | U | | |
| Perfluorooctane Sulfonamide (FOSA) | µg/kg | NC | NC | < 0.096 | U | < 0.098 | U | < 0.092 | U | | |
| Perfluorooctanesulfonic acid (PFOS) | µg/kg | 0.88 | 8.8 | 0.13 | J | 0.33 | J | 0.24 | J | | |
| Perfluorooctanoic acid (PFOA) | µg/kg | 0.66 | 6.6 | 0.15 | J | 0.22 | J | < 0.13 | U | | |
| Perfluoropentanesulfonic Acid (PFPeS) | µg/kg | NC | NC | < 0.072 | U | < 0.074 | U | < 0.069 | U | | |
| Perfluoropentanoic Acid (PFPeA) | µg/kg | NC | NC | < 0.075 | U | < 0.077 | U | < 0.072 | U | | |
| Perfluorotetradecanoic acid (PFTA) | µg/kg | NC | NC | < 0.094 | U | < 0.096 | U | < 0.09 | U | | |
| Perfluorotridecanoic Acid (PFTriA/PFTrDA) | µg/kg | NC | NC | < 0.11 | U | < 0.11 | U | < 0.11 | U | | |
| Perfluoroundecanoic Acid (PFUnA) | µg/kg | NC | NC | < 0.09 | U | 0.11 | J | 0.12 | J | | |

Notes:

[1]New York State Department of Environmental Conservation, *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS),* November 2022

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

µg/kg - microgram per kilogram = parts per billion (ppb)

NC - No criteria currently exists

U - Compound was not detected at the reporting limit shown

J - An estimated value

**Bold - Indicates the compound was detected**

Highlighted - Indicates the compound was detected above Unrestricted Use guidance value

Highlighted - Indicates the compound was detected above Residential Use guidance value

# BORING LOGS

MONITORING WELL / BORING NO. **HM-SB-01**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 18, 2022

Location: Hass Manufacturing | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 1.0' (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

LaBella
Powered by partnership

**Soil Samples Collected:**

**HM-SB-01 0-2"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 1.0'<br>Rec: 1.0'/1.0' | 3.3 | 0' - 1.0' Topsoil and brown fine SAND and weathered shale fragments |
| | | | | End of boring (refusal), weathered shale bedrock in sampler shoe @ 1.0'<br>Groundwater was not encountered<br>No monitoring well installed |
| 5 | | | | 1.0' |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **HM-SB-02**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 18, 2022

Location: Hass Manufacturing | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 3.0' (Dia): 2" | Sampled TD: N/A (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

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**Soil Samples Collected:**

**No soil sample retained from HM-SB-02**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 3.0'<br>Rec: 0.0'/3.0' | N/A | 0' - 3.0' No Soil Classification, shallow refusal |
| 5 | | | | End of boring (refusal), weathered shale bedrock in sampler shoe @ 3.0'<br>Groundwater was not encountered<br>No monitoring well installed |
| | | | | 3.0' |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **HM-SB-03**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 18, 2022

Location: Hass Manufacturing | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 8" (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

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**Soil Samples Collected:**

**HM-SB-03 0-2"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | S-1: 0' - 8" Rec: 8"/8" | 4.8 | 0" - 8" Topsoil and brown fine SAND and weathered shale fragments |
| | | | | End of boring (refusal), weathered shale bedrock in sampler shoe @ 8" Groundwater was not encountered No monitoring well installed |
| 5 | | | | 8" |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **HM-SB-04**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 18, 2022

Location: Hass Manufacturing | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 0.5' (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

LaBella
Powered by partnership.

**Soil Samples Collected:**

**HM-SB-04 0-2"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | S-1: 0' - 0.5'<br>Rec: 0.5'/0.5' | 3.3 | 0' - 0.5' Topsoil and brown fine SAND and weathered shale fragments |
| | | | | End of boring (refusal), weathered shale bedrock in sampler shoe @ 0.5'<br>Groundwater was not encountered<br>No monitoring well installed |
| 5 | | | | 0.5' |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **HM-SB-05**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 18, 2022

Location: Hass Manufacturing | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 0.5' (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

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**Soil Samples Collected:**

**HM-SB-05 0-2"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | S-1: 0' - 0.5'<br>Rec: 0.5'/0.5' | 4.3 | 0' - 0.5' Topsoil and brown fine SAND and weathered shale fragments |
| | | | | End of boring (refusal), weathered shale bedrock in sampler shoe @ 0.5'<br>Groundwater was not encountered<br>No monitoring well installed |
| 5 | | | | 0.5' |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **HM-SB-06**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 18, 2022

Location: Hass Manufacturing | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 2.0' (Dia): 2" | Sampled TD: N/A (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

LaBella
Powered by partnership.

**Soil Samples Collected:**

**No soil sample retained from HM-SB-06**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | S-1: 0' - 2.0'<br>Rec: 0.0'/2.0' | N/A | 0' - 2.0' No Soil Classification, shallow refusal |
| | | | | End of boring (refusal), weathered shale bedrock in sampler shoe @ 2.0'<br>Groundwater was not encountered<br>No monitoring well installed |
| 5 | | | | 2.0' |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **HM-SB-07**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 18, 2022

Location: Hass Manufacturing | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 3.5' (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

LaBella
Powered by partnership.

**Soil Samples Collected:**

**HM-SB-07 0-2"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | | | |
| | | S-1: 0' - 3.5'<br>Rec: 3.5'/3.5' | 3.5 | 0' - 3.5' Weathered shale bedrock fragments |
| 5 | | | | End of boring (refusal), weathered shale bedrock in sampler shoe @ 3.5'<br>Groundwater was not encountered<br>No monitoring well installed |
| | | | | 3.5' |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

MONITORING WELL / BORING NO. **HM-SB-08**

Site Name: NYSDEC - Algonquin Middle School | Date Drilled: August 18, 2022

Location: Hass Manufacturing | Drilling Co.: Clean Globe Environmental

Client: NYSDEC | Driller: Mario Pineda

Phone No.: N/A | Logged by: B.Baulsir

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

Drilled TD: 5" (Dia): 2" | Sampled TD: see samples collected (Dia): N/A

Well TD: N/A (Dia): N/A | Well Type: N/A

Screen Interval: N/A | Slot Size: N/A | Diameter: N/A

Cased Interval: N/A | Type: N/A | Diameter: N/A

Sand Pack Interval: N/A | Type: N/A | Wellhead Prot: N/A

Bentonite Seal Interval: N/A | Type: N/A | Grouted Interval: N/A

LaBella
Powered by partnership.

**Soil Samples Collected:**

**HM-SB-08 0-2"**

| Depth (Feet) | Monitoring Well Construction | Recovery; | PID (ppm): | Description / Soil Classification |
|---|---|---|---|---|
| 0 | | S-1: 0' - 5"<br>Rec: 5"/5" | 3.8 | 0' - 0.5" Topsoil and brown fine SAND and weathered shale fragments<br><br>End of boring (refusal), weathered shale bedrock in sampler shoe @ 5"<br>Groundwater was not encountered<br>No monitoring well installed |
| 5 | | | | 5" |
| 10 | | | | |
| 15 | | | | |
| 20 | | | | |
| 25 | | | | |
| 30 | | | | |
| 35 | | | | |

# LABORATORY ANALYTICAL REPORTS