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2 October 2024

TECHNICAL MEMORANDUM

TO: James Kruegler, Project Manager
Samantha Salotto, P.E., Chief Remedial Section C

FROM: Hilary Williams, EA Project Manager

RE: June 2024 Groundwater, Surface Water, and Sediment Sample Data Summary
West Islip, Suffolk County, New York, NYSDEC Site No. 152033
Contract/Work Assignment No. D009806-15
EA Project No. 16025-15-00-CP

EA Engineering, P.C. and its affiliate EA Science and Technology (EA) were tasked by the New York State Department of Environmental Conservation (NYSDEC) under Work Assignment Number (No.) D009806-15 to complete monitoring and sampling activities associated with the site management conducted at the Dzus Fastener Company, Inc. Site (152033). EA conducted groundwater, surface water, and sediment sampling from 17 to 18 June 2024 for NYSDEC at the Dzus Fastener Company, Inc. Site, hereinafter referred to as the Site, in accordance with the Site Management Plan (EA 2023).[1] A summary of environmental media samples is presented in **Table 1**. Water level measurements were collected from each groundwater monitoring well in the site network.

1. STANDARDS, CRITERIA, AND GUIDANCE

Standards, criteria, and guidance (SCGs) are published requirements and unpublished guidance, which govern activities that may affect the environment and are widely used at different stages of an investigation and remediation of a site. A standard is a value that has been published and placed into regulation. A guidance value may be used where a standard for a substance or group of substances has not been established for a particular media and type of value. It is important to recognize that SCGs have different applications, with some values appropriate for evaluating risk to ecological receptors and others appropriate for evaluating human health exposures. The analytical data collected during this Site Management sampling effort were evaluated using the following SCGs:

- **Groundwater**
  - ***SCG* = *Standard***: NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1, Ambient Water Quality Standards and Guidance Values, Class GA groundwater standard (NYSDEC 1998)
    - ***Application***: Human Health Risk.
      - Protection for groundwater as a source of drinking water.

[1] EA Engineering, P.C. and its affiliate EA Science and Technology (EA). 2023. *Site Management Plan, Revision 2, Dzus Fastener Company, Inc. Site (150233), West Islip, New York.* July.

        - Note that Willetts Creek, Lake Capri, and groundwater in the area are not used as a source of potable water. Potable water in the area is supplied by the Suffolk County Water Authority which tests and treats drinking water to ensure that it meets and often surpasses all state, federal, and local water quality regulations. Use of the Class GA value provides a conservative comparison point.
    - ***Values***:
        - Cadmium (5 micrograms per liter [µg/L])
        - Chromium (50 µg/L)
        - Perfluorooctanesulfonic acid (PFOS) (2.7 nanograms per liter [ng/L])
        - Perfluorooctanoic acid (PFOA) (6.7 ng/L)

- **Surface Water**

— All waters in NYS are assigned a letter classification that denotes their "best uses" (e.g., fishing, swimming, source of drinking water). Willetts Creek is defined as a Class C water body, meaning the best usage is fishing, although fishing opportunities in Willetts Creek are limited to due to restricted access and the relatively small size of the waterbody. Class C waters shall be suitable for fish, shellfish and wildlife propagation and survival. Class C water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes.

— ***SCG = Standard***: NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1, Ambient Water Quality Standards and Guidance Values, Class C Water, Type A(C) (NYSDEC 1998)
    - ***Application***: Ecological Risk.
        - Values for protection of aquatic life from potential chronic effects are designated Aquatic (Chronic) and noted as A(C).
    - ***Values***:
        - Standards are hardness-specific and apply only to the dissolved form (not total).
            - Cadmium (range of 1.33 to 1.53 µg/L for June 2024)
            - Chromium (range of 46.1 to 53.4 µg/L for June 2024)
        - PFOS (160,000 ng/L)

— ***SCG = Standard***: NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1, Ambient Water Quality Standards and Guidance Values, Class A Water, Type H(WS) (NYSDEC 1998)
    - The best usages of Class A waters are: a source of water supply for drinking, culinary or food processing purposes; primary and secondary contact recreation; and fishing.
    - Note that surface water from Willetts Creek and Lake Capri is not used as a source of potable water. Comparison to the Class A standard is for informational purposes only to provide context for established drinking water criteria.
    - ***Application***: Human Health Risk.

        - Values for protection of sources of drinking water are designated Health (Water Source) and noted by H(WS).
    - ***Values***:
        - Cadmium (5 µg/L)
        - Chromium (5 µg/L)
        - PFOS (2.7 ng/L)
        - PFOA (6.7 ng/L)

- **Sediment**
    - ***SCG* = *Guidance***: NYSDEC Freshwater Sediment Guidance Values (SGV) (NYSDEC 2014)
        - ***Application***: Ecological Risk.
            - Guidance classifies the sediment as Class A (low risk to aquatic life), Class B (potential risk to aquatic life), or Class C (likely risk to aquatic life).
        - ***Values***:
            - Class A: low risk to aquatic life
                - Cadmium (less than 1 mg/kg)
                - Chromium (less than 43 mg/kg).
            - Class B: potential risk to aquatic life; additional testing required to evaluate risk
                - Cadmium (1 – 5 mg/kg)
                - Chromium (43 – 110 mg/kg).
            - Class C: likely risk to aquatic life
                - Cadmium (greater than 5 mg/kg)
                - Chromium (greater than 110 mg/kg).

2. BACKGROUND AND CURRENT CONDITIONS

During a site visit on 22 April 2021, EA personnel observed that the asphalt cap at OU1 had been removed by the site developer (EA 2023).[2] The asphalt cap is an engineering control included in the Site Management Plan (EA 2023)[1] and a component of the remedy which serves to limit infiltration and erosion at the Site. An increase in cadmium concentrations within the shallow groundwater plume was observed beginning in October 2021. Total cadmium exceeded Class GA groundwater standards at MW-13A with a concentration of 547 µg/L; up from 3.7 µg/L observed in November 2018 (AECOM 2019).[3] A confirmation sample of the same well in July 2022 yielded cadmium concentration of 830 µg/L. A slight rebound of total cadmium was observed during the November 2023 and April 2024 sampling, as concentrations increased to 540 µg/L and 540 µg/L, respectively. Removal of the asphalt cap at OU1 potentially allowed for surface water to infiltrate the OU1 treatment cell, mobilizing cadmium into the shallow groundwater. Groundwater at the Site flows in a south/southwest direction and some discharges into/communicates with Willetts Creek. Cadmium in the shallow groundwater plume appears to be absorbing to clean backfill

[2] EA. 2023. *2021 Monitoring and Inspection Report, Former Dzus Fastener Company, Inc. Site (152033), West Islip, New York*.
[3] AECOM. 2019. *Final Groundwater Sampling Report (November 2018 Sampling Event), Dzus Fasteners Site, Site #1-52-033*.

material placed during the remedial action along the creek in 2019 as evidenced by sediment exceedances of Class C SGVs in the upper reaches of Willetts Creek.

3. GROUNDWATER SAMPLE COLLECTION AND RESULTS

EA collected samples from 17 to 18 June 2024 from 15 groundwater monitoring wells (MW-1, MW-2, MW-3 MW-9, MW-9B, MW-13A, MW-13B, MW-15A, MW-15B, MW-17, MW-18, MW-22A, MW-22B, MW-23A, and MW-23B) at the Site (**Figure 1**). A field duplicate sample was collected at MW-13A.

The 15 monitoring wells were gauged to develop shallow and deep potentiometric surface contour figures (**Figures 2 and 3**). Groundwater elevations in June 2024 at all monitoring wells were lower than the elevations reported in April 2024, within the range of normal seasonal fluctuation.

Filtered and un-filtered groundwater samples were analyzed for total and dissolved Target Analyte List Metals (including mercury) via U.S. Environmental Protection Agency (EPA) Method 6010; In some samples, dissolved metal concentrations exceed total metal concentrations; this has been observed in previous sampling results. Note that this has not been the case for cadmium or chromium results. During the June 2024 sampling effort, the field team composited groundwater aliquots into a 1-liter container that was then split into a filtered and unfiltered sample in an attempt to avoid this anomaly. The observed difference between filtered and unfiltered results from the June 2024 effort is likely a result of variability in laboratory instrumentation. Cadmium (total and dissolved), iron (total and dissolved), manganese (total and dissolved), and sodium (total and dissolved) exceeded New York State (NYS) Class GA groundwater standards.

Total cadmium in groundwater samples exceeded the NYS Class GA groundwater standard of 5 µg/L at monitoring wells MW-9 (69 µg/L), MW-13A (290 µg/L), and MW-15A (14 µg/L). Dissolved cadmium exceedances in groundwater samples were observed at monitoring wells MW-9 (65µg/L) and MW-13A (280 µg/L). Total and dissolved chromium did not exceed Class GA groundwater standards in any of the wells. Groundwater analytical results and comparable NYS Class GA groundwater standards are summarized in **Table 2** and on **Figure 4**. The cadmium result of 290 µg/L at MW-13A in June 2024 is the lowest result since Site Management sampling began in October 2021. **Figure 5** shows concentration trends for cadmium and chromium in MW-13A from June 2006 through June 2024.

A subset of four monitoring wells (MW-9, MW-13A, MW-17, and MW-18) were sampled for per- and polyfluorinated alkyl substances (PFAS) via EPA Method 1633, upon request by the NYSDEC Division of Fish and Wildlife (DFW). PFAS analysis has been included in the SM program as a result of the Lake Capri fish advisory. With PFAS compounds detected in the tissues of fish collected in Lake Capri, sampling upstream media such as surface water, groundwater, and sediment may help determine potential sources. Perfluorooctanesulfonic acid (PFOS) exceeded the NYS Class GA groundwater standard of 2.7 ng/L at monitoring wells MW-9 (11 ng/L), MW-13A (25 ng/L), MW-17 (32 ng/L) and MW-18 (3.1 ng/L). Perfluorooctanoic acid (PFOA exceeded the NYS Class GA groundwater standard of 6.7 ng/L at monitoring wells MW-9 (11 ng/L), MW-13A (25 ng/L) and MW-17 (23 ng/L). Groundwater analytical results and comparable NYS Class GA groundwater standards are summarized in **Table 2** and on **Figure 4**.

4. SURFACE WATER SAMPLE COLLECTION AND RESULTS

On 17 June 2024, EA collected surface water samples from nine locations (SW-01, SW-01E, SW-04, SW-04E, SW-06, SW-06E, SW-11, SW-13, and SW-14) in Willetts Creek **(Figure 1)**. A field duplicate sample was collected at the SW-01 location.

The field-filtered surface water samples were analyzed for dissolved cadmium and chromium via EPA Method 6010. The unfiltered surface water sample at the same locations were analyzed for total hardness via EPA Method 6010. A subset of three surface water sample locations (SW-01, SW-11, and SW-14) were sampled for PFAS upon request by NYSDEC DFW.

Total hardness of surface water samples ranged from 56 to 67 milligrams per liter. Hardness in surface water was used in accordance with NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 (NYSDEC 1998)[4] to calculate site-specific hardness-corrected chronic surface water standards for dissolved forms of cadmium and chromium. Dissolved cadmium was detected above the individual sample's site-specific hardness-corrected chronic surface water standard in eight of nine samples (SW-01, SW-01E, SW-04, SW-04E, SW-06, SW-06E, SW-13, and SW-14). Dissolved chromium was not detected in surface water samples. Surface water analytical results and comparable site-specific hardness-corrected surface water standards are summarized in **Table 3** and **Figure 6**. PFAS results are also shown on Table 3. There were no exceedances of PFOS, which is the only compound that has a surface water guidance value.

5. SEDIMENT SAMPLE COLLECTION AND RESULTS

On 17 June 2024, EA collected composite sediment samples from 17 locations (SD-01, SD-01E, SD-02, SD-03, SD-04, SD-04E, SD-05, SD-06, SD06E, SD-07, SD-08, SD-09, SD-10, SD-11, SD-12, SD-13, and SD-14) in Willetts Creek (**Figure 1**) to evaluate the extent of cadmium and/or chromium migration along the creek corridor. The SD-01 location represents the historical hotspot for cadmium in sediment, prior to remedial action. Concentrations at this location were observed to be as high as 8,200 mg/kg prior to the 2020 remedial action (EA 2017)[5]. A field duplicate sample was collected at the SD-01 location. All sediment samples were analyzed for total cadmium and total chromium via EPA Method 6010. A subset of three sediment sample locations (SD-01, SD-11, and SD-14) were sampled for PFAS upon request by NYSDEC DFW.

Sediment samples were screened against the SGVs to classify into Class A, B, or C sediments. Sediment samples from SD-04E, SD-05, SD-08, SD-09, SD-10, SD-11, SD-13, and SD-14 fall within the Class A range for cadmium. Sediment samples from SD-01E, SD-02, SD-03, and SD-12 fall within the Class B range for cadmium. Sediment samples from SD-01, SD-04, SD-06, SD-06E, and SD-07 fall within the Class C range for cadmium. All sediment samples are classified as Class A for chromium. Sediment analytical results and comparable NYSDEC SGVs are

[4] New York State Department of Environmental Conservation (NYSDEC). 1998. *Technical and Operational Guidance Series (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.* Division of Water, Albany, New York.
[5] EA. 2017. *Final OU3 Remedial Investigation Report, Former Dzus Fastener Company, Inc. Site (152033), West Islip, New York.*

summarized in **Table 4** and on **Figure 6**. PFAS results are also shown on Table 4. There are no sediment SCGs for comparison to PFAS results.

6. CONCLUSIONS AND RECOMMENDATIONS

Continued groundwater sampling is recommended to monitor the migration and possible attenuation of the cadmium plume. EA plans to continue sampling groundwater, surface water, and sediment on a quarterly schedule, with the next event planned for September 2024. EA is completing a supplemental groundwater investigation at the Site to increase resolution of contaminant distribution in the aquifer, better delineate the dissolved-phase cadmium plume, and refine the conceptual site model.[6] Results from the investigation and Quarter 2 sampling effort will aid in the development and design of an interim remedial measure to address groundwater contamination.

Surface water and sediment analytical results indicate that cadmium from groundwater is continuing to discharge into Willetts Creek and mobilize downstream. Sediments in Willetts Creek with cadmium exceedances of Class C values are focused in the SD-01 (historical hot spot) area. Sediment samples in SD-13 and SD-14 indicate that cadmium has not yet deposited in sediments in the far south reaches of the creek. Surface water results at SW-13 and SW-14 indicate that the dissolved cadmium is moving to lower reaches of the creek.

One or more PFAS compounds were detected in groundwater, surface water, and sediment samples from the site. SCGs for PFAS are limited to PFOS and PFOA in groundwater and PFOS surface water. Groundwater exceedances were observed both upgradient and downgradient from OU1 suggesting a more ubiquitous source. The observed groundwater impacts do not appear to be causing exceedances in Willetts Creek sediment given the limited detections in sediment. Going forward, biennial PFAS sampling concurrent with fish sampling is recommended to monitor PFAS concentrations at the Site.

A sampling plan will be developed by EA to define the scope for the Quarter 3 2024 sampling and evaluate potential benefits of including other analyses.

[6] EA Engineering, P.C. and its Affiliate EA Science and Technology (EA). 2024. *Letter Workplan for Groundwater Investigation Phase I, Former Dzus Fastener Company, Inc. Site (152033), West Islip, New York.*

Tables

Figures

Attachments

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Tables

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Table 1. Sample Collection and Analyses Summary

Samples	Sample Matrix	Total TAL Metals via EPA Method 6010	Dissolved TAL Metals via EPA Method 6010	Total Mercury via EPA Method 7470A	Dissolved Mercury via EPA Method 7470A	PFAS via EPA Method 1633	Total Cadmium and Chromium via EPA Method 6010	Dissolved Cadmium and Chromium via EPA Method 6010	Hardness via EPA Method 6010
GROUNDWATER SAMPLING									
Number of Parent Samples	Groundwater	15	15	15	15	4			
Field Duplicate		1	1	1	1	1			
Matrix Spike/Matrix Spike Duplicate		1	1	1	1	1			
Total Number of Analyses		**17**	**17**	**17**	**17**	**6**			
SURFACE WATER SAMPLING									
Number of Parent Samples	Willetts Creek Surface Water					3		9	3
Field Duplicate						1		1	1
Matrix Spike/Matrix Spike Duplicate						1		1	1
Total Number of Analyses						**5**		**11**	**5**
SEDIMENT SAMPLING									
Number of Parent Samples	Willetts Creek Surficial Sediment					3	17		
Field Duplicate						1	1		
Matrix Spike/Matrix Spike Duplicate						1	1		
Total Number of Analyses						**5**	**19**		

Notes:
EPA = U.S. Environmental Protection Agency
PFAS = Per- and polyfluoroalkyl substances
TAL = Target Analyte List

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Table 2. Groundwater Analytical Results

	Location ID		**MW-1**	**MW-2**	**MW-3**	**MW-9**
	Sample Name		**152033-SM-MW-1-061824**	**152033-SM-MW-2-061824**	**152033-SM-MW-3-061824**	**152033-SM-MW-9-061724**
	Sample Date					
	Parent Sample		**6/18/2024**	**6/18/2024**	**6/18/2024**	**6/17/2024**
Analyte	**NY CLASS GA GW(AWQS)**	**Unit**				
Dissolved Metals (SW6010D/SW7470A)						
Aluminum	NSL	µg/L	< 25 U	< 25 U	610	< 25 U
Antimony	3	µg/L	< 11 U	< 11 U	< 11 U	< 11 U
Arsenic	25	µg/L	< 5 U	< 5 U	< 5 U	< 5 U
Barium	1000	µg/L	27 J	46 J	11 J	26 J
Beryllium	3	µg/L	< 0.9 U	< 0.9 U	< 0.9 U	< 0.9 U
Cadmium	5	µg/L	< 1.5 U	3.4 J	< 1.5 U	**65**
Calcium	NSL	µg/L	12000	34000	44000	61000
Chromium, Total	50	µg/L	< 5.3 U	< 5.3 U	< 5.3 U	< 5.3 U
Cobalt	NSL	µg/L	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U
Copper	200	µg/L	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Iron	300	µg/L	**450**	< 36 U	40 J	88
Lead	25	µg/L	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Magnesium	35000	µg/L	2700	3700	470	6800
Manganese	300	µg/L	**360**	8.0 JB	3.5 J	210
Mercury	0.7	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
Nickel	100	µg/L	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U
Potassium	NSL	µg/L	1800 J	4700	13000	3600
Selenium	10	µg/L	< 8.5 U	< 8.5 U	< 8.5 U	< 8.5 U
Silver	50	µg/L	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Sodium	20000	µg/L	**34000**	**43000**	14000	**21000**
Thallium	0.5	µg/L	< 16 U	< 16 U	< 16 U	< 16 U
Vanadium	NSL	µg/L	< 5.4 U	< 5.4 U	< 5.4 U	< 5.4 U
Zinc	2000	µg/L	37	< 8 U	8.2 J	< 8 U
Total Metals (SW6010D/SW7470A)						
Aluminum	NSL	µg/L	290	57	2400	55
Antimony	3	µg/L	< 11 U	< 11 U	< 11 U	< 11 U
Arsenic	25	µg/L	< 5 U	< 5 U	8.8 J	< 5 U
Barium	1000	µg/L	28 J	46 J	14 J	26 J
Beryllium	3	µg/L	< 0.9 U	< 0.9 U	< 0.9 U	< 0.9 U
Cadmium	5	µg/L	< 1.5 U	4.0 J	1.9 J	**69**
Calcium	NSL	µg/L	12000	35000	46000	63000
Chromium, Total	50	µg/L	< 5.3 U	< 5.3 U	< 5.3 U	< 5.3 U
Cobalt	NSL	µg/L	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U
Copper	200	µg/L	16	< 9.5 U	14	< 9.5 U
Iron	300	µg/L	**16000**	74	**1300**	120
Lead	25	µg/L	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Magnesium	35000	µg/L	2800	3900	620	7100
Manganese	300	µg/L	**360**	7.9 J	11	220
Mercury	0.7	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
Nickel	100	µg/L	< 4.6 U	< 4.6 U	6.2 J	< 4.6 U
Potassium	NSL	µg/L	1800 J	4900	13000	3700
Selenium	10	µg/L	< 8.5 U	< 8.5 U	< 8.5 U	< 8.5 U
Silver	50	µg/L	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Sodium	20000	µg/L	**35000**	**44000**	14000	**22000**
Thallium	0.5	µg/L	< 16 U	< 16 U	< 16 U	< 16 U
Vanadium	NSL	µg/L	< 5.4 U	< 5.4 U	10	< 5.4 U
Zinc	2000	µg/L	100	< 8 U	< 8 U	< 8 U
PFAS (E1633)						
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	NSL	ng/L	NA	NA	NA	< 0.96 U
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	NSL	ng/L	NA	NA	NA	< 1 U
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	NSL	ng/L	NA	NA	NA	< 0.67 U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	NSL	ng/L	NA	NA	NA	< 2.7 U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	NSL	ng/L	NA	NA	NA	< 10 U
3-Perfluoroheptyl propanoic acid (7:3FTCA)	NSL	ng/L	NA	NA	NA	< 8.5 U
3-Perfluoropropyl propanoic acid (3:3 FTCA)	NSL	ng/L	NA	NA	NA	< 2 U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NSL	ng/L	NA	NA	NA	< 0.74 U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid (9Cl-PF3ONS)	NSL	ng/L	NA	NA	NA	< 0.86 U
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NSL	ng/L	NA	NA	NA	< 0.92 U
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NSL	ng/L	NA	NA	NA	< 0.3 U
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	NSL	ng/L	NA	NA	NA	< 0.36 U
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	NSL	ng/L	NA	NA	NA	< 2.4 U
N-methyl perfluorooctanesulfonamide (NMeFOSA)	NSL	ng/L	NA	NA	NA	< 0.29 U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	NSL	ng/L	NA	NA	NA	< 0.32 U
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	NSL	ng/L	NA	NA	NA	< 2.4 U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NSL	ng/L	NA	NA	NA	< 0.49 U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NSL	ng/L	NA	NA	NA	< 0.31 U
Perfluoro-3-methoxypropanoic acid (PFMPA)	NSL	ng/L	NA	NA	NA	< 0.5 U
Perfluoro-4-methoxybutanoic acid (PFMBA)	NSL	ng/L	NA	NA	NA	< 0.48 U
Perfluorobutanesulfonic acid (PFBS)	NSL	ng/L	NA	NA	NA	0.99
Perfluorobutanoic Acid	NSL	ng/L	NA	NA	NA	5.8
Perfluorodecanesulfonic acid (PFDS)	NSL	ng/L	NA	NA	NA	< 0.26 U
Perfluorodecanoic acid (PFDA)	NSL	ng/L	NA	NA	NA	0.42 J
Perfluorododecanesulfonic acid (PFDoS)	NSL	ng/L	NA	NA	NA	< 0.26 U
Perfluorododecanoic acid (PFDoA)	NSL	ng/L	NA	NA	NA	< 0.18 U
Perfluoroheptanesulfonic acid (PFHpS)	NSL	ng/L	NA	NA	NA	< 0.3 U
Perfluoroheptanoic acid (PFHpA)	NSL	ng/L	NA	NA	NA	5.7
Perfluorohexanesulfonic acid (PFHxS)	NSL	ng/L	NA	NA	NA	1.4
Perfluorohexanoic acid (PFHxA)	NSL	ng/L	NA	NA	NA	4.4
Perfluorononanesulfonic Acid (PFNS)	NSL	ng/L	NA	NA	NA	< 0.23 U
Perfluorononanoic acid (PFNA)	NSL	ng/L	NA	NA	NA	1.1
Perfluorooctane Sulfonamide (PFOSA)	NSL	ng/L	NA	NA	NA	< 0.21 U
Perfluorooctanesulfonic acid (PFOS)	2.7	ng/L	NA	NA	NA	**11**
Perfluorooctanoic acid (PFOA)	6.7	ng/L	NA	NA	NA	**11**
Perfluoropentanesulfonic Acid (PFPeS)	NSL	ng/L	NA	NA	NA	< 0.23 U
Perfluoropentanoic Acid (PFPeA)	NSL	ng/L	NA	NA	NA	7.0
Perfluorotetradecanoic acid (PFTeDA)	NSL	ng/L	NA	NA	NA	< 0.23 U
Perfluorotridecanoic Acid (PFTriA/PFTrDA)	NSL	ng/L	NA	NA	NA	< 0.27 U
Perfluoroundecanoic Acid (PFUnA)	NSL	ng/L	NA	NA	NA	< 0.18 U
Total Suspended Solids	NSL	mg/L	NA	NA	NA	< 10 U

Notes:

mg/L = Milligram(s) per liter
ng/L = Nanogram(s) per liter
FD = Field duplicate
NA = Not Analyzed
J = Estimated value
NY CLASS GA GW(AWQS) = New York State Department of Environmental Conservation Groundwater Guidance Values (June 2014)
NSL = No Screening Level
U = Qualifier denotes the analyte was analyzed but not detected.

Bold and shaded values exceed the New York GA AWQS.

Table 2. Groundwater Analytical Results

	Location ID		**MW-9B**	**MW-13A**	**MW-13A**	**MW-13B**
	Sample Name		**152033-SM-MW-9B-061724**	**152033-SM-MW-13A-061724**	**152033-SM-MW-FD-01-061724**	**152033-SM-MW-13B-061724**
	Sample Date				**152033-SM-MW-13A-20240617**	
	Parent Sample		**6/17/2024**	**6/17/2024**	**6/17/2024**	**6/17/2024**
Analyte	**NY CLASS GA GW(AWQS)**	**Unit**				
Dissolved Metals (SW6010D/SW7470A)						
Aluminum	NSL	µg/L	< 25 U	< 25 U	< 25 U	< 25 U
Antimony	3	µg/L	< 11 U	< 11 U	< 11 U	< 11 U
Arsenic	25	µg/L	< 5 U	< 5 U	< 5 U	< 5 U
Barium	1000	µg/L	< 9.8 U	31 J	29 J	32 J
Beryllium	3	µg/L	< 0.9 U	< 0.9 U	< 0.9 U	< 0.9 U
Cadmium	5	µg/L	< 1.5 U	**280**	**270**	< 1.5 U
Calcium	NSL	µg/L	5900	34000	34000	8500
Chromium, Total	50	µg/L	< 5.3 U	< 5.3 U	< 5.3 U	18
Cobalt	NSL	µg/L	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U
Copper	200	µg/L	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Iron	300	µg/L	< 36 U	90	90	< 36 U
Lead	25	µg/L	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Magnesium	35000	µg/L	910	4500	4500	1400
Manganese	300	µg/L	9.0 J	12 B	11 B	11 B
Mercury	0.7	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
Nickel	100	µg/L	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U
Potassium	NSL	µg/L	1400 J	3400	3400	1600 J
Selenium	10	µg/L	< 8.5 U	< 8.5 U	< 8.5 U	< 8.5 U
Silver	50	µg/L	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Sodium	20000	µg/L	14000	**50000**	**49000**	12000
Thallium	0.5	µg/L	< 16 U	< 16 U	< 16 U	< 16 U
Vanadium	NSL	µg/L	< 5.4 U	< 5.4 U	< 5.4 U	< 5.4 U
Zinc	2000	µg/L	< 8 U	< 8 U	< 8 U	< 8 U
Total Metals (SW6010D/SW7470A)						
Aluminum	NSL	µg/L	420	40 J	43 J	81
Antimony	3	µg/L	< 11 U	< 11 U	< 11 U	< 11 U
Arsenic	25	µg/L	< 5 U	7.0 J	< 5 U	< 5 U
Barium	1000	µg/L	11 J	31 J	29 J	32 J
Beryllium	3	µg/L	< 0.9 U	< 0.9 U	< 0.9 U	< 0.9 U
Cadmium	5	µg/L	< 1.5 U	**290**	**290**	< 1.5 U
Calcium	NSL	µg/L	6200	35000	35000	9300
Chromium, Total	50	µg/L	< 5.3 U	< 5.3 U	< 5.3 U	21
Cobalt	NSL	µg/L	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U
Copper	200	µg/L	< 9.5 U	26	< 9.5 U	< 9.5 U
Iron	300	µg/L	**540**	**520**	**430**	220
Lead	25	µg/L	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Magnesium	35000	µg/L	1000	4800	4700	1500
Manganese	300	µg/L	19	50	42	40
Mercury	0.7	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
Nickel	100	µg/L	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U
Potassium	NSL	µg/L	1400 J	3500	3500	1600 J
Selenium	10	µg/L	< 8.5 U	< 8.5 U	< 8.5 U	< 8.5 U
Silver	50	µg/L	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Sodium	20000	µg/L	14000	**51000**	**50000**	13000
Thallium	0.5	µg/L	< 16 U	< 16 U	< 16 U	< 16 U
Vanadium	NSL	µg/L	< 5.4 U	< 5.4 U	< 5.4 U	< 5.4 U
Zinc	2000	µg/L	< 8 U	< 8 U	< 8 U	< 8 U
PFAS (E1633)						
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	NSL	ng/L	NA	< 0.97 U	< 1 U	NA
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	NSL	ng/L	NA	< 1 U	< 1.1 U	NA
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	NSL	ng/L	NA	< 0.68 U	< 0.73 U	NA
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	NSL	ng/L	NA	< 2.7 U	< 2.9 U	NA
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	NSL	ng/L	NA	< 10 U	< 11 U	NA
3-Perfluoroheptyl propanoic acid (7:3FTCA)	NSL	ng/L	NA	< 8.6 U	< 9.2 U	NA
3-Perfluoropropyl propanoic acid (3:3 FTCA)	NSL	ng/L	NA	< 2 U	< 2.1 U	NA
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NSL	ng/L	NA	< 0.75 U	< 0.8 U	NA
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid (9Cl-PF3ONS)	NSL	ng/L	NA	< 0.87 U	< 0.94 U	NA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NSL	ng/L	NA	< 0.94 U	< 1 U	NA
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NSL	ng/L	NA	< 0.31 U	< 0.33 U	NA
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	NSL	ng/L	NA	< 0.36 U	< 0.39 U	NA
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	NSL	ng/L	NA	< 2.4 U	< 2.6 U	NA
N-methyl perfluorooctanesulfonamide (NMeFOSA)	NSL	ng/L	NA	< 0.3 U	< 0.32 U	NA
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	NSL	ng/L	NA	< 0.32 U	< 0.35 U	NA
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	NSL	ng/L	NA	< 2.5 U	< 2.7 U	NA
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NSL	ng/L	NA	< 0.5 U	< 0.54 U	NA
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NSL	ng/L	NA	< 0.32 U	< 0.34 U	NA
Perfluoro-3-methoxypropanoic acid (PFMPA)	NSL	ng/L	NA	< 0.5 U	< 0.54 U	NA
Perfluoro-4-methoxybutanoic acid (PFMBA)	NSL	ng/L	NA	< 0.49 U	< 0.53 U	NA
Perfluorobutanesulfonic acid (PFBS)	NSL	ng/L	NA	3.2	3.7	NA
Perfluorobutanoic Acid	NSL	ng/L	NA	11	12	NA
Perfluorodecanesulfonic acid (PFDS)	NSL	ng/L	NA	< 0.26 U	< 0.28 U	NA
Perfluorodecanoic acid (PFDA)	NSL	ng/L	NA	0.91	1.1	NA
Perfluorododecanesulfonic acid (PFDoS)	NSL	ng/L	NA	< 0.26 U	< 0.28 U	NA
Perfluorododecanoic acid (PFDoA)	NSL	ng/L	NA	< 0.18 U	< 0.19 U	NA
Perfluoroheptanesulfonic acid (PFHpS)	NSL	ng/L	NA	0.39 J	< 0.32 U	NA
Perfluoroheptanoic acid (PFHpA)	NSL	ng/L	NA	7.9	8.5	NA
Perfluorohexanesulfonic acid (PFHxS)	NSL	ng/L	NA	3.5	3.9	NA
Perfluorohexanoic acid (PFHxA)	NSL	ng/L	NA	9.7	11	NA
Perfluorononanesulfonic Acid (PFNS)	NSL	ng/L	NA	< 0.23 U	< 0.25 U	NA
Perfluorononanoic acid (PFNA)	NSL	ng/L	NA	1.9	2.1	NA
Perfluorooctane Sulfonamide (PFOSA)	NSL	ng/L	NA	< 0.21 U	< 0.23 U	NA
Perfluorooctanesulfonic acid (PFOS)	2.7	ng/L	NA	**25**	**28**	NA
Perfluorooctanoic acid (PFOA)	6.7	ng/L	NA	**25**	**27**	NA
Perfluoropentanesulfonic Acid (PFPeS)	NSL	ng/L	NA	0.46 J	0.53 J	NA
Perfluoropentanoic Acid (PFPeA)	NSL	ng/L	NA	11	12	NA
Perfluorotetradecanoic acid (PFTeDA)	NSL	ng/L	NA	< 0.24 U	< 0.25 U	NA
Perfluorotridecanoic Acid (PFTriA/PFTrDA)	NSL	ng/L	NA	< 0.27 U	< 0.29 U	NA
Perfluoroundecanoic Acid (PFUnA)	NSL	ng/L	NA	< 0.18 U	< 0.2 U	NA
Total Suspended Solids	NSL	mg/L	NA	< 10 U	< 10 U	NA

Notes:

mg/L = Milligram(s) per liter
ng/L = Nanogram(s) per liter
FD = Field duplicate
NA = Not Analyzed
J = Estimated value
NY CLASS GA GW(AWQS) = New York State Department of Environmental Conservation Groundwater Guidance Values (June 2014)
NSL = No Screening Level
U = Qualifier denotes the analyte was analyzed but not detected.

Bold and shaded values exceed the New York GA AWQS.

Table 2. Groundwater Analytical Results

Location ID			MW-15A	MW-15B	MW-17	MW-18
Sample Name			152033-SM-MW-15A-061824	152033-SM-MW-15B-061824	152033-SM-MW-17-061824	152033-SM-MW-18-061824
Sample Date						
Parent Sample			6/18/2024	6/18/2024	6/18/2024	6/18/2024
Analyte	NY CLASS GA GW(AWQS)	Unit				
Dissolved Metals (SW6010D/SW7470A)						
Aluminum	NSL	µg/L	< 25 U	< 25 U	53	< 25 U
Antimony	3	µg/L	< 11 U	< 11 U	< 11 U	< 11 U
Arsenic	25	µg/L	< 5 U	< 5 U	< 5 U	< 5 U
Barium	1000	µg/L	< 9.8 U	41 J	28 J	< 9.8 U
Beryllium	3	µg/L	< 0.9 U	< 0.9 U	< 0.9 U	< 0.9 U
Cadmium	5	µg/L	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U
Calcium	NSL	µg/L	16000	12000	21000	17000
Chromium, Total	50	µg/L	< 5.3 U	< 5.3 U	< 5.3 U	< 5.3 U
Cobalt	NSL	µg/L	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U
Copper	200	µg/L	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Iron	300	µg/L	< 36 U	**2400**	180	< 36 U
Lead	25	µg/L	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Magnesium	35000	µg/L	1600	5300	5800	1600
Manganese	300	µg/L	2.2 JB	120	260	2.6 JB
Mercury	0.7	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
Nickel	100	µg/L	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U
Potassium	NSL	µg/L	2100	1400 J	1900 J	860 J
Selenium	10	µg/L	< 8.5 U	< 8.5 U	< 8.5 U	< 8.5 U
Silver	50	µg/L	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Sodium	20000	µg/L	12000	**37000**	18000	19000
Thallium	0.5	µg/L	< 16 U	< 16 U	< 16 U	< 16 U
Vanadium	NSL	µg/L	< 5.4 U	< 5.4 U	< 5.4 U	< 5.4 U
Zinc	2000	µg/L	< 8 U	< 8 U	20	< 8 U
Total Metals (SW6010D/SW7470A)						
Aluminum	NSL	µg/L	61	29 J	1200	41 J
Antimony	3	µg/L	< 11 U	< 11 U	< 11 U	< 11 U
Arsenic	25	µg/L	< 5 U	< 5 U	< 5 U	< 5 U
Barium	1000	µg/L	< 9.8 U	40 J	35 J	< 9.8 U
Beryllium	3	µg/L	< 0.9 U	< 0.9 U	< 0.9 U	< 0.9 U
Cadmium	5	µg/L	**14**	< 1.5 U	< 1.5 U	< 1.5 U
Calcium	NSL	µg/L	17000	13000	22000	18000
Chromium, Total	50	µg/L	< 5.3 U	< 5.3 U	< 5.3 U	< 5.3 U
Cobalt	NSL	µg/L	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U
Copper	200	µg/L	< 9.5 U	< 9.5 U	12	< 9.5 U
Iron	300	µg/L	100	**2600**	**2800**	42 J
Lead	25	µg/L	< 4.4 U	< 4.4 U	17	< 4.4 U
Magnesium	35000	µg/L	1700	5400	6000	1600
Manganese	300	µg/L	240	120	**370**	82
Mercury	0.7	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
Nickel	100	µg/L	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U
Potassium	NSL	µg/L	2100	1400 J	2000	860 J
Selenium	10	µg/L	< 8.5 U	< 8.5 U	< 8.5 U	< 8.5 U
Silver	50	µg/L	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Sodium	20000	µg/L	12000	**37000**	18000	19000
Thallium	0.5	µg/L	< 16 U	< 16 U	< 16 U	< 16 U
Vanadium	NSL	µg/L	< 5.4 U	< 5.4 U	7.8 J	< 5.4 U
Zinc	2000	µg/L	< 8 U	< 8 U	54	< 8 U
PFAS (E1633)						
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	NSL	ng/L	NA	NA	< 0.98 U	< 1 U
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	NSL	ng/L	NA	NA	< 1 U	< 1 U
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	NSL	ng/L	NA	NA	< 0.68 U	< 0.69 U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	NSL	ng/L	NA	NA	< 2.8 U	< 2.8 U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	NSL	ng/L	NA	NA	< 10 U	< 11 U
3-Perfluoroheptyl propanoic acid (7:3FTCA)	NSL	ng/L	NA	NA	< 8.7 U	< 8.8 U
3-Perfluoropropyl propanoic acid (3:3 FTCA)	NSL	ng/L	NA	NA	< 2 U	< 2 U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NSL	ng/L	NA	NA	< 0.75 U	< 0.76 U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid (9Cl-PF3ONS)	NSL	ng/L	NA	NA	< 0.88 U	< 0.9 U
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NSL	ng/L	NA	NA	< 0.95 U	< 0.96 U
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NSL	ng/L	NA	NA	< 0.31 U	< 0.31 U
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	NSL	ng/L	NA	NA	< 0.37 U	< 0.37 U
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	NSL	ng/L	NA	NA	< 2.5 U	< 2.5 U
N-methyl perfluorooctanesulfonamide (NMeFOSA)	NSL	ng/L	NA	NA	< 0.3 U	< 0.31 U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	NSL	ng/L	NA	NA	< 0.33 U	< 0.33 U
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	NSL	ng/L	NA	NA	< 2.5 U	< 2.5 U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NSL	ng/L	NA	NA	< 0.51 U	< 0.51 U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NSL	ng/L	NA	NA	< 0.32 U	< 0.32 U
Perfluoro-3-methoxypropanoic acid (PFMPA)	NSL	ng/L	NA	NA	< 0.51 U	< 0.52 U
Perfluoro-4-methoxybutanoic acid (PFMBA)	NSL	ng/L	NA	NA	< 0.49 U	< 0.5 U
Perfluorobutanesulfonic acid (PFBS)	NSL	ng/L	NA	NA	5.3	0.67 J
Perfluorobutanoic Acid	NSL	ng/L	NA	NA	11	< 2 U
Perfluorodecanesulfonic acid (PFDS)	NSL	ng/L	NA	NA	< 0.26 U	0.30 J
Perfluorodecanoic acid (PFDA)	NSL	ng/L	NA	NA	1.0	0.22 J
Perfluorododecanesulfonic acid (PFDoS)	NSL	ng/L	NA	NA	< 0.26 U	< 0.27 U
Perfluorododecanoic acid (PFDoA)	NSL	ng/L	NA	NA	< 0.18 U	< 0.19 U
Perfluoroheptanesulfonic acid (PFHpS)	NSL	ng/L	NA	NA	< 0.3 U	< 0.31 U
Perfluoroheptanoic acid (PFHpA)	NSL	ng/L	NA	NA	8.2	0.41 J
Perfluorohexanesulfonic acid (PFHxS)	NSL	ng/L	NA	NA	3.1	1.1
Perfluorohexanoic acid (PFHxA)	NSL	ng/L	NA	NA	20	0.64 J
Perfluorononanesulfonic Acid (PFNS)	NSL	ng/L	NA	NA	< 0.23 U	< 0.23 U
Perfluorononanoic acid (PFNA)	NSL	ng/L	NA	NA	6.2	0.85 J
Perfluorooctane Sulfonamide (PFOSA)	NSL	ng/L	NA	NA	< 0.21 U	< 0.22 U
Perfluorooctanesulfonic acid (PFOS)	2.7	ng/L	NA	NA	**32**	**3.1**
Perfluorooctanoic acid (PFOA)	6.7	ng/L	NA	NA	**23**	0.93
Perfluoropentanesulfonic Acid (PFPeS)	NSL	ng/L	NA	NA	< 0.23 U	< 0.24 U
Perfluoropentanoic Acid (PFPeA)	NSL	ng/L	NA	NA	13	0.72 J
Perfluorotetradecanoic acid (PFTeDA)	NSL	ng/L	NA	NA	< 0.24 U	< 0.24 U
Perfluorotridecanoic Acid (PFTriA/PFTrDA)	NSL	ng/L	NA	NA	< 0.27 U	< 0.28 U
Perfluoroundecanoic Acid (PFUnA)	NSL	ng/L	NA	NA	0.21 J	< 0.19 U
Total Suspended Solids	NSL	mg/L	NA	NA	28	< 10 U

Notes:

mg/L = Milligram(s) per liter
ng/L = Nanogram(s) per liter
FD = Field duplicate
NA = Not Analyzed
J = Estimated value
NY CLASS GA GW(AWQS) = New York State Department of Environmental Conservation Groundwater Guidance Values (June 2014)
NSL = No Screening Level
U = Qualifier denotes the analyte was analyzed but not detected.

Bold and shaded values exceed the New York GA AWQS.

Table 2. Groundwater Analytical Results

	Location ID		MW-22A	MW-22B	MW-23A	MW-23B
	Sample Name		152033-SM-MW-22A-061824	152033-SM-MW-22B-061824	152033-SM-MW-23A-061824	152033-SM-MW-23B-061824
	Sample Date					
	Parent Sample		6/18/2024	6/18/2024	6/18/2024	6/18/2024
Analyte	NY CLASS GA GW(AWQS)	Unit				
Dissolved Metals (SW6010D/SW7470A)						
Aluminum	NSL	µg/L	< 25 U	< 25 U	140	< 25 U
Antimony	3	µg/L	< 11 U	< 11 U	< 11 U	< 11 U
Arsenic	25	µg/L	< 5 U	< 5 U	< 5 U	< 5 U
Barium	1000	µg/L	11 J	23 J	24 J	42 J
Beryllium	3	µg/L	< 0.9 U	< 0.9 U	< 0.9 U	< 0.9 U
Cadmium	5	µg/L	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U
Calcium	NSL	µg/L	14000	32000	35000	10000
Chromium, Total	50	µg/L	< 5.3 U	< 5.3 U	< 5.3 U	< 5.3 U
Cobalt	NSL	µg/L	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U
Copper	200	µg/L	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Iron	300	µg/L	**2000**	< 36 U	**1300**	**470**
Lead	25	µg/L	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Magnesium	35000	µg/L	3200	5300	6600	2000
Manganese	300	µg/L	140	**370**	180	70 B
Mercury	0.7	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
Nickel	100	µg/L	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U
Potassium	NSL	µg/L	1200 J	2800	4900	1900 J
Selenium	10	µg/L	< 8.5 U	< 8.5 U	< 8.5 U	< 8.5 U
Silver	50	µg/L	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Sodium	20000	µg/L	**24000**	15000	**53000**	19000
Thallium	0.5	µg/L	< 16 U	< 16 U	< 16 U	< 16 U
Vanadium	NSL	µg/L	< 5.4 U	< 5.4 U	< 5.4 U	< 5.4 U
Zinc	2000	µg/L	< 8 U	< 8 U	< 8 U	8.7 J
Total Metals (SW6010D/SW7470A)						
Aluminum	NSL	µg/L	38 J	< 25 U	160	390
Antimony	3	µg/L	< 11 U	< 11 U	< 11 U	< 11 U
Arsenic	25	µg/L	< 5 U	< 5 U	< 5 U	< 5 U
Barium	1000	µg/L	10 J	26 J	22 J	49 J
Beryllium	3	µg/L	< 0.9 U	< 0.9 U	< 0.9 U	< 0.9 U
Cadmium	5	µg/L	< 1.5 U	< 1.5 U	2.2 J	4.9
Calcium	NSL	µg/L	15000	31000	36000	11000
Chromium, Total	50	µg/L	< 5.3 U	< 5.3 U	< 5.3 U	6.7 J
Cobalt	NSL	µg/L	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U
Copper	200	µg/L	< 9.5 U	< 9.5 U	< 9.5 U	19
Iron	300	µg/L	**2400**	**780**	**1400**	**1100**
Lead	25	µg/L	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Magnesium	35000	µg/L	3300	5100	6800	2300
Manganese	300	µg/L	140	**730**	180	81
Mercury	0.7	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
Nickel	100	µg/L	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U
Potassium	NSL	µg/L	1300 J	2700	4900	2100
Selenium	10	µg/L	< 8.5 U	< 8.5 U	< 8.5 U	< 8.5 U
Silver	50	µg/L	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Sodium	20000	µg/L	**25000**	15000	**54000**	20000
Thallium	0.5	µg/L	< 16 U	< 16 U	< 16 U	< 16 U
Vanadium	NSL	µg/L	< 5.4 U	< 5.4 U	< 5.4 U	< 5.4 U
Zinc	2000	µg/L	< 8 U	< 8 U	< 8 U	40
PFAS (E1633)						
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	NSL	ng/L	NA	NA	NA	NA
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	NSL	ng/L	NA	NA	NA	NA
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	NSL	ng/L	NA	NA	NA	NA
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	NSL	ng/L	NA	NA	NA	NA
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	NSL	ng/L	NA	NA	NA	NA
3-Perfluoroheptyl propanoic acid (7:3FTCA)	NSL	ng/L	NA	NA	NA	NA
3-Perfluoropropyl propanoic acid (3:3 FTCA)	NSL	ng/L	NA	NA	NA	NA
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NSL	ng/L	NA	NA	NA	NA
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid (9Cl-PF3ONS)	NSL	ng/L	NA	NA	NA	NA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NSL	ng/L	NA	NA	NA	NA
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NSL	ng/L	NA	NA	NA	NA
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	NSL	ng/L	NA	NA	NA	NA
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	NSL	ng/L	NA	NA	NA	NA
N-methyl perfluorooctanesulfonamide (NMeFOSA)	NSL	ng/L	NA	NA	NA	NA
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	NSL	ng/L	NA	NA	NA	NA
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	NSL	ng/L	NA	NA	NA	NA
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NSL	ng/L	NA	NA	NA	NA
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NSL	ng/L	NA	NA	NA	NA
Perfluoro-3-methoxypropanoic acid (PFMPA)	NSL	ng/L	NA	NA	NA	NA
Perfluoro-4-methoxybutanoic acid (PFMBA)	NSL	ng/L	NA	NA	NA	NA
Perfluorobutanesulfonic acid (PFBS)	NSL	ng/L	NA	NA	NA	NA
Perfluorobutanoic Acid	NSL	ng/L	NA	NA	NA	NA
Perfluorodecanesulfonic acid (PFDS)	NSL	ng/L	NA	NA	NA	NA
Perfluorodecanoic acid (PFDA)	NSL	ng/L	NA	NA	NA	NA
Perfluorododecanesulfonic acid (PFDoS)	NSL	ng/L	NA	NA	NA	NA
Perfluorododecanoic acid (PFDoA)	NSL	ng/L	NA	NA	NA	NA
Perfluoroheptanesulfonic acid (PFHpS)	NSL	ng/L	NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NSL	ng/L	NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NSL	ng/L	NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NSL	ng/L	NA	NA	NA	NA
Perfluorononanesulfonic Acid (PFNS)	NSL	ng/L	NA	NA	NA	NA
Perfluorononanoic acid (PFNA)	NSL	ng/L	NA	NA	NA	NA
Perfluorooctane Sulfonamide (PFOSA)	NSL	ng/L	NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	2.7	ng/L	NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	6.7	ng/L	NA	NA	NA	NA
Perfluoropentanesulfonic Acid (PFPeS)	NSL	ng/L	NA	NA	NA	NA
Perfluoropentanoic Acid (PFPeA)	NSL	ng/L	NA	NA	NA	NA
Perfluorotetradecanoic acid (PFTeDA)	NSL	ng/L	NA	NA	NA	NA
Perfluorotridecanoic Acid (PFTriA/PFTrDA)	NSL	ng/L	NA	NA	NA	NA
Perfluoroundecanoic Acid (PFUnA)	NSL	ng/L	NA	NA	NA	NA
Total Suspended Solids	NSL	mg/L	NA	NA	NA	NA

Notes:

mg/L = Milligram(s) per liter
ng/L = Nanogram(s) per liter
FD = Field duplicate
NA = Not Analyzed
J = Estimated value
NY CLASS GA GW(AWQS) = New York State Department of Environmental Conservation Groundwater Guidance Values (June 2014)
NSL = No Screening Level
U = Qualifier denotes the analyte was analyzed but not detected.

Bold and shaded values exceed the New York GA AWQS.

Table 3. Surface Water Analytical Results

		Location ID	SWSED-01	SWSED-01	SWSED-01E	SWSED-04	SWSED-04E	SWSED-06	SWSED-06E	SWSED-11	SWSED-13	SWSED-14
		Sample Name	152033-SM-SW-01-061724	152033-SM-SW-FD-01-061724	152033-SM-SW-01E-061724	152033-SM-SW-04-061724	152033-SM-SW-04E-061724	152033-SM-SW-06-061724	152033-SM-SW-06E-061724	152033-SM-SW-11-061724	152033-SM-SW-13-061724	152033-SM-SW-14-061724
		Parent Sample		152033-SM-SW-01-20240617								
		Sample Date	6/17/2024	6/17/2024	6/17/2024	6/17/2024	6/17/2024	6/17/2024	6/17/2024	6/17/2024	6/17/2024	6/17/2024
Analyte	AWQS Class C Aquatic	Unit										
Total Hardness (SW6010D)												
Hardness (As CaCO3)	NSL	mg/l	63	62	62	58	67	62	58	67	56	57
NYS AWQS Class C Aquatic (Chronic) Hardness-Corrected Standard												
Cadmium [1]	NSL	µg/L	1.46	1.44	1.44	1.36	1.53	1.44	1.36	1.53	1.33	1.35
Chromium [1]	NSL	µg/L	50.8	50.1	50.1	47.4	53.4	50.1	47.4	53.4	46.1	46.8
Copper [1]	NSL	µg/L	6.03	5.95	5.95	5.62	6.36	5.95	5.62	6.36	5.46	5.54
Lead [1]	NSL	µg/L	2.28	2.24	2.24	2.08	2.44	2.24	2.08	2.44	2.00	2.04
Nickle [1]	NSL	µg/L	34.6	34.1	34.1	32.3	36.4	34.1	32.3	36.4	31.3	31.8
Zinc [1]	NSL	µg/L	79.2	78.2	78.2	73.9	83.5	78.2	73.9	83.5	71.7	72.8
Dissolved Metals (SW6010D)												
Aluminum	NSL	µg/L	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U
Antimony	NSL	µg/L	< 11 U	< 11 U	< 11 U	< 11 U	< 11 U	< 11 U	< 11 U	< 11 U	< 11 U	< 11 U
Arsenic	150	µg/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
Barium	NSL	µg/L	27 J	27 J	27 J	29 J	29 J	28 J	28 J	25 J	25 J	24 J
Beryllium	11	µg/L	< 0.9 U	< 0.9 U	< 0.9 U	< 0.9 U	< 0.9 U	< 0.9 U	< 0.9 U	< 0.9 U	< 0.9 U	< 0.9 U
Cadmium	See Above	µg/L	**16**	**16**	**16**	**6.3**	**8.8**	**24**	**22**	< 1.5 U	**3.4 J**	**3.0 J**
Calcium	NSL	µg/L	17000	17000	17000	16000	16000	16000	16000	18000	15000	15000
Chromium, Total	See Above	µg/L	< 5.3 U	< 5.3 U	< 5.3 U	< 5.3 U	< 5.3 U	< 5.3 U	< 5.3 U	< 5.3 U	< 5.3 U	< 5.3 U
Cobalt	5	µg/L	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U	< 2.7 U
Copper	See Above	µg/L	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U	< 9.5 U
Iron	NSL	µg/L	230	260	220	370	320	210	260	220	100	92
Lead	See Above	µg/L	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Magnesium	NSL	µg/L	3400	3300	3300	3400	3400	3200	3200	3500	3400	3400
Manganese	NSL	µg/L	510	500	520	580	620	470	520	420	230	430
Mercury	0.77	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
Nickel	See Above	µg/L	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U
Potassium	NSL	µg/L	2400	2400	2300	2200	2300	2400	2200	2500	2100	2000 J
Selenium	4.6	µg/L	< 8.5 U	< 8.5 U	< 8.5 U	< 8.5 U	< 8.5 U	< 8.5 U	< 8.5 U	< 8.5 U	< 8.5 U	< 8.5 U
Silver	NSL	µg/L	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
Sodium	NSL	µg/L	32000	32000	30000	31000	32000	33000	29000	29000	28000	27000
Thallium	8	µg/L	< 16 U	< 16 U	< 16 U	< 16 U	< 16 U	< 16 U	< 16 U	< 16 U	< 16 U	< 16 U
Vanadium	14	µg/L	< 5.4 U	< 5.4 U	< 5.4 U	< 5.4 U	< 5.4 U	< 5.4 U	< 5.4 U	< 5.4 U	< 5.4 U	< 5.4 U
Zinc	See Above	µg/L	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U
PFAS (E1633)												
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	NSL	ng/L	< 1 U	< 1 U	NA	NA	NA	NA	NA	< 0.96 U	NA	< 1 U
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	NSL	ng/L	< 1 U	< 1 U	NA	NA	NA	NA	NA	< 1 U	NA	< 1.1 U
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	NSL	ng/L	< 0.69 U	< 0.7 U	NA	NA	NA	NA	NA	< 0.67 U	NA	< 0.71 U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	NSL	ng/L	< 2.8 U	< 2.8 U	NA	NA	NA	NA	NA	< 2.7 U	NA	< 2.9 U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	NSL	ng/L	< 10 U	< 11 U	NA	NA	NA	NA	NA	< 10 U	NA	< 11 U
3-Perfluoroheptyl propanoic acid (7:3FTCA)	NSL	ng/L	< 8.8 U	< 8.8 U	NA	NA	NA	NA	NA	< 8.5 U	NA	< 9 U
3-Perfluoropropyl propanoic acid (3:3 FTCA)	NSL	ng/L	< 2 U	< 2 U	NA	NA	NA	NA	NA	< 2 U	NA	< 2.1 U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NSL	ng/L	< 0.76 U	< 0.77 U	NA	NA	NA	NA	NA	< 0.74 U	NA	< 0.78 U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid (9Cl-PF3ONS)	NSL	ng/L	< 0.89 U	< 0.9 U	NA	NA	NA	NA	NA	< 0.87 U	NA	< 0.91 U
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NSL	ng/L	< 0.96 U	< 0.96 U	NA	NA	NA	NA	NA	< 0.93 U	NA	< 0.98 U
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NSL	ng/L	< 0.31 U	< 0.31 U	NA	NA	NA	NA	NA	< 0.3 U	NA	< 0.32 U
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	NSL	ng/L	< 0.37 U	< 0.37 U	NA	NA	NA	NA	NA	0.39 J	NA	< 0.38 U
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	NSL	ng/L	< 2.5 U	< 2.5 U	NA	NA	NA	NA	NA	< 2.4 U	NA	< 2.5 U
N-methyl perfluorooctanesulfonamide (NMeFOSA)	NSL	ng/L	< 0.3 U	< 0.31 U	NA	NA	NA	NA	NA	< 0.29 U	NA	< 0.31 U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	NSL	ng/L	< 0.33 U	< 0.33 U	NA	NA	NA	NA	NA	< 0.32 U	NA	< 0.34 U
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	NSL	ng/L	< 2.5 U	< 2.5 U	NA	NA	NA	NA	NA	< 2.5 U	NA	< 2.6 U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NSL	ng/L	< 0.51 U	< 0.51 U	NA	NA	NA	NA	NA	< 0.5 U	NA	< 0.52 U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NSL	ng/L	< 0.32 U	< 0.33 U	NA	NA	NA	NA	NA	< 0.31 U	NA	< 0.33 U
Perfluoro-3-methoxypropanoic acid (PFMPA)	NSL	ng/L	< 0.52 U	< 0.52 U	NA	NA	NA	NA	NA	< 0.5 U	NA	< 0.53 U
Perfluoro-4-methoxybutanoic acid (PFMBA)	NSL	ng/L	< 0.5 U	< 0.5 U	NA	NA	NA	NA	NA	< 0.48 U	NA	< 0.51 U
Perfluorobutanesulfonic acid (PFBS)	NSL	ng/L	5.8	6.0	NA	NA	NA	NA	NA	7.8	NA	4.4
Perfluorobutanoic Acid	NSL	ng/L	5.6	5.8	NA	NA	NA	NA	NA	6.1	NA	5.3
Perfluorodecanesulfonic acid (PFDS)	NSL	ng/L	< 0.27 U	< 0.27 U	NA	NA	NA	NA	NA	< 0.26 U	NA	< 0.27 U
Perfluorodecanoic acid (PFDA)	NSL	ng/L	0.78 J	0.88 J	NA	NA	NA	NA	NA	0.93	NA	0.63 J
Perfluorododecanesulfonic acid (PFDoS)	NSL	ng/L	< 0.27 U	< 0.27 U	NA	NA	NA	NA	NA	< 0.26 U	NA	< 0.27 U
Perfluorododecanoic acid (PFDoA)	NSL	ng/L	< 0.19 U	< 0.19 U	NA	NA	NA	NA	NA	< 0.18 U	NA	< 0.19 U
Perfluoroheptanesulfonic acid (PFHpS)	NSL	ng/L	0.32 J	0.35 J	NA	NA	NA	NA	NA	< 0.3 U	NA	< 0.31 U
Perfluoroheptanoic acid (PFHpA)	NSL	ng/L	4.7	4.7	NA	NA	NA	NA	NA	5.5	NA	5.2
Perfluorohexanesulfonic acid (PFHxS)	NSL	ng/L	3.8	3.8	NA	NA	NA	NA	NA	2.9	NA	5.5
Perfluorohexanoic acid (PFHxA)	NSL	ng/L	7.1	7.3	NA	NA	NA	NA	NA	7	NA	7.2
Perfluorononanesulfonic Acid (PFNS)	NSL	ng/L	< 0.23 U	< 0.23 U	NA	NA	NA	NA	NA	< 0.23 U	NA	< 0.24 U
Perfluorononanoic acid (PFNA)	NSL	ng/L	2.5	2.5	NA	NA	NA	NA	NA	2.7	NA	1.9
Perfluorooctane Sulfonamide (PFOSA)	NSL	ng/L	< 0.22 U	< 0.22 U	NA	NA	NA	NA	NA	0.30 J	NA	< 0.22 U
Perfluorooctanesulfonic acid (PFOS)	160,000	ng/L	27	28	NA	NA	NA	NA	NA	21	NA	28
Perfluorooctanoic acid (PFOA)	NSL	ng/L	14	15	NA	NA	NA	NA	NA	15	NA	13
Perfluoropentanesulfonic Acid (PFPeS)	NSL	ng/L	0.55 J	< 0.24 U	NA	NA	NA	NA	NA	0.45 J	NA	0.55 J
Perfluoropentanoic Acid (PFPeA)	NSL	ng/L	7.2	7.4	NA	NA	NA	NA	NA	6.8	NA	7.3
Perfluorotetradecanoic acid (PFTeDA)	NSL	ng/L	< 0.24 U	< 0.24 U	NA	NA	NA	NA	NA	< 0.23 U	NA	< 0.25 U
Perfluorotridecanoic Acid (PFTriA/PFTriDA)	NSL	ng/L	< 0.28 U	< 0.28 U	NA	NA	NA	NA	NA	< 0.27 U	NA	< 0.28 U
Perfluoroundecanoic Acid (PFUnA)	NSL	ng/L	< 0.19 U	< 0.19 U	NA	NA	NA	NA	NA	< 0.18 U	NA	< 0.19 U
Total Suspended Solids	NSL	mg/L	48	< 10 U	NA	NA	NA	NA	NA	< 10 U	NA	< 10 U

Notes:

[1] Site-specific chronic hardness-corrected surface water standard for dissolved forms.

mg/L = Milligram(s) per liter
ug/L = Microgram(s) per liter
ng/l =Nanogram(s) per liter
NYS AWQS Class C = New York State Ambient Water Quality Standard for Class C Waters
NA = Not analyzed
NSL = No screening level
J = Qualifier denotes an estimated concentration.
U = Qualifier denotes the analyte was analyzed but not detected. Detection limit provided.

Bold and shaded values exceed the New York State AWQS standard.

Table 4. Sediment Analytical Results

					Location ID	**SWSED-01**	**SWSED-01**	**SWSED-01**	**SWSED-02**	**SWSED-03**	**SWSED-04**	**SWSED-04**	**SWSED-05**	**SWSED-06**
					Sample Name	**152033-SM-SD-01-061724**	**152033-SM-SD-FD-01-061724**	**152033-SM-SD-01E-061724**	**152033-SM-SD-02-061724**	**152033-SM-SD-03-061724**	**152033-SM-SD-04-061724**	**152033-SM-SD-04E-061724**	**152033-SM-SD-05-061724**	**152033-SM-SD-06-061724**
					Sample Date		**152033-SM-SD-01-20240617**							
					Parent Sample	**6/17/2024**	**6/17/2024**	**6/17/2024**	**6/17/2024**	**6/17/2024**	**6/17/2024**	**6/17/2024**	**6/17/2024**	**6/17/2024**
	NYSDEC FRESHWATER SGV													
Analyte	**Class A**	**Class B**	**Class C**	**Unit**										
Dissolved Metals (SW6010D/SW7470A)														
Aluminum	NSL	NSL	NSL	mg/kg		1200	1500	1200	1600	1100	1000	1500	750	1800
Antimony	NSL	NSL	NSL	mg/kg		< 0.58 U	< 0.53 U	< 0.66 U	< 0.53 U	< 0.57 U	< 0.57 U	< 0.58 U	< 0.57 U	< 0.51 U
Arsenic	10	10	33	mg/kg		< 0.61 U	< 0.56 U	< 0.7 U	< 0.56 U	< 0.6 U	< 0.6 U	< 0.61 U	< 0.6 U	< 0.54 U
Barium	NSL	NSL	NSL	mg/kg		7.2	9.2	6.0	14	5.7	5.8	7.5	2.9	12
Beryllium	NSL	NSL	NSL	mg/kg		< 0.066 U	0.090 J	0.087 J	0.12 J	0.090 J	< 0.065 U	0.093 J	< 0.065 U	0.10 J
Cadmium	1	1	5	mg/kg		**7.1**	**7.4**	**4.1**	**4.3**	**5.0**	**8.7**	0.81	< 0.2 U	**9.4**
Calcium	NSL	NSL	NSL	mg/kg		460	480	9800	470	180	180	220	240	1900
Chromium, Total	43	43	110	mg/kg		7.5	11	12	16	3.7	4.3	3.8	3.8	5.6
Cobalt	NSL	NSL	NSL	mg/kg		0.85 J	0.97 J	0.72 J	1.5 J	1.4 J	1.3 J	1.1 J	0.61 J	1.2 J
Copper	32	32	150	mg/kg		6.4	5.9	4.5	14	4.6	4.5	4.9	3.0	7.1
Iron	NSL	NSL	NSL	mg/kg		3100 D	3900 D	3300 D	9300 D	1700	1800	2300 D	3200 D	6400 D
Lead	36	36	130	mg/kg		6.1	7.4	5.2	2.6	8.3	6.5	5.6	2.5	6.2
Magnesium	NSL	NSL	NSL	mg/kg		460	490	5800	570	320	270	450	270	1100
Manganese	NSL	NSL	NSL	mg/kg		42	49	40	92	21	18	25	22	48
Mercury	0.2	0.2	1	mg/kg		0.016 J	< 0.012 U	< 0.017 U	< 0.013 U	< 0.014 U	0.025 J	< 0.015 U	< 0.014 U	< 0.013 U
Nickel	23	23	49	mg/kg		2.4	2.8	2.0	2.0	1.9	1.6	2.5	1.4	2.7
Potassium	NSL	NSL	NSL	mg/kg		180 J	230	190 J	240	110 J	120 J	200 J	68 J	310
Selenium	NSL	NSL	NSL	mg/kg		< 1.1 U	< 0.99 U	< 1.2 U	< 0.99 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 0.96 U
Silver	1	1	2.2	mg/kg		< 0.27 U	< 0.25 U	< 0.31 U	< 0.25 U	< 0.26 U	< 0.26 U	< 0.27 U	< 0.26 U	< 0.24 U
Sodium	NSL	NSL	NSL	mg/kg		< 65 U	< 59 U	< 74 U	< 59 U	< 64 U	< 63 U	< 64 U	< 63 U	< 57 U
Thallium	NSL	NSL	NSL	mg/kg		< 0.69 U	< 0.64 U	< 0.79 U	< 0.64 U	< 0.68 U	< 0.68 U	< 0.69 U	< 0.68 U	< 0.62 U
Vanadium	NSL	NSL	NSL	mg/kg		4.0	5.5	5.1	5.2	3.6	3.0	4.7	3.2	6.1
Zinc	120	120	460	mg/kg		13	16	9.5	13	12	13	13	3.8	20
PFAS (E1633)														
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	NSL	NSL	NSL	µg/kg		< 0.087 U	< 0.088 U	NA	NA	NA	NA	NA	NA	NA
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	NSL	NSL	NSL	µg/kg		< 0.091 U	< 0.092 U	NA	NA	NA	NA	NA	NA	NA
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	NSL	NSL	NSL	µg/kg		< 0.068 U	< 0.07 U	NA	NA	NA	NA	NA	NA	NA
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	NSL	NSL	NSL	µg/kg		< 0.49 U	< 0.5 U	NA	NA	NA	NA	NA	NA	NA
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	NSL	NSL	NSL	µg/kg		< 1.3 U	< 1.3 U	NA	NA	NA	NA	NA	NA	NA
3-Perfluoroheptyl propanoic acid (7:3FTCA)	NSL	NSL	NSL	µg/kg		< 1.5 U	< 1.5 U	NA	NA	NA	NA	NA	NA	NA
3-Perfluoropropyl propanoic acid (3:3 FTCA)	NSL	NSL	NSL	µg/kg		< 0.19 U	< 0.19 U	NA	NA	NA	NA	NA	NA	NA
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NSL	NSL	NSL	µg/kg		< 0.058 U	< 0.059 U	NA	NA	NA	NA	NA	NA	NA
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid (9Cl-PF3ONS)	NSL	NSL	NSL	µg/kg		< 0.057 U	< 0.057 U	NA	NA	NA	NA	NA	NA	NA
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NSL	NSL	NSL	µg/kg		< 0.05 U	< 0.051 U	NA	NA	NA	NA	NA	NA	NA
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NSL	NSL	NSL	µg/kg		< 0.023 U	< 0.023 U	NA	NA	NA	NA	NA	NA	NA
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	NSL	NSL	NSL	µg/kg		< 0.029 U	< 0.03 U	NA	NA	NA	NA	NA	NA	NA
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	NSL	NSL	NSL	µg/kg		< 0.21 U	< 0.21 U	NA	NA	NA	NA	NA	NA	NA
N-methyl perfluorooctanesulfonamide (NMeFOSA)	NSL	NSL	NSL	µg/kg		< 0.024 U	< 0.025 U	NA	NA	NA	NA	NA	NA	NA
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	NSL	NSL	NSL	µg/kg		< 0.035 U	< 0.036 U	NA	NA	NA	NA	NA	NA	NA
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	NSL	NSL	NSL	µg/kg		< 0.21 U	< 0.21 U	NA	NA	NA	NA	NA	NA	NA
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NSL	NSL	NSL	µg/kg		< 0.059 U	< 0.06 U	NA	NA	NA	NA	NA	NA	NA
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NSL	NSL	NSL	µg/kg		< 0.031 U	< 0.031 U	NA	NA	NA	NA	NA	NA	NA
Perfluoro-3-methoxypropanoic acid (PFMPA)	NSL	NSL	NSL	µg/kg		< 0.032 U	< 0.033 U	NA	NA	NA	NA	NA	NA	NA
Perfluoro-4-methoxybutanoic acid (PFMBA)	NSL	NSL	NSL	µg/kg		< 0.032 U	< 0.033 U	NA	NA	NA	NA	NA	NA	NA
Perfluorobutanesulfonic acid (PFBS)	NSL	NSL	NSL	µg/kg		< 0.02 U	< 0.021 U	NA	NA	NA	NA	NA	NA	NA
Perfluorobutanoic Acid	NSL	NSL	NSL	µg/kg		< 0.32 U	< 0.32 U	NA	NA	NA	NA	NA	NA	NA
Perfluorodecanesulfonic acid (PFDS)	NSL	NSL	NSL	µg/kg		< 0.031 U	< 0.032 U	NA	NA	NA	NA	NA	NA	NA
Perfluorodecanoic acid (PFDA)	NSL	NSL	NSL	µg/kg		< 0.017 U	0.041 J	NA	NA	NA	NA	NA	NA	NA
Perfluorododecanesulfonic acid (PFDoS)	NSL	NSL	NSL	µg/kg		< 0.03 U	< 0.03 U	NA	NA	NA	NA	NA	NA	NA
Perfluorododecanoic acid (PFDoA)	NSL	NSL	NSL	µg/kg		< 0.021 U	< 0.022 U	NA	NA	NA	NA	NA	NA	NA
Perfluoroheptanesulfonic acid (PFHpS)	NSL	NSL	NSL	µg/kg		< 0.021 U	< 0.021 U	NA	NA	NA	NA	NA	NA	NA
Perfluoroheptanoic acid (PFHpA)	NSL	NSL	NSL	µg/kg		< 0.014 U	< 0.014 U	NA	NA	NA	NA	NA	NA	NA
Perfluorohexanesulfonic acid (PFHxS)	NSL	NSL	NSL	µg/kg		< 0.077 U	< 0.078 U	NA	NA	NA	NA	NA	NA	NA
Perfluorohexanoic acid (PFHxA)	NSL	NSL	NSL	µg/kg		< 0.032 U	< 0.033 U	NA	NA	NA	NA	NA	NA	NA
Perfluorononanesulfonic Acid (PFNS)	NSL	NSL	NSL	µg/kg		< 0.022 U	< 0.022 U	NA	NA	NA	NA	NA	NA	NA
Perfluorononanoic acid (PFNA)	NSL	NSL	NSL	µg/kg		< 0.014 U	< 0.014 U	NA	NA	NA	NA	NA	NA	NA
Perfluorooctane Sulfonamide (PFOSA)	NSL	NSL	NSL	µg/kg		< 0.03 U	< 0.031 U	NA	NA	NA	NA	NA	NA	NA
Perfluorooctanesulfonic acid (PFOS)	NSL	NSL	NSL	µg/kg		0.47	0.58	NA	NA	NA	NA	NA	NA	NA
Perfluorooctanoic acid (PFOA)	NSL	NSL	NSL	µg/kg		< 0.031 U	0.041 J	NA	NA	NA	NA	NA	NA	NA
Perfluoropentanesulfonic Acid (PFPeS)	NSL	NSL	NSL	µg/kg		< 0.025 U	< 0.025 U	NA	NA	NA	NA	NA	NA	NA
Perfluoropentanoic Acid (PFPeA)	NSL	NSL	NSL	µg/kg		< 0.044 U	< 0.045 U	NA	NA	NA	NA	NA	NA	NA
Perfluorotetradecanoic acid (PFTeDA)	NSL	NSL	NSL	µg/kg		< 0.02 U	< 0.02 U	NA	NA	NA	NA	NA	NA	NA
Perfluorotridecanoic Acid (PFTriA/PFTrDA)	NSL	NSL	NSL	µg/kg		< 0.022 U	< 0.022 U	NA	NA	NA	NA	NA	NA	NA
Perfluoroundecanoic Acid (PFUnA)	NSL	NSL	NSL	µg/kg		< 0.023 U	< 0.023 U	NA	NA	NA	NA	NA	NA	NA
Percent Solids (SM2540G)														
Solids, Percent	NSL	NSL	NSL	%		73.3	82.8	66.6	78.9	76.3	77.8	74.4	77.1	82.0

Notes:

FD = Field duplicate
ID = Identification
mg/kg = Milligram(s) per kilogram
µg/kg = Microgram(s) per kilogram
NYSDEC Freshwater SGV = New York State Department of Environmental Conservation Sediment Freshwater & Saltwater Guidance Values (June 2014).
J = Qualifier denotes an estimated concentration.
U = Qualifier denotes the analyte was analyzed but not detected. Detection limit provided.
D = Qualifier denotes the analyte was detected in diluted analysis

Bold values are Class B sediments
Bold and highlighted values are Class C sediments

Table 4. Sediment Analytical Results

Location ID					SWSED-06	SWSED-07	SWSED-08	SWSED-09	SWSED-10	SWSED-11	SWSED-12	SWSED-13	SWSED-14
Sample Name					152033-SM-SD-06E-061724	152033-SM-SD-07-061724	152033-SM-SD-08-061724	152033-SM-SD-09-061724	152033-SM-SD-10-061724	152033-SM-SD-11-061724	152033-SM-SD-12-061724	152033-SM-SD-13-061724	152033-SM-SD-14-061724
Sample Date													
Parent Sample					6/17/2024	6/17/2024	6/17/2024	6/17/2024	6/17/2024	6/17/2024	6/17/2024	6/17/2024	6/17/2024
	NYSDEC FRESHWATER SGV												
Analyte	Class A	Class B	Class C	Unit									
Dissolved Metals (SW6010D/SW7470A)													
Aluminum	NSL	NSL	NSL	mg/kg	3100	2300	1200	1600	2200	1000	2600	250	760
Antimony	NSL	NSL	NSL	mg/kg	< 0.8 U	< 0.52 U	< 0.55 U	< 0.52 U	< 0.52 U	< 0.54 U	< 0.49 U	< 0.49 U	< 0.55 U
Arsenic	10	10	33	mg/kg	< 0.84 U	0.68 J	< 0.58 U	< 0.55 U	< 0.55 U	< 0.57 U	6.1	< 0.52 U	< 0.58 U
Barium	NSL	NSL	NSL	mg/kg	26	6.7	5.0	5.6	19	7.6	14	2.1	4.9
Beryllium	NSL	NSL	NSL	mg/kg	0.25 J	0.18 J	< 0.062 U	< 0.059 U	0.074 J	0.067 J	0.17 J	< 0.056 U	< 0.063 U
Cadmium	1	1	5	mg/kg	**7.9**	**6.6**	0.86	0.28 J	0.54	0.42	**2.0**	0.62	**1.2**
Calcium	NSL	NSL	NSL	mg/kg	2200	18000	170	170	490	280	37000 D	71	280
Chromium, Total	43	43	110	mg/kg	9.3	3.8	6.9	2.5	7.7	2.4	5.7	1.0	2.0
Cobalt	NSL	NSL	NSL	mg/kg	3.8	0.98 J	0.62 J	0.97 J	2.5	0.63 J	2.3	0.39 J	1.2 J
Copper	32	32	150	mg/kg	12	6.7	3.9	5.2	11	3.4	4.1	< 1.3 U	6.3
Iron	NSL	NSL	NSL	mg/kg	5300 D	10000 D	5800 D	4200 D	8500 D	3000 D	8100 D	1300	3000 D
Lead	36	36	130	mg/kg	15	2.6	4.3	5.7	3.0	5.4	3.5	1.6	3.8
Magnesium	NSL	NSL	NSL	mg/kg	1100	1100	320	480	1000	300	3300	80	270
Manganese	NSL	NSL	NSL	mg/kg	44	74	27	62	81	84	62	63	140
Mercury	0.2	0.2	1	mg/kg	0.024 J	< 0.013 U	< 0.013 U	< 0.012 U	< 0.012 U	< 0.013 U	< 0.012 U	< 0.012 U	< 0.013 U
Nickel	23	23	49	mg/kg	6.4	1.3	1.8	2.7	6.5	1.8	5.4	0.53 J	1.4
Potassium	NSL	NSL	NSL	mg/kg	530	260	120 J	110 J	670	81 J	440	< 46 U	100 J
Selenium	NSL	NSL	NSL	mg/kg	< 1.5 U	< 0.98 U	< 1 U	< 0.96 U	< 0.97 U	< 1 U	< 0.92 U	< 0.92 U	< 1 U
Silver	1	1	2.2	mg/kg	< 0.37 U	< 0.24 U	< 0.25 U	< 0.24 U	< 0.24 U	< 0.25 U	< 0.23 U	< 0.23 U	< 0.25 U
Sodium	NSL	NSL	NSL	mg/kg	< 89 U	< 58 U	< 61 U	< 58 U	< 58 U	< 60 U	< 55 U	< 55 U	< 61 U
Thallium	NSL	NSL	NSL	mg/kg	< 0.96 U	< 0.63 U	< 0.65 U	< 0.62 U	< 0.62 U	< 0.65 U	< 0.59 U	< 0.59 U	< 0.66 U
Vanadium	NSL	NSL	NSL	mg/kg	11	3.7	3.6	4.7	11	2.8	4.3	0.65 J	4.0
Zinc	120	120	460	mg/kg	39	37	6.3	7.7	14	9.1	15	2.5	11
PFAS (E1633)													
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.086 U	NA	NA	< 0.087 U
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.09 U	NA	NA	< 0.091 U
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.068 U	NA	NA	< 0.069 U
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.49 U	NA	NA	< 0.49 U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 1.3 U	NA	NA	< 1.3 U
3-Perfluoroheptyl propanoic acid (7:3FTCA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 1.5 U	NA	NA	< 1.5 U
3-Perfluoropropyl propanoic acid (3:3 FTCA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.19 U	NA	NA	< 0.19 U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.058 U	NA	NA	< 0.059 U
9-Chlorohexadecafluoro-3-Oxanonane-1-Sulfonic Acid (9Cl-PF3ONS)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.056 U	NA	NA	< 0.057 U
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.05 U	NA	NA	< 0.05 U
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.023 U	NA	NA	< 0.023 U
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.029 U	NA	NA	< 0.029 U
N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.21 U	NA	NA	< 0.21 U
N-methyl perfluorooctanesulfonamide (NMeFOSA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.024 U	NA	NA	< 0.024 U
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.035 U	NA	NA	< 0.035 U
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.21 U	NA	NA	< 0.21 U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.059 U	NA	NA	< 0.059 U
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.031 U	NA	NA	< 0.031 U
Perfluoro-3-methoxypropanoic acid (PFMPA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.032 U	NA	NA	< 0.032 U
Perfluoro-4-methoxybutanoic acid (PFMBA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.032 U	NA	NA	< 0.032 U
Perfluorobutanesulfonic acid (PFBS)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.02 U	NA	NA	< 0.021 U
Perfluorobutanoic Acid	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.31 U	NA	NA	< 0.32 U
Perfluorodecanesulfonic acid (PFDS)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.031 U	NA	NA	< 0.031 U
Perfluorodecanoic acid (PFDA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.017 U	NA	NA	< 0.017 U
Perfluorododecanesulfonic acid (PFDoS)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.03 U	NA	NA	< 0.03 U
Perfluorododecanoic acid (PFDoA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.021 U	NA	NA	< 0.021 U
Perfluoroheptanesulfonic acid (PFHpS)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.021 U	NA	NA	< 0.021 U
Perfluoroheptanoic acid (PFHpA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.014 U	NA	NA	< 0.014 U
Perfluorohexanesulfonic acid (PFHxS)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.076 U	NA	NA	< 0.077 U
Perfluorohexanoic acid (PFHxA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.032 U	NA	NA	< 0.033 U
Perfluorononanesulfonic Acid (PFNS)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.022 U	NA	NA	< 0.022 U
Perfluorononanoic acid (PFNA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.013 U	NA	NA	< 0.014 U
Perfluorooctane Sulfonamide (PFOSA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.03 U	NA	NA	< 0.031 U
Perfluorooctanesulfonic acid (PFOS)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.031 U	NA	NA	0.23
Perfluorooctanoic acid (PFOA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	0.033 J	NA	NA	< 0.031 U
Perfluoropentanesulfonic Acid (PFPeS)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.025 U	NA	NA	< 0.025 U
Perfluoropentanoic Acid (PFPeA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.044 U	NA	NA	< 0.045 U
Perfluorotetradecanoic acid (PFTeDA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.02 U	NA	NA	< 0.02 U
Perfluorotridecanoic Acid (PFTriA/PFTrDA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.022 U	NA	NA	< 0.022 U
Perfluoroundecanoic Acid (PFUnA)	NSL	NSL	NSL	µg/kg	NA	NA	NA	NA	NA	< 0.023 U	NA	NA	0.066 J
Percent Solids (SM2540G)													
Solids, Percent	NSL	NSL	NSL	%	53.3	84.5	78.6	85.6	82.7	77.7	86.1	89.3	78.7

Notes:

FD = Field duplicate
ID = Identification
mg/kg = Milligram(s) per kilogram
µg/kg = Microgram(s) per kilogram
NYSDEC Freshwater SGV = New York State Department of Environmental Conservation Sediment Freshwater & Saltwater Guidance Values (June 2014).
J = Qualifier denotes an estimated concentration.
U = Qualifier denotes the analyte was analyzed but not detected. Detection limit provided.
D = Qualifier denotes the analyte was detected in diluted analysis

Bold values are Class B sediments
Bold and highlighted values are Class C sediments

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Figures

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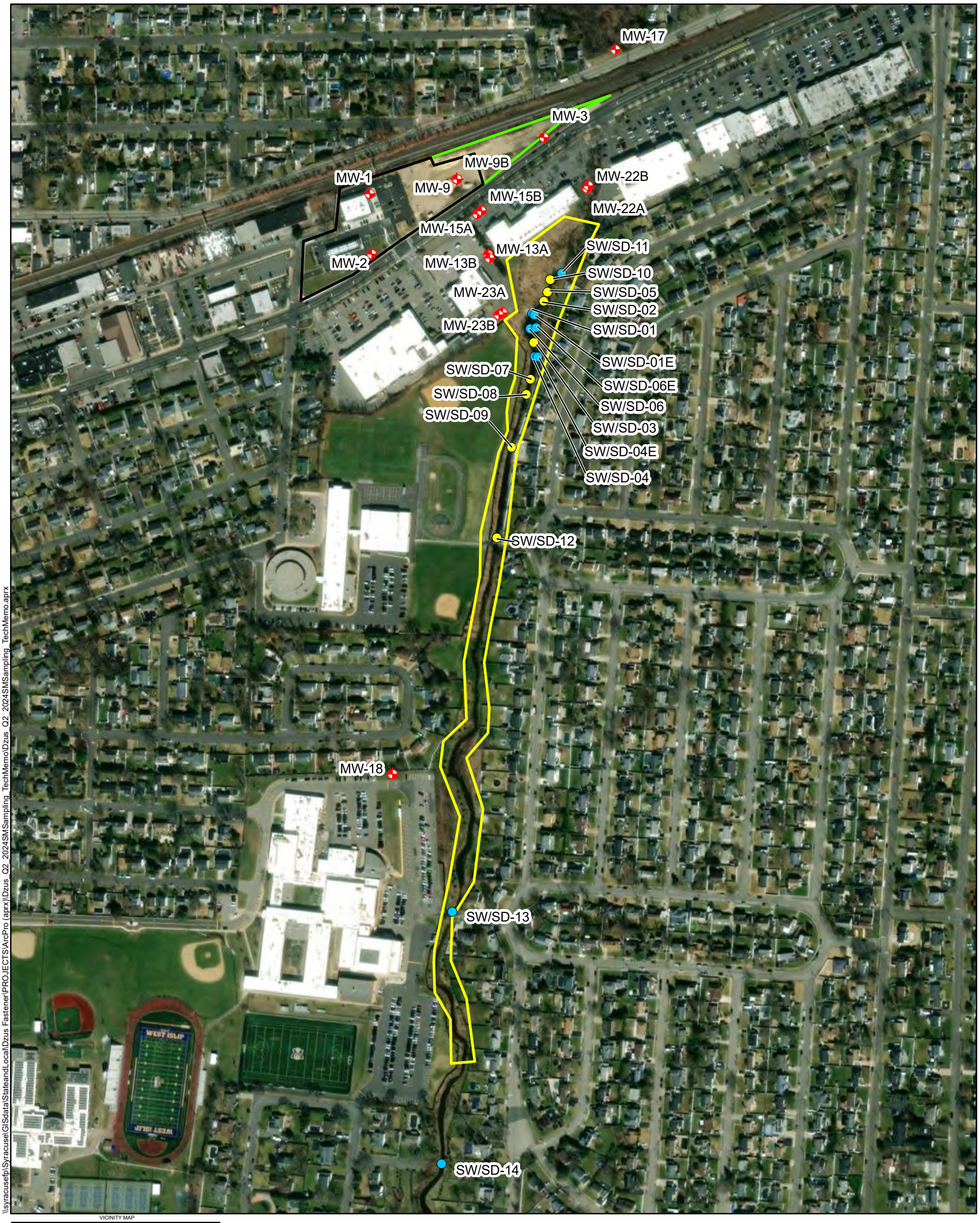

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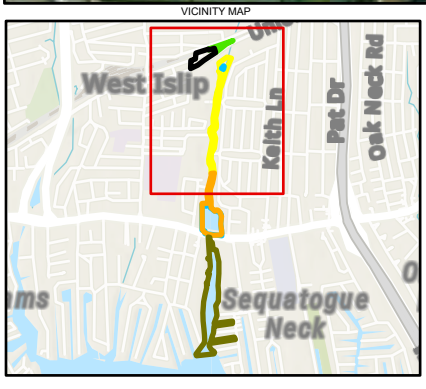
VICINITY MAP



Legend

Operable Units

- OU1
- OU3
- OU6

SW_SD_0624Survey

- Sediment Sample Site
- Surface Water/Sediment Sample Site
- Monitoring Well

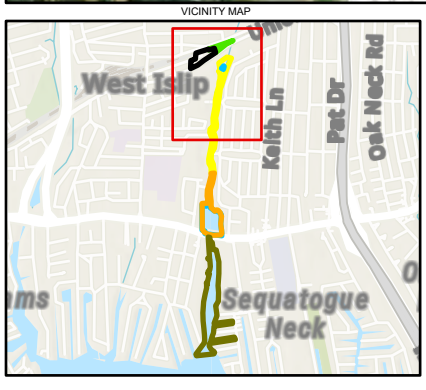
0 250 500
Feet
N

Figure 1
Monitoring Locations
Dzus Fastener Company, Inc.
West Islip, New York

Map Date: 8/2/2024
Projection: NAD 83 State Plane
New York Long Island 3104 (US Feet)
Source: Esri

NEW YORK STATE Department of Environmental Conservation

VICINITY MAP



Legend

- Shallow Potentiometric Surface Contour
- Groundwater Flow Direction
- Monitoring Well

0 150 300
Feet
N

Figure 2
Shallow Potentiometric Surface Contours
June 2024
Dzus Fastener Company, Inc.
West Islip, New York

Map Date: 8/6/2024
Projection: NAD 83 State Plane
New York Long Island 3104 (US Feet)
Source: Esri

NEW YORK STATE Department of Environmental Conservation

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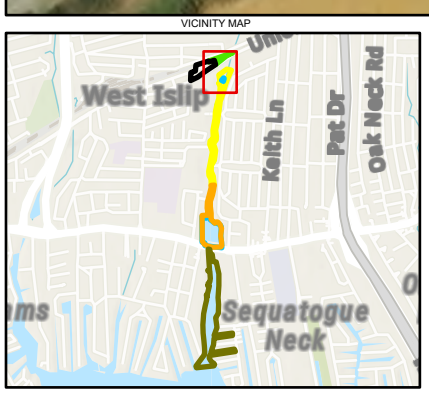


Legend

- Groundwater Potinometric Contours
- Groundwater Flow Direction
- Monitoring Well

0 50 100
Feet
N

Figure 3
Deep Potentiometric Surface Contours
June 2024
Dzus Fastener Company, Inc.
West Islip, New York

Map Date: 8/6/2024
Projection: NAD 83 State Plane
New York Long Island 3104 (US Feet)
Source: Esri

NEW YORK STATE Department of Environmental Conservation

MW-9	Total	Dissolved
Cadmium	69	65
Chromium	ND	ND

MW-9	Total
PFOA	11
PFOS	11

MW-17	Total	Dissolved
Cadmium	ND	ND
Chromium	ND	ND

MW-17	Total
PFOA	23
PFOS	32

MW-9B	Total	Dissolved
Cadmium	ND	ND
Chromium	ND	ND

MW-15B	Total	Dissolved
Cadmium	ND	ND
Chromium	ND	ND

MW-15A	Total	Dissolved
Cadmium	14	ND
Chromium	ND	ND

MW-3	Total	Dissolved
Cadmium	1.9	NS
Chromium	ND	NS

MW-22B	Total	Dissolved
Cadmium	ND	ND
Chromium	ND	ND

MW-1	Total	Dissolved
Cadmium	ND	ND
Chromium	ND	ND

MW-22A	Total	Dissolved
Cadmium	ND	ND
Chromium	ND	ND

MW-2	Total	Dissolved
Cadmium	4.0	3.4
Chromium	ND	ND

MW-13A	Total	Dissolved
Cadmium	290	280
Chromium	ND	ND

MW-13A	Total
PFOA	25
PFOS	25

MW-23A	Total	Dissolved
Cadmium	2.2	ND
Chromium	ND	ND

MW-13B	Total	Dissolved
Cadmium	ND	ND
Chromium	21	18

MW-23B	Total	Dissolved
Cadmium	4.9	ND
Chromium	6.7	ND

NYSDEC Class GA AWQS	
Cadmium	5 µg/L
Chromium	50 µg/L

NYSDEC PFAS Guidance Values	
PFOA	6.7 ng/L
PFOS	2.7 ng/L

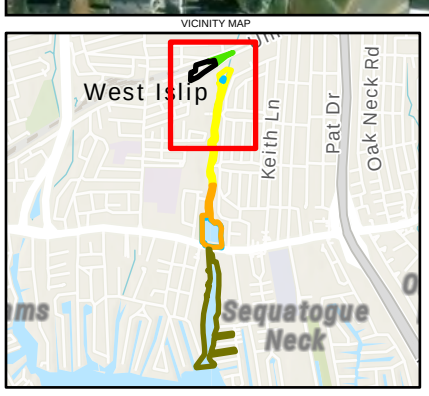
MW-18	Total	Dissolved
Cadmium	ND	ND
Chromium	ND	ND

MW-18	Total
PFOA	0.93
PFOS	3.1

Notes:
Analytical results for cadmium and chromium are shown in units of micrograms per liter (µg/L).

Bold and highlighted values indicate concentrations greater than the NYSDEC Class GA AWQS (metals) or guidance values (PFAS).

AWQS = Ambient Water Quality Standards
ND = Non-detect
NYSDEC = New York State Department of Environmental Conservation
PFAS = per- and polyfluorinated alkyl substances



Legend

A Monitoring Well

0 150 300
Feet
N

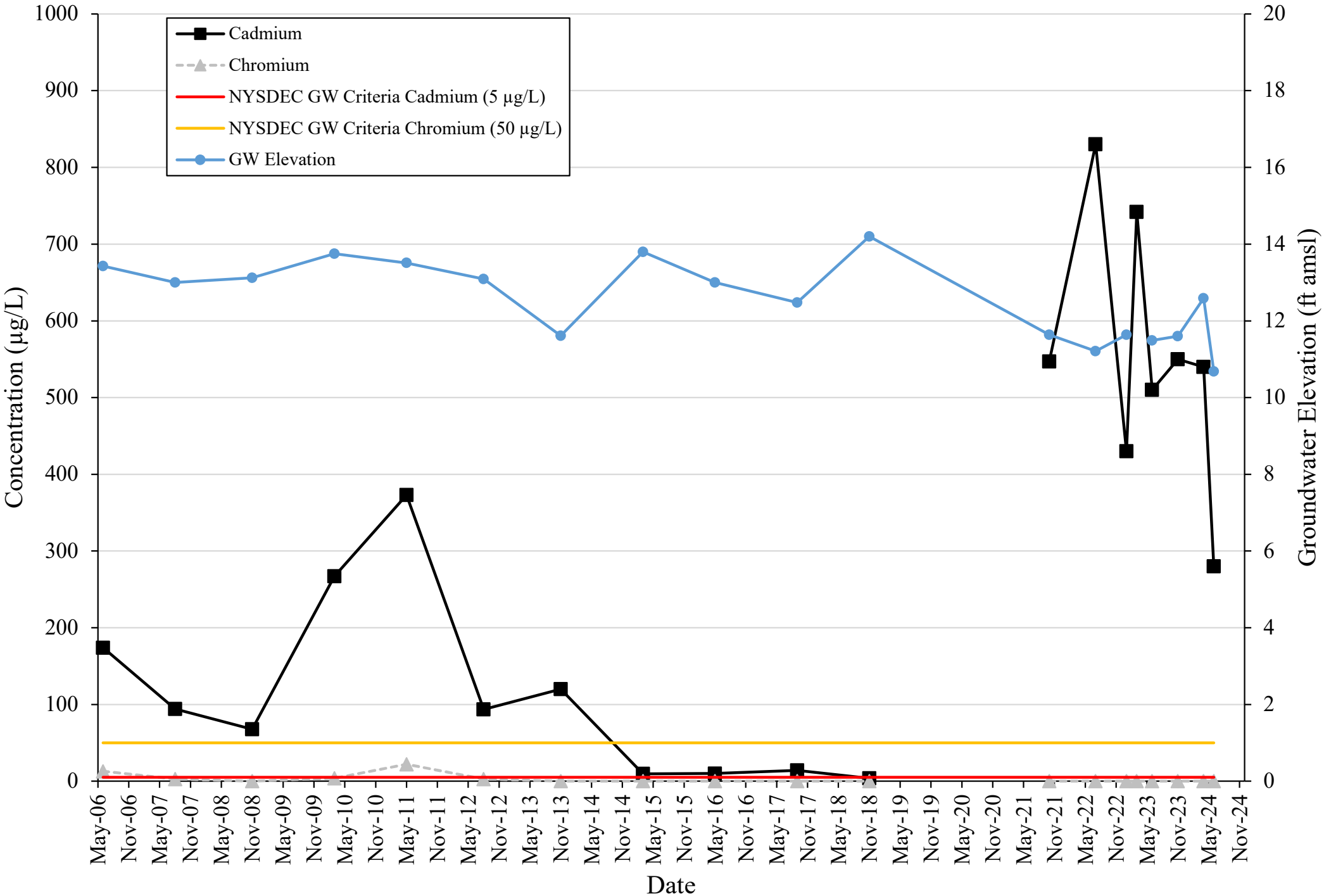
Figure 4
Groundwater Analytical Results
June 2024
Dzus Fastener Company, Inc.
West Islip, New York

Map Date: 8/9/2024
Projection: NAD 83 State Plane
New York Long Island 3104 (US Feet)
Source: Esri

NEW YORK STATE Department of Environmental Conservation

\\syracusefp\SyracuseGISdata\StateandLocal\Dzus Fastener\PROJECTS\ArcPro (aprx)\Dzus_Q2_2024SMSampling_TechMemo\Dzus_Q2_2024SMSampling_TechMemo.aprx

Figure 5
MW-13A: Metal Concentrations Over Time (June 2006 - June 2024)



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SD-02	Jun-24
Cadmium	4.3
Chromium	16

SW-01	Jun-24
Cadmium	16
Chromium	ND
SD-01	Jun-24
Cadmium	7.1
Chromium	7.5

SW-01E	Jun-24
Cadmium	16
Chromium	ND
SD-01E	Jun-24
Cadmium	4.1
Chromium	12

SW-06	Jun-24
Cadmium	24
Chromium	ND
SD-06	Jun-24
Cadmium	9.4
Chromium	5.6

SW-06E	Jun-24
Cadmium	22
Chromium	ND
SD-06E	Jun-24
Cadmium	7.9
Chromium	9.3

SD-03	Jun-24
Cadmium	5.0
Chromium	3.7

SD-09	Jun-24
Cadmium	0.28
Chromium	2.5

SD-12	Jun-24
Cadmium	2.0
Chromium	5.7

SW-14	Jun-24
Cadmium	3.0
Chromium	ND
SD-14	Jun-24
Cadmium	1.2
Chromium	2.0

SW-11	Jun-24
Cadmium	ND
Chromium	ND
SD-11	Jun-24
Cadmium	0.42
Chromium	2.4

SD-10	Jun-24
Cadmium	0.54
Chromium	7.7

SD-05	Jun-24
Cadmium	ND
Chromium	3.8

SW-04E	Jun-24
Cadmium	8.8
Chromium	ND
SD-04E	Jun-24
Cadmium	0.81
Chromium	3.8

SW-04	Jun-24
Cadmium	6.3
Chromium	ND
SD-04	Jun-24
Cadmium	8.7
Chromium	4.3

SD-07	Jun-24
Cadmium	6.6
Chromium	3.8

SD-08	Jun-24
Cadmium	0.86
Chromium	6.9

SW-13	Jun-24
Cadmium	3.4
Chromium	ND
SD-13	Jun-24
Cadmium	0.62
Chromium	1.0

NYSDEC Class A Drinking Water Standard	
Cadmium	5 µg/L
Chromium	50 µg/L

NYSDEC Sediment Guidance Values			
Compound	Class A	Class B	Class C
Cadmium	<1 mg/kg	1-5 mg/kg	5 mg/kg
Chromium	<43 mg/kg	43-110 mg/kg	>110 mg/kg

NYSDEC Site-Specific Hardness-Location	Cadmium	Chromium
SW-01	1.46	50.76
SW-01E	1.44	50.10
SW-04	1.36	47.44
SW-04E	1.53	53.39
SW-06	1.44	50.10
SW-06E	1.36	47.44
SW-11	1.53	53.39
SW-13	1.33	46.10
SW-14	1.35	46.77

Notes:
Surface water analytical results for cadmium and chromium are shown in units of micrograms per liter(µg/L). Sediment analytical results for cadmium and chromium are shown in units of milligrams per kilogram (mg/kg).

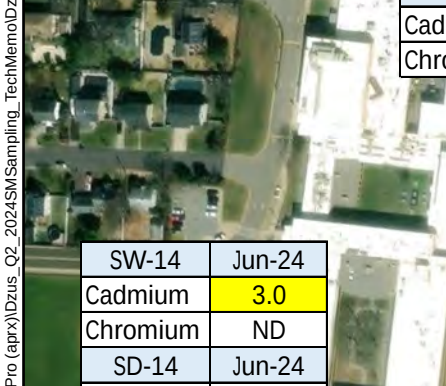
Willetts Creek is classified as a Class C water body, meaning the best usage is fishing. Bold surface water results indicate exceedance of site-specific hardness-corrected NYSDEC Class C AWQS which represent values for protection of aquatic life from chronic effects. Highlighted surface water results indicate exceedance of NYSDEC Class A AWQS which represent values for protection of sources of drinking water. note that Willetts Creek is not a source of drinking water; this comparison is provided for information purposes to provide context for established drinking water criteria.

Comparison of results to NYSDEC Sediment Guidance Values (SGV) classifies sediment into Class A (low risk to aquatic life), Class B (potential risk to aquatic life), or Class C (likely risk to aquatic life). Bold sediment results indicate sediment is considered Class B. Highlighted sediment results indicate sediment is considered Class C.

AWQS = Ambient Water Quality Standards
ND = Non-detect
NYSDEC = New York State Department of Environmental Conservation
SGV = Sediment Guidance Value

\\syracusefp\Syracuse\GIS\data\StateandLocal\Dzus Fastener\PROJECTS\ArcPro (aprx)\Dzus_Q2_2024SMSampling_TechMemo\Dzus_Q2_2024SMSampling_TechMemo.aprx

VICINITY MAP



Legend

- Sediment Sample Location
- Surface Water/Sediment Sample Location

0 150 300
Feet
N

Figure 6
Surface Water and Sediment Analytical Results
June 2024
Dzus Fastener Company, Inc.
West Islip, New York

Map Date: 8/9/2024
Projection: NAD 83 State Plane
New York Long Island 3104 (US Feet)
Source: Esri

NEW YORK STATE Department of Environmental Conservation

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Attachment A

Field Book Log

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2) D2US FASTNER (152033) 06/17/24

Weather AM: 73°F, Sunny
Weather PM: 78°F, Sunny
Personell: M. Boyle, C. Casey, L. Bach, ann. Lowe
Objective: Q2 SM Sampling

0628: EA onsite, Grassing ice
0652: Tailgate H&S Meeting, Calibrate horibas
0700: Remove Standing water atop 13A/B
0730: Start Purge @ MW-13A
0805: Start Purge @ MW-09
0828: Sample MW-13 For TAL Metals (Total + Diss.) and PFAS/SPLIT w/DUP -01
0900: Sample MW-09 For TAL Metals (total + dissolved) and PFAS / SPLIT W/ MS / MSD
0926: Start Purge @ MW-13B
0953: Start Purge @ MW-09B
1018: Sample MW-09B For TAL Metals (Total + Diss).
1020: Sample MW-13B For TAL Metals (Tot. + Diss)
1100: Mos to 4 IV4 Ct.
1115: Sample SW-14 For TAL Metals (tot + Diss) + PFAS
Sample SD-14 For TAL Metals (T&D) + PFAS

~~FB~~ (MB) D2US FASTNER (152033) 6/17/24

1125: Mos to SW/SD 13 (west ISLIP HS)
1150: Sample SW/SD 13 For TAL Metals (Tot. & Diss) + ~~PFAS~~ (MAH B)
1200: Mos to Captree Plaza
1210: Mos TO SD-12 location
1245: Sample SD-12 For TAL Metals (total & Dissolved)
1320: Sample SD-09 For TAL Metals (Tot & Diss.)
1325: Sample SD-08 For TAL Metals (Tot + Diss)
1330: Sample SD-07 For TAL Metals (Tot & Diss).
1340: Sample SW-04 For TAL Metals (Tot + Diss)
1350: Sample SW-04E For TAL Metals (Tot & Diss)
1405: Sample SD-03 For TAL Metals (Tot & Diss.)
1420: Sample SW-06 For TAL Metals (Tot & Dissolved)
1425: Sample SW-06E For TAL Metals (Tot & Diss.)
1440: Sample SW-01 For TAL Metals (Tot & dissolved) + PFAS / SPLIT W/FD-01
1455: Sample SW-01E For TAL ~~Metals (Tot & Diss)~~

4 DZ05 FASTNER (152033) 6/17/24

1505: Sample SD-02 for TAL Metals (Tot ; Diss)

1510: Sample SD-05 for TAL Metals (Tot ; Diss.)

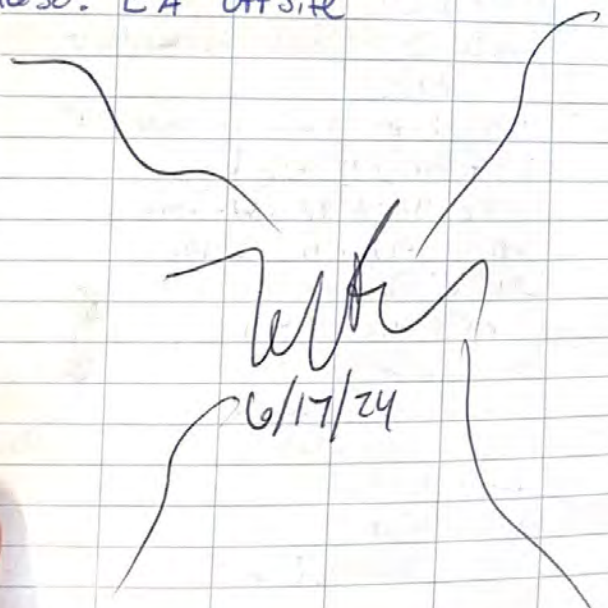
1515: Sample SD-10 for TAL Metals (Tot ; Diss.)

1530: Sample SW-11 For TAL Metals (Tot ; Diss.) + PFAS / Split w/ MS/MSD

1600: John Iannotto offsite

1615: EA pack up, MOS to get ice

1630: EA offsite



DZ05 FASTNER (152033) 6/18/24 5

Weather AM: 75°F, Sunny

Weather PM:

Personell: M. Boyle, L. Bachmann-Love, L. Case

Objective: DZ05 Qz SM Sampling

0715: EA onsite, Calibrate Horibas

0730: Tailgate H+S Meeting

0736: MOS to MW-15A/B locations

0753: Start Purge @ MW-15A

0800: Start Purge @ MW-15B

0830: Sample MW-~~15~~ 15B For TAL Metals (Tot ; Diss.)

0835: Sample MW-15A for TAL Metals (Tot + Diss.)

0851: MOS to MW-22A/B locations

0904: Start Purge @ MW-22B

0916: Start Purge @ MW-22A

0946: Sample MW-22B For TAL Metals (Tot + Diss.)

0955: Sample MW-22A for TAL Metals (Tot + Diss)

1017: Start Purge @ MW-23B

1020: Start Purge @ MW-23A

1050: Sample MW-23A for TAL Metals (Tot + Diss.)

1055: Sample MW-23B for TAL Metals (Tot + Diss.)

Rite in the Rain

6 DZUS FASTNER (152033) 6/18/24

1135: Start Purge @ MW-2
1220: Sample MW-1 for TAL Metals (Tot + Diss.)
1235: Start Purge @ MW-2
1310: Sample MW-2 for TAL Metals (Tot + Diss.)
1320: Start Purge @ MW-3
1415: Sample MW-3 for TAL Metals (Tot + Diss.)
1430: Mos to MW-17 location
1450: Start Purge @ MW-17
1540: Sample MW-17 for TAL Metals (Tot + Diss) and PFAS
1550: Mos to MW-18 location
1611: Start Purge @ MW-18
1630: Complete Slug tests
1630: Sample Soil / GW IDW
1653: Sample MW-18 for TAL Metals (Diss + Tot) and PFAS
1700: Pack Vehicles, Grab Ice for Samples
1715: EA Offsite

ZRR
06/15/2024

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Attachment B

Chain-of-Custody

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Pace Analytical

Phone: 413-525-2332
39 Spruce St
East Longmeadow, MA 01028

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Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

Page 1 of 5

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: NYS DEC | Consultant: EA Engineering
Consultant Address: 333 W. Washington St. Syracuse, NY 13202
Consultant Phone:
Callout Project Name: Dzus Fastener
Project Location: West Islip, NY
Callout Number: 151998
Site/Spill Number: 152033
Project Manager: Hilary Willizms
Pace Analytical Quote Name/Number:
Invoice Recipient:
Sampled By: Lincoln Backman-Lowe

Requested Turnaround Time
DEC Standard 30-calendar day: X
Due Date:

Rush (Prior Approval Required)
1-Day ☐ 2-Day ☐ 3-Day ☐
4-Day ☐ 5-Day ☐ 10-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other: NYSDEC Equis EDD
CLP Like (Level 4) Data Pkg Required: ☑
Email To: hwilliams@ezest.com
Fax To #:

ANALYSIS REQUESTED (Circle Requested Analyses/Reporting List)

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	8260: DER TCL / Oxygenates / CP-51	8270: DER TCL / CP-51	1,4-Dioxane SIM | 8082 PCBs	8081 Pesticide | 8151 Herbicide	TAL Total Metals | TCLP RCRA 8 Metals	PFAS 537 ID | PFAS 1633	TAL Dissolved Metals						# of Containers / [2] Preservation Code / [3] Container Code
																				1 N P / 3 H P / 1 N P
	152033-SM-MW-1-061824	6/18	12:20		X	GW						X		X						
	152033-SM-MW-2-061824	6/18	13:10		X	GW						X		X						
	152033-SM-MW-3-061824	6/18	14:15		X	GW						X		X						
	152033-SM-MW-9-061724	6/17	09:00		X	GW						X	X	X						
	152033-SM-MW-9D-061724	6/17	10:18		X	GW						X		X						
	152033-SM-MW-13A-061724	6/17	08:28		X	GW						X	X	X						
	152033-SM-MW-13B-061724	6/17	10:20		X	GW						X		X						
	152033-SM-MW-15A-061824	6/18	08:35		X	GW						X		X						
	152033-SM-MW-15B-061824	6/18	08:30		X	GW						X		X						
	152033-SM-MW-17-061824	6/18	15:40		X	GW						X	X	X						

Comments: Additional volume for 152033-SM-MW-9-061724 sample included for MS/MSD

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Dissolved Metals Samples
☑ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Relinquished by: (signature)	Date/Time:
Kil Bl-Lowe 6/9/24	15:15
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Program & Regulatory Information
☑ AWQ STDS ☑ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375
Other:

Deliverables
☐ Enhanced Data Package
☑ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD
Other:

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☑ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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39 Spruce St
East Longmeadow, MA 01028

https://www.pacelabs.com/

CHAIN OF CUSTODY RECORD (New York)

Doc # 380 Rev 1_03242017

Page 2 of 5

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: NYS DEC
Consultant: EA Engineering
Consultant Address: 333 W. Washington St. Syracuse, NY 13202
Consultant Phone:
Callout Project Name: Dzus Fastener
Project Location: West Islip, NY
Callout Number: 151998
Site/Spill Number: 152033
Project Manager: Hilary Williams
Pace Analytical Quote Name/Number:
Invoice Recipient:
Sampled By: Lincoln Backman-Lowe

Requested Turnaround Time
DEC Standard 30-calendar day ☒
Due Date:

Rush (Prior Approval Required)
1-Day ☐ 2-Day ☐ 3-Day ☐
4-Day ☐ 5-Day ☐ 10-Day ☐

Data Delivery
Format: PDF ☒ EXCEL ☒
Other: NYSDEC Equis EDD
CLP Like (Level 4) Data Pkg Required: ☒
Email To: hwilliams@ezest.com
Fax To #:

ANALYSIS REQUESTED (Circle Requested Analyses/Reporting List)

	TAL Total Metals / TCLP RCRA 8 Metals	PFAS 1633 / PFAS 537 ID	TAL Dissolved Metals
# of Containers	1	3	1
Preservation Code	N	I	N
Container Code	P	P	P

Other listed analyses: 8260: DER TCL / Oxygenates / CP-51; 8270: DER TCL / CP-51; 1,4-Dioxane SIM / 8082 PCBs; 8081 Pesticide / 8151 Herbicide

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Conc Code	8260	8270	1,4-Dioxane SIM / 8082 PCBs	8081 Pesticide / 8151 Herbicide	TAL Total Metals	PFAS 1633	TAL Dissolved Metals
	152033-SM-MW-18-061824	6/18	16:53		X	GW						X	X	X
	152033-SM-MW-22A-061824	6/18	09:55		X	GW						X		X
	152033-SM-MW-22B-061824	6/18	09:46		X	GW						X		X
	152033-SM-MW-23A-061824	6/18	10:50		X	GW						X		X
	152033-SM-MW-23B-061824	6/18	10:55		X	GW						X		X
	152033-SM-MW-FD-01-061724	6/17	—		X	GW						X	X	X
	152033-SM-FB-01-061724	6/17	1700		X	FB							X	
	152033-SM-FB-02-061824	6/18	1700		X	FB							X	
	152033-SM-EQB-01-061724	6/17	1705		X	RB						X	X	
	152033-SM-EQB-02-061824	6/18	1705		X	RB							X	

Comments:

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Dissolved Metals Samples
☒ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Relinquished by: (signature) [signature]	Date/Time: 6/19/24 15:15
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Program & Regulatory Information
☒ AWQ STDS
☐ NYC Sewer Discharge
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375
☒ NY TOGS
☐ NY CP-51

Deliverables
☐ Enhanced Data Package
☒ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other:

NELAC and AIHA-LAP, LLC Accredited

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Project Entity
☒ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
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DEC Standard 30-calendar day ☑
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Rush (Prior Approval Required)
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	152033-SM-SD-01-061724	6/17	14:40	X		SOL							X		X		1	I	A
	152033-SM-SD-02-061724	6/17	15:05	X		SOL							X						
	152033-SM-SD-03-061724	6/17	14:05	X		SOL							X						
	152033-SM-SD-04-061724	6/17	13:40	X		SOL							X						
	152033-SM-SD-05-061724	6/17	15:10	X		SOL							X						
	152033-SM-SD-06-061724	6/17	14:20	X		SOL							X						
	152033-SM-SD-07-061724	6/17	13:30	X		SOL							X						
	152033-SM-SD-08-061724	6/17	13:35	X		SOL							X						
	152033-SM-SD-09-061724	6/17	13:20	X		SOL							X						
	152033-SM-SD-10-061724	6/17	15:15	X		SOL							X						

Dissolved Metals Samples
☑ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

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V = Vial
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T = Tedlar Bag
O = Other (please define)

Comments:

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature) Lincoln Brickman-Lowe 6/19/24 Date/Time: 15:15
Received by: (signature) Date/Time:
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:

Project & Regulatory Information
☑ AWQ STDS ☐ NY TOGS ☐ NY CP-51
☐ NYC Sewer Discharge
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables
☐ Enhanced Data Package
☑ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☑ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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CHAIN OF CUSTODY RECORD (New York)

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Consultant Phone:	
Callout Project Name:	Daus Fastener
Project Location:	West Islip, NY
Callout Number:	151998
Site/Spill Number:	152033
Project Manager:	Hilary Williams
Pace Analytical Quote Name/Number:	
Invoice Recipient:	
Sampled By:	Lincoln Backman-Lowe

Requested Turnaround Time

DEC Standard 30-calendar day ☑
Due Date:

Rush (Prior Approval Required)

1-Day ☐ 2-Day ☐ 3-Day ☐
4-Day ☐ 5-Day ☐ 10-Day ☐

Data Delivery

Format: PDF ☑ EXCEL ☑
Other: NYSDEC Equis EDD
CLP Like (Level 4) Data Pkg Required: ☑
Email To: hwilliams@eaest.com
Fax To #:

ANALYSIS REQUESTED (Circle Requested Analyses/Reporting List)

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	8260: DER TCL / Oxygenates / CP-51	8270: DER TCL / CP-51	1,4-Dioxane SIM | 8082 PCBs	8081 Pesticide | 8151 Herbicide	(TAL Total Metals) | TCLP RCRA 8 Metals	(PFAS 1633) | PFAS 537 ID	Dissolved TAL Metals	Hardness (6010D)			
	152033-SM-SD-11-061724	6/17	15:30	X		SOL						X	X					
	152033-SM-SD-12-061724	6/17	12:45	X		SOL						X						
	152033-SM-SD-13-061724	6/17	11:50	X		SOL						X						
	152033-SM-SD-14-061724	6/17	11:15	X		SOL						X	X					
	152033-SM-SD-FD-~~06~~-061724	6/17	—	X		SOL						X	X					
	152033-SM-SD-01E-061724	6/17	14:55	X		SOL						X						
	152033-SM-SD-04E-061724	6/17	13:50	X		SOL						X						
	152033-SM-SD-06E-061724	6/17	14:25	X		SOL						X						
	152033-SM-SW-01-061724	6/17	14:40	~~X~~	X	SW							X	X	X			
	152033-SM-SW-01E-061724	6/17	14:55	~~X~~	X	SW								X	X			

Comments:
SW = surface water
Additional volume for 152033-SM-SD-14-061724 sample included for MS/MSD

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature) [signature] 6/19/24	Date/Time: 15:15
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Program/Regulatory Information

☑ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables

☐ Enhanced Data Package
☑ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other:

NELAC and AIHA-LAP, LLC Accredited

Other:

Project Entity
☑ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

# of Containers	
[2] Preservation Code	
[3] Container Code	

Dissolved Metals Samples
☑ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Pace Analytical®

Phone: 413-525-2332
99 Spruce St
East Longmeadow, MA 01028

https://www.pacelabs.com/

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: NYS DEC | Consultant: EA Engineering

Consultant Address: 333 W. Washington St. Syracuse, NY 13202

Consultant Phone:

Callout Project Name: Dzus Fastener

Project Location: West Islip, NY

Callout Number: 151998

Site/Spill Number: 152033

Project Manager: Hilary Williams

Pace Analytical Quote Name/Number:

Invoice Recipient:

Sampled By: Lincoln Backman-Lowe

Requested Turnaround Time
DEC Standard 30-calendar day ☑
Due Date:

Rush (Prior Approval Required)
1-Day ☐ 2-Day ☐ 3-Day ☐
4-Day ☐ 5-Day ☐ 10-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☑
Other: NYSDEC Equis EDD
CLP Like (Level 4) Data Pkg Required: ☑
Email To: hwilliams@eaest.com
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ANALYSIS REQUESTED (Circle Requested Analyses/Reporting List)

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	152033-SM-SW-04-061724	6/17	13:40														X	X					
	152033-SM-SW-04E-061724	6/17	13:50														X	X					
	152033-SM-SW-06-061724	6/17	14:20														X	X					
	152033-SM-SW-06E-061724	6/17	14:25													X	X	X					
	152033-SM-SW-11-061724	6/17	15:30														X	X					
	152033-SM-SW-13-061724	6/17	11:50													X	X	X					
	152033-SM-SW-14-061724	6/17	11:15													X	X	X					
	152033-SM-SW-FD-01-061724	6/17	—																				

Comments: ~~X~~ Additional volume for 152033-SM-SW-11-061724 sample included for MS/MSD~~X~~

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
Kincoln Backman-Lowe 6/19/24	15:15
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Program & Regulatory Information
☑ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables
☐ Enhanced Data Package
☑ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Others
NELAC and AIHA-LAP, LLC Accredited

Fees
Project Entity
☑ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

# of Containers
[2] Preservation Code
[3] Container Code

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☑ Field Filtered
☐ Lab to Filter

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X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

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Attachment C

Field Forms

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GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-1	**Personnel:** M. Boyle / Lincoln Backman-Lowe	**Client:** NYSDEC
Location: 7-Eleven	**Well Condition:** Good	**Weather:** 80's, Sunny
Sounding Method: Ktero	**Gauge Date:** 6/18/24	**Measurement Ref:** TOC
	Gauge Time:	
Stick Up/Down (ft): 0.3	**PID Headspace Reading:** —	**Well Diameter (in):** 2"

Purge Date: 06/18/2024	**Purge Time:** 1135
Purge Method: Low Flow, Peristaltic	**Field Technician:** M. Boyle

Well Volume

A. Well Depth (ft): 15.3	**D. Well Volume (gal/ft):** 0.163	**Depth/Height of Top of PVC:** 0.3
B. Depth to Water (ft): 9.52	**E. Well Volume (gal) (C*D):** 0.942	**Pump Type:** Peristaltic
C. Liquid Depth (ft) (A-B): 5.78	**F. Three Well Volumes (gal) (E*3):** 2.83	**Pump Intake Depth:** 10.3'

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1135	6.20	0.356	17.5	7.21	24.17	175	9.52	0.25	0.0
1140	6.12	0.332	12.6	7.31	22.15	180	9.52	0.25	1.25
1145	6.21	0.243	12.3	5.79	25.43	146	9.52	0.25	2.50
1150	6.37	0.246	9.3	5.76	25.83	129	9.52	0.25	3.75
1155	6.55	0.250	9.7	5.86	26.17	111	9.52	0.25	5.0
1200	6.65	0.252	9.7	5.91	26.39	102	9.52	0.25	6.25
1205	6.87	0.255	9.1	6.03	26.97	87	9.52	0.25	7.50
1210	6.94	0.256	8.2	6.05	27.15	82	9.52	0.25	8.75
1215	6.93	0.254	8.1	6.06	27.21	81	9.52	0.25	10.0
1220	6.90	0.256	8.2	6.07	27.19	80	9.52	0.25	11.25

Total Quantity of Water Removed (gal):	11.25 L	**Sampling Time:**	1220
Samplers:	M. Boyle	**Split Sample With:**	—
Sampling Date:	6/18/2024	**Sample Type:**	Grab

COMMENTS AND OBSERVATIONS:

Volume of Water in Casing (gallons/foot):	1" well: 0.041	2" well: 0.163	4" well: 0.653	6" well: 1.469	
Sample Parameter Stabilization Criteria:	Temp.: ±3%	pH: ±0.1	Cond.: ±3%	ORP: ±10 mV	DO/NTU: ±10%

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-2	**Personnel:** M. Boyle / Lincoln Backman-Lowe	**Client:** NYSDEC
Location: 7-Eleven	**Well Condition:** Good	**Weather:** 80's, Sunny
Sounding Method: Heron WLM	**Gauge Date:** 6/18/2024 **Gauge Time:** —	**Measurement Ref:** TOC
Stick Up/Down (ft): 0.3	**PID Headspace Reading:** —	**Well Diameter (in):** 2"

Purge Date: 6/18/24	**Purge Time:** 1235
Purge Method: Low Flow, Peristaltic	**Field Technician:** M. Boyle

Well Volume

A. Well Depth (ft): 15.3	**D. Well Volume (gal/ft):** 0.163	**Depth/Height of Top of PVC:** 0.3
B. Depth to Water (ft): 8.05	**E. Well Volume (gal) (C*D):** 1.18	**Pump Type:** Peristaltic
C. Liquid Depth (ft) (A-B): 7.25	**F. Three Well Volumes (gal) (E*3):** 3.55	**Pump Intake Depth:** 10.3'

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1235	6.32	0.359	21.8	8.88	21.25	166	8.05	0.25	0.0
1240	6.45	0.420	15.7	7.41	21.06	157	8.05	0.25	1.25
1245	6.48	0.431	15.1	7.00	20.79	156	8.05	0.25	2.50
1250	6.49	0.430	10.6	6.59	20.97	145	8.05	0.25	3.75
1255	6.50	0.433	6.2	6.31	20.99	133	8.05	0.25	5.0
1300	6.51	0.438	4.7	6.09	20.90	133	8.05	0.25	6.25
1305	6.51	0.436	3.1	6.02	20.92	132	8.05	0.25	7.50
1310	6.51	0.433	2.8	6.10	20.87	131	8.05	0.25	8.75

Total Quantity of Water Removed (gal): 6 8.75 L		**Sampling Time:**	1310
Samplers:	M. Boyle / L. Casey	**Split Sample With:**	—
Sampling Date:	06/18/2024	**Sample Type:**	Grab

COMMENTS AND OBSERVATIONS:

Volume of Water in Casing (gallons/foot):	1" well: 0.041	2" well: 0.163	4" well: 0.653	6" well: 1.469	
Sample Parameter Stabilization Criteria:	Temp.: ±3%	pH: ±0.1	Cond.: ±3%	ORP: ±10 mV	DO/NTU: ±10%

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-3	Personnel: M. Boyle / Lincoln Backman-Lowe	Client: NYSDEC
Location: Island Associates	Well Condition: Wew	Weather: 80's, Sunny
Sounding Method: Heron WLM	Gauge Date: 6/18/2	Measurement Ref: TOC
	Gauge Time:	
Stick Up/Down (ft): 0.3	PID Headspace Reading: —	Well Diameter (in): 2"

Purge Date: 06/18/2024	Purge Time: ~~120~~ 1320
Purge Method: Low Flow, Perristaltic	Field Technician: M. Boyle

Well Volume

A. Well Depth (ft): 15.0	D. Well Volume (gal/ft): 0.163	Depth/Height of Top of PVC: 0.3
B. Depth to Water (ft): 5.28	E. Well Volume (gal) (C*D): 1.58	Pump Type: Perristaltic
C. Liquid Depth (ft) (A-B): 9.72	F. Three Well Volumes (gal) (E*3): 4.75	Pump Intake Depth: 10.0'

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1320	9.10	0.326	273	1.22	22.58	41	5.28	0.25	0.0
1325	9.14	0.330	31.2	6.65	23.53	9	5.28	0.25	1.25
1330	9.16	0.330	19.7	0.62	23.90	0	5.28	0.25	2.50
1335	9.26	0.309	71.2	0.96	22.81	-44	5.28	0.25	3.75
1340	9.27	0.308	67.4	0.71	22.70	-55	5.28	0.25	5.0
1345	~	~	~	Clean	Horiba	~	~	~	~
1350	9.14	0.304	53.8	1.24	22.86	-49	5.28	0.25	6.25
1355	9.25	0.304	49.8	0.63	22.25	-89	5.28	0.25	7.5
1400	9.26	0.304	41.7	0.52	22.36	-91	5.28	0.25	8.75
1405	9.27	0.303	35.2	0.42	22.38	-99	5.28	0.25	10.0
1410	9.28	0.302	34.7	0.43	22.34	-102	5.28	0.25	11.25
1415	9.29	0.302	34.3	0.44	22.36	-104	5.28	0.25	12.50

Total Quantity of Water Removed (gal):	12.50L	Sampling Time:	1415
Samplers:	M. Boyle / L. Casey	Split Sample With:	—
Sampling Date:	6/18/24	Sample Type:	Grab

COMMENTS AND OBSERVATIONS: —

Volume of Water In Casing (gallons/foot):	1" well: 0.041	2" well: 0.163	4" well: 0.653	6" well: 1.469	
Sample Parameter Stabilization Criteria:	Temp.: ±3%	pH: ±0.1	Cond.: ±3%	ORP: ±10 mV	DO/NTU: ±10%

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-09	**Personnel:** M. Boyle / Lincoln Backman-Lowe	**Client:** NYSDEC
Location: Island Associates	**Well Condition:** NEW	**Weather:** 70's, Sunny
Sounding Method: Heron WLM	**Gauge Date:** 06/17/2024	**Measurement Ref:** TOC
	Gauge Time:	
Stick Up/Down (ft): FLUSH	**PID Headspace Reading:** —	**Well Diameter (in):** 2"

Purge Date: 06/17/2024	**Purge Time:** 0805
Purge Method: Peristaltic Pump	**Field Technician:** M. Boyle

Well Volume

A. Well Depth (ft): 11.5	**D. Well Volume (gal/ft):** 0.163	**Depth/Height of Top of PVC:** 0.3
B. Depth to Water (ft): 9.1	**E. Well Volume (gal) (C*D):** 0.391	**Pump Type:** Peristaltic
C. Liquid Depth (ft) (A-B): 2.4	**F. Three Well Volumes (gal) (E*3):** 1.17	**Pump Intake Depth:** 5' From Bottom

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0805	6.29	0.466	363	2.85	20.96	286	—	0.25	0.0
0810	6.37	0.453	312	1.97	20.99	297	—	0.25	1.25
0815	6.39	0.449	255	1.91	20.88	306	—	0.25	2.50
0820	6.51	0.449	199	2.12	20.75	305	—	0.25	3.75
0825	6.42	0.466	106	2.34	20.15	311	—	0.25	5.0
0830	6.37	0.441	96.3	2.15	20.40	309	—	0.25	6.25
0835	6.44	0.446	93.2	2.21	20.44	309	—	0.25	7.50
0840	—	—	—	Clean Horiba	—	—	—	—	—
0845	6.87	0.468	14.1	2.68	20.93	181	—	0.25	8.75
0850	6.83	0.462	9.7	1.68	20.67	225	—	0.25	10.0
0855	6.81	0.468	8.8	1.72	20.51	228	—	0.25	11.25
0900	6.83	0.466	9.3	1.69	20.58	228	—	0.25	12.5

Total Quantity of Water Removed (gal):	12.5 L	**Sampling Time:**	0900
Samplers:	M. Boyle	**Split Sample With:**	MS / MSD
Sampling Date:	06/17/2024	**Sample Type:**	Grab

COMMENTS AND OBSERVATIONS: —

Volume of Water in Casing (gallons/foot):	1" well: 0.041	2" well: 0.163	4" well: 0.653	6" well: 1.469	
Sample Parameter Stabilization Criteria:	Temp.: ±3%	pH: ±0.1	Cond.: ±3%	ORP: ±10 mV	DO/NTU: ±10%

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-9B	**Personnel:** M. Boyle / Lincoln Backman-Lowe	**Client:** NYSDEC
Location: Island Associates	**Well Condition:** WEW	**Weather:** 70's, Sunny
Sounding Method: Heron WLM	**Gauge Date:** 06/17/2024 **Gauge Time:**	**Measurement Ref:** TOC
Stick Up/Down (ft): 0.3	**PID Headspace Reading:** —	**Well Diameter (in):** 2"

Purge Date: 06/17/2024	**Purge Time:** 0953
Purge Method: Peristaltic	**Field Technician:** M. Boyle

Well Volume

A. Well Depth (ft): 44.5	**D. Well Volume (gal/ft):** 0.163	**Depth/Height of Top of PVC:** 0.3
B. Depth to Water (ft): 9.76	**E. Well Volume (gal) (C*D):** 5.66	**Pump Type:** Peristaltic
C. Liquid Depth (ft) (A-B): 34.74	**F. Three Well Volumes (gal) (E*3):** 17.0	**Pump Intake Depth:** 39.5'

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0953	6.39	0.124	14.2	2.04	25.75	221	—	0.75	0.0
0958	6.18	0.123	9.3	1.24	20.57	229	—	0.75	1.25
1003	6.06	0.125	6.7	1.01	25.18	232	—	0.75	2.5
1008	5.95	0.122	12.5	0.83	24.63	231	—	0.75	3.75
1013	5.88	0.122	12.9	0.80	24.59	231	—	0.75	5.0
1018	5.92	0.122	12.2	0.78	24.65	231	—	0.75	6.25

Total Quantity of Water Removed (gal):	6.25 L	**Sampling Time:**	1018
Samplers:	M. Boyle	**Split Sample With:**	—
Sampling Date:	06/17/2024	**Sample Type:**	Grab

COMMENTS AND OBSERVATIONS:

Volume of Water In Casing (gallons/foot):	1" well: 0.041	2" well: 0.163	4" well: 0.653	6" well: 1.469	
Sample Parameter Stabilization Criteria:	Temp.: ±3%	pH: ±0.1	Cond.: ±3%	ORP: ±10 mV	DO/NTU: ±10%

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-13A	**Personnel:** M. Boyle / Lincoln Backman-Lowe	**Client:** NYSDEC
Location: Parking lot of liquor store	**Well Condition:** good	**Weather:** Sunny
Sounding Method: Heron WLM	**Gauge Date:** / **Gauge Time:**	**Measurement Ref:** TOC
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):** 2 in.

Purge Date: 6/07/24	**Purge Time:** 0730
Purge Method: Low-Flow	**Field Technician:** L. Casey

Well Volume

A. Well Depth (ft): 10.99 Ft.	**D. Well Volume (gal/ft):** 0.163	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 4.20 Ft	**E. Well Volume (gal) (C*D):** 1.09	**Pump Type:** Peristaltic
C. Liquid Depth (ft) (A-B): 6.69	**F. Three Well Volumes (gal) (E*3):** 3.27	**Pump Intake Depth:** 8.00 Ft.

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0733	6.10	0.406	86.9	8.59	19.05	177	4.20	0.25	
0738	6.12	0.419	73.1	7.87	18.64	200	—	0.25	
0743	6.12	0.424	60.6	7.66	18.54	206	—	0.25	
0748	6.12	0.423	52.4	7.44	18.50	208	—	0.25	
0753	6.13	0.427	44.9	7.25	18.49	212	—	0.25	
0758	6.13	0.430	38.6	7.05	18.49	218	—	0.25	
0803	6.14	0.434	39.9	6.87	18.46	212	—	0.25	
0808	6.14	0.439	37.8	6.37	18.46	214	—	0.25	
0813	6.15	0.448	38.2	6.44	18.43	224	—	0.25	
0818	6.16	0.446	38.6	6.05	18.46	226	—	0.25	
0823	6.16	0.453	38.3	6.00	18.48	225	—	0.25	
0828	6.17	0.453	38.3	5.97	18.58	223	—	0.25	

Total Quantity of Water Removed (gal):		**Sampling Time:**	0828
Samplers:	L. Casey	**Split Sample With:**	
Sampling Date:	6/7/24	**Sample Type:**	Grab

COMMENTS AND OBSERVATIONS: Well gauged after sample due to PFAS

Volume of Water in Casing (gallons/foot):	1" well: 0.041	2" well: 0.163	4" well: 0.653	6" well: 1.469	
Sample Parameter Stabilization Criteria:	Temp.: ±3%	pH: ±0.1	Cond.: ±3%	ORP: ±10 mV	DO/NTU: ±10%

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-13B	**Personnel:** M. Boyle / Lincoln Backman-Lowe	**Client:** NYSDEC
Location: Parking lot next to liquor store	**Well Condition:** good	**Weather:** Sunny
Sounding Method: Heron w/m	**Gauge Date:** 06/17/24	**Measurement Ref:** TOC
	Gauge Time:	
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):** 2 in

Purge Date: 6/17/2024	**Purge Time:** 0926
Purge Method: Low-flow	**Field Technician:** L. Casey

Well Volume

A. Well Depth (ft): 44.25	**D. Well Volume (gal/ft):** 0.163	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 4.05 ft	**E. Well Volume (gal) (C*D):** 6.55	**Pump Type:** Peristaltic
C. Liquid Depth (ft) (A-B): 40.2	**F. Three Well Volumes (gal) (E*3):** 19.66	**Pump Intake Depth:** 38.25 ft

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0930	5.78	0.159	1.1	3.36	19.21	211	4.02	0.25	
0935	5.49	0.155	0.0	2.66	18.60	234	4.02		1.25
0940	5.45	0.153	0.0	2.47	18.45	242	4.01		2.50
0945	5.44	0.153	0.0	2.34	18.43	246	4.01		3.75
0950	5.43	0.151	6.0	2.48	18.37	244	4.01		5.00
0955	5.43	0.149	0.0	2.53	18.40	251	4.01		6.25
1000	5.43	0.149	0.0	3.13	18.53	254	4.01		7.50
1005	5.42	0.150	0.0	2.68	18.54	256	4.01		8.75
1010	5.42	0.149	0.0	2.54	18.80	257	4.01		10.00
1015	5.42	0.150	0.0	2.56	18.83	257	4.01		11.25
1020	5.42	0.149	0.0	2.56	18.84	257	4.01	V	12.50

Total Quantity of Water Removed (gal):		**Sampling Time:**	1020
Samplers:	L. Casey	**Split Sample With:**	
Sampling Date:	6/17/24	**Sample Type:**	Grab

COMMENTS AND OBSERVATIONS:

Volume of Water in Casing (gallons/foot):	1" well: 0.041	2" well: 0.163	4" well: 0.653	6" well: 1.469	
Sample Parameter Stabilization Criteria:	Temp.: ±3%	pH: ±0.1	Cond.: ±3%	ORP: ±10 mV	DO/NTU: ±10%

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-15A	**Personnel:** M. Boyle / Lincoln Backman-Lowe	**Client:** NYSDEC
Location: front of ACE Hardware	**Well Condition:** good	**Weather:** Sunny
Sounding Method: Heron WLM	**Gauge Date:** 6/18/24 **Gauge Time:**	**Measurement Ref:** TOC
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):** 2"

Purge Date: 06/18/24	**Purge Time:** 0753
Purge Method: Low-flow	**Field Technician:** L. Casey

Well Volume

A. Well Depth (ft): 28.82 Ft.	**D. Well Volume (gal/ft):** 0.163	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 6.78 ft.	**E. Well Volume (gal) (C*D):** 3.59	**Pump Type:** Peristaltic
C. Liquid Depth (ft) (A-B): 22.04 ft.	**F. Three Well Volumes (gal) (E*3):** 10.78	**Pump Intake Depth:** 23.82 ft.

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0755	6.19	0.482	4.8	4.95	17.54	264	6.79	0.25	–
0800	6.14	0.482	2.6	4.84	17.38	280	6.79		1.25
0805	6.08	0.495	0.0	4.56	17.64	292	6.79		2.50
0810	6.03	0.495	0.0	4.37	17.64	308	6.79		3.75
0815	5.97	0.494	0.0	4.18	17.59	318	6.79		5.00
0820	5.93	6.493	0.0	3.98	17.87	325	6.79		6.25
0825	5.91	0.492	0.0	3.88	17.91	330	6.79		7.50
0830	5.90	0.492	0.0	3.86	17.94	332	6.79		8.75
0835	5.89	0.492	0.0	3.85	12.95	333	6.79		10.00

Total Quantity of Water Removed (gal): 2.64
Samplers: L. Casey
Sampling Date: 06/18/24
Sampling Time: 0835
Split Sample With:
Sample Type: Grab

COMMENTS AND OBSERVATIONS:

Volume of Water in Casing (gallons/foot):	1" well: 0.041	2" well: 0.163	4" well: 0.653	6" well: 1.469	
Sample Parameter Stabilization Criteria:	Temp.: ±3%	pH: ±0.1	Cond.: ±3%	ORP: ±10 mV	DO/NTU: ±10%

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-10B	**Personnel:** M. Boyle / Lincoln Backman-Lowe	**Client:** NYSDEC
Location: Ace Hardware	**Well Condition:** OK	**Weather:** 70's, Sunny
Sounding Method: Heron WLM	**Gauge Date:** 06/18/24	**Measurement Ref:** TOC
	Gauge Time:	
Stick Up/Down (ft): 0.3	**PID Headspace Reading:**	**Well Diameter (in):** 2"

Purge Date: 06/18/2024	**Purge Time:** 0800
Purge Method: Peristaltic	**Field Technician:** M. Boyle

Well Volume

A. Well Depth (ft): 44.25	**D. Well Volume (gal/ft):** 0.163	**Depth/Height of Top of PVC:** 0.3
B. Depth to Water (ft): 6.80	**E. Well Volume (gal) (C*D):** 6.16	**Pump Type:** Peristaltic
C. Liquid Depth (ft) (A-B): 37.45	**F. Three Well Volumes (gal) (E*3):** 18.3	**Pump Intake Depth:** 39.25'

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0800	5.17	0.338	8.9	2.95	17.21	149	–	0.25	0.00
0805	5.16	0.339	4.6	2.27	17.10	143	–	0.25	1.25
0810	5.16	0.337	0.0	1.02	16.84	134	–	0.25	2.50
0815	5.17	0.337	0.0	0.64	16.87	132	–	0.25	3.75
0820	5.18	0.336	0.0	0.47	16.95	130	–	0.25	5.0
0825	5.18	0.335	0.0	0.43	17.12	128	–	0.25	6.25
0830	5.18	0.334	0.0	0.42	17.03	126	–	0.25	7.5

Total Quantity of Water Removed (gal):	7.5L	**Sampling Time:**	0830
Samplers:	M. Boyle	**Split Sample With:**	–
Sampling Date:	06/18/2024	**Sample Type:**	Grab

COMMENTS AND OBSERVATIONS:

Volume of Water in Casing (gallons/foot):	1" well: 0.041	2" well: 0.163	4" well: 0.653	6" well: 1.469	
Sample Parameter Stabilization Criteria:	Temp.: ±3%	pH: ±0.1	Cond.: ±3%	ORP: ±10 mV	DO/NTU: ±10%

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-17	**Personnel:** M. Boyle / Lincoln Backman-Lowe	**Client:** NYSDEC
Location: W. Islip Blvd.	**Well Condition:** OK	**Weather:** 80's, Sunny
Sounding Method: Heron WLM	**Gauge Date:** 6/18/24 **Gauge Time:**	**Measurement Ref:** TOC
Stick Up/Down (ft): 3.0 Ft	**PID Headspace Reading:** 0	**Well Diameter (in):** 2"

Purge Date: 6/18/24	**Purge Time:** 1450
Purge Method: Low Flow, Peristaltic	**Field Technician:** M. Boyle

Well Volume

A. Well Depth (ft): 16.0	**D. Well Volume (gal/ft):** 0.163	**Depth/Height of Top of PVC:** 0.3
B. Depth to Water (ft): 8.24	**E. Well Volume (gal) (C*D):** 1.26	**Pump Type:** Peristaltic
C. Liquid Depth (ft) (A-B): 7.76	**F. Three Well Volumes (gal) (E*3):** 3.79	**Pump Intake Depth:** 11.0

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1450	7.27	0.264	585	8.33	16.85	4	8.24	0.25	0.0
1455	7.04	0.234	161	8.34	18.67	23	8.24	0.25	1.25
1500	6.95	0.234	160	8.23	18.44	34	8.24	0.25	2.50
1505	6.86	0.230	144	7.73	18.11	54	8.24	0.25	3.75
1510	6.80	0.232	83.5	7.14	17.94	69	8.24	0.25	5.0
1515	6.78	0.230	83.7	6.71	18.33	67	8.24	0.25	6.25
1520	6.77	0.233	43.5	6.33	18.55	64	8.24	0.25	7.50
1525	6.76	0.238	27.7	6.06	18.73	51	8.24	0.25	8.75
1530	6.75	0.237	22.6	5.92	18.76	50	8.24	0.25	10.0
1535	6.74	0.237	21.8	5.90	18.71	46	8.24	0.25	11.25
1540	6.73	0.235	20.9	5.96	18.68	46	8.24	0.25	12.50

Total Quantity of Water Removed (gal):	12.50 L	**Sampling Time:**	1540
Samplers:	M. Boyle, L. Casey	**Split Sample With:**	—
Sampling Date:	6/18/2024	**Sample Type:**	Grab

COMMENTS AND OBSERVATIONS:

Volume of Water in Casing (gallons/foot):	1" well: 0.041	2" well: 0.163	4" well: 0.653	6" well: 1.469	
Sample Parameter Stabilization Criteria:	Temp.: ±3%	pH: ±0.1	Cond.: ±3%	ORP: ±10 mV	DO/NTU: ±10%

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-18	**Personnel:** M. Boyle / Lincoln Backman-Lowe	**Client:** NYSDEC
Location: West Islip HS	**Well Condition:** good	**Weather:** Sunny
Sounding Method: Heron WLM	**Gauge Date:**	**Measurement Ref:** TOC
	Gauge Time:	
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):** 2 in

Purge Date: 06/18/24	**Purge Time:** 16:11
Purge Method: Low-Flow	**Field Technician:** L. Casey

Well Volume

A. Well Depth (ft): 13.52 Ft.	**D. Well Volume (gal/ft):** 0.163	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 5.92	**E. Well Volume (gal) (C*D):** 1.24	**Pump Type:** Peristaltic
C. Liquid Depth (ft) (A-B): 7.60	**F. Three Well Volumes (gal) (E*3):** 3.71	**Pump Intake Depth:** 10 ft.

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1613	7.22	0.163	9.6	7.97	18.04	121	5.92	0.25	–
1618	7.04	0.184	5.7	6.45	17.24	134	5.92		1.25
1623	6.97	0.198	4.8	6.46	17.30	140	5.92		2.50
1628	6.93	0.210	4.9	6.26	17.17	145	5.92		5.75
1633	6.90	0.207	1.7	5.95	16.98	150	5.92		5.00
1638	6.89	0.210	2.7	5.82	17.06	152	5.92		6.25
1643	6.89	0.205	2.5	5.81	16.98	154	5.92		7.50
1648	6.88	0.209	1.7	5.79	16.97	155	5.92		8.75
1653	6.88	0.207	1.8	5.77	16.95	156	5.92		
								✓	

Total Quantity of Water Removed (gal):		**Sampling Time:**	~~1655~~ LC 1653
Samplers:	L. Casey / M. Boyle	**Split Sample With:**	
Sampling Date:	06/18/24	**Sample Type:**	Grab

COMMENTS AND OBSERVATIONS:

Volume of Water in Casing (gallons/foot):	1" well: 0.041	2" well: 0.163	4" well: 0.653	6" well: 1.469	
Sample Parameter Stabilization Criteria:	Temp.: ±3%	pH: ±0.1	Cond.: ±3%	ORP: ±10 mV	DO/NTU: ±10%

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-22A	**Personnel:** M. Boyle / Lincoln Backman-Lowe	**Client:** NYSDEC
Location: Adjacent to Laundromat	**Well Condition:** Good	**Weather:** 76°F, Sunny
Sounding Method: Heron WLM	**Gauge Date:** 06/18/2024 **Gauge Time:**	**Measurement Ref:** TOC
Stick Up/Down (ft): 0.3	**PID Headspace Reading:** —	**Well Diameter (in):** 2"

Purge Date: 06/18/2024	**Purge Time:** 0910
Purge Method: Low flow, Peristaltic	**Field Technician:** M. Boyle

Well Volume

A. Well Depth (ft): ~~14.4~~ MB 14.4	**D. Well Volume (gal/ft):** 0.163	**Depth/Height of Top of PVC:** 0.3
B. Depth to Water (ft): 7.44	**E. Well Volume (gal) (C*D):** ~~1.00~~ 1.13	**Pump Type:** Peristaltic
C. Liquid Depth (ft) (A-B): ~~37.06~~ 6.96	**F. Three Well Volumes (gal) (E*3):** 3.4 ~~18.1~~ MB	**Pump Intake Depth:** 39.5

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0910	6.35	0.236	89.5	0.61	20.05	-18	—	0.25	0.0
0915	6.36	0.240	69.4	0.49	19.41	-27	—	0.25	1.25
0920	6.38	0.240	65.4	0.43	19.15	-34	—	0.25	2.50
0925	6.33	0.235	56.4	0.43	18.72	-30	—	0.25	3.75
0930	6.33	0.232	58.9	0.43	18.60	-29	—	0.25	5.00
0935	—	—	—	Clean	Horiba	—	—	—	—
0940	6.03	0.212	31.6	2.79	18.60	116	—	0.25	6.25
0945	6.10	0.217	0.5	3.08	18.19	1	—	0.25	7.50
0950	6.12	0.217	0.2	3.03	18.16	-1	—	0.25	8.75
0955	6.13	0.218	0.0	3.00	18.09	-4	—	0.25	10.0

Total Quantity of Water Removed (gal):	10.0 L	**Sampling Time:**	0935
Samplers:	M. Boyle	**Split Sample With:**	—
Sampling Date:	06/18/2024	**Sample Type:**	Grab

COMMENTS AND OBSERVATIONS:

Volume of Water in Casing (gallons/foot):	1" well: 0.041	2" well: 0.163	4" well: 0.653	6" well: 1.469	
Sample Parameter Stabilization Criteria:	Temp.: ±3%	pH: ±0.1	Cond.: ±3%	ORP: ±10 mV	DO/NTU: ±10%

0946

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-22B	**Personnel:** M. Boyle / Lincoln Backman-Lowe	**Client:** NYSDEC
Location: Grass next to laundromat	**Well Condition:** Good	**Weather:** Sunny
Sounding Method: Heron WLM	**Gauge Date:** 06/18/24	**Measurement Ref:** TOC
	Gauge Time:	
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):** 2 in

Purge Date: 06/18/24	**Purge Time:** 0904
Purge Method: Low-Flow	**Field Technician:** L. Casey

Well Volume

A. Well Depth (ft): 44.84	**D. Well Volume (gal/ft):** 0.163	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 7.24	**E. Well Volume (gal) (C*D):** 6.13	**Pump Type:** Peris
C. Liquid Depth (ft) (A-B): 37.60	**F. Three Well Volumes (gal) (E*3):** 18.39	**Pump Intake Depth:** 38.84

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
0906	6.18	0.583	3.6	8.92	18.74	118	7.26	0.25	–
0911	6.21	0.593	1.7	1.33	19.85	126	7.26		1.25
0916	6.25	0.595	0.0	1.43	19.68	132	7.26		2.50
0921	6.14	0.594	0.0	0.96	19.96	140	7.26		3.75
0926	6.13	0.594	0.0	0.67	19.67	148	7.26		5.00
0931	6.16	0.594	0.0	0.59	19.68	150	7.26		6.25
0936	6.16	0.594	0.0	0.55	19.71	152	7.26		7.50
0941	6.16	0.594	0.0	0.54	19.72	153	7.26		8.75
0946	6.16	0.594	0.0	0.51	19.72	154	7.26	V	10.00

Total Quantity of Water Removed (gal):	2.69	**Sampling Time:**	0946
Samplers:	L. Casey	**Split Sample With:**	
Sampling Date:	06/18/24	**Sample Type:**	Grab

COMMENTS AND OBSERVATIONS:

Volume of Water in Casing (gallons/foot):	1" well: 0.041	2" well: 0.163	4" well: 0.653	6" well: 1.469	
Sample Parameter Stabilization Criteria:	Temp.: ±3%	pH: ±0.1	Cond.: ±3%	ORP: ±10 mV	DO/NTU: ±10%

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-23A	**Personnel:** M. Boyle / Lincoln Backman-Lowe	**Client:** NYSDEC
Location: Behind	**Well Condition:** OK	**Weather:** 76°F, Sunny
Sounding Method: Heron WLM	**Gauge Date:** 6/18/24 **Gauge Time:**	**Measurement Ref:** TOC
Stick Up/Down (ft): 0.3	**PID Headspace Reading:** —	**Well Diameter (in):** 2"

Purge Date: 6/18/24	**Purge Time:** 1020
Purge Method: Low Flow, Peristaltic	**Field Technician:** M. Boyle

Well Volume

A. Well Depth (ft): 14.3'	**D. Well Volume (gal/ft):** 0.163	**Depth/Height of Top of PVC:** 0.3
B. Depth to Water (ft): 6.38	**E. Well Volume (gal) (C*D):** 1.29	**Pump Type:** Peristaltic
C. Liquid Depth (ft) (A-B): 7.92	**F. Three Well Volumes (gal) (E*3):** 3.87	**Pump Intake Depth:** 9.3'

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1020	6.14	0.558	1.5	1.08	21.03	40	—	0.25	0.0
1025	6.16	6.541	0.0	0.50	21.28	33	—	0.25	1.25
1030	6.17	0.535	0.0	0.53	21.53	30	—	0.25	2.50
1035	6.18	0.524	0.0	0.59	21.81	28	—	0.25	3.75
1040	6.19	0.528	0.0	0.56	22.06	25	—	0.25	5.0
1045	6.19	0.526	0.0	0.55	22.09	24	—	0.25	6.25
1050	6.19	0.529	0.0	0.54	22.12	24	—	0.25	7.50

Total Quantity of Water Removed (gal):	7.50 L	**Sampling Time:**	1050
Samplers:	M. Boyle	**Split Sample With:**	—
Sampling Date:	06/18/24	**Sample Type:**	Grab

COMMENTS AND OBSERVATIONS:

Volume of Water in Casing (gallons/foot):	1" well: 0.041	2" well: 0.163	4" well: 0.653	6" well: 1.469	
Sample Parameter Stabilization Criteria:	Temp.: ±3%	pH: ±0.1	Cond.: ±3%	ORP: ±10 mV	DO/NTU: ±10%

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW-23B	**Personnel:** M. Boyle / Lincoln Backman-Lowe	**Client:** NYSDEC
Location:	**Well Condition:**	**Weather:** Sunny
Sounding Method: Heron WLM	**Gauge Date:** 06/18/24 **Gauge Time:**	**Measurement Ref:** TOC
Stick Up/Down (ft):	**PID Headspace Reading:**	**Well Diameter (in):** 2 in

Purge Date: 06/18/24	**Purge Time:** 1017
Purge Method: Low Flow	**Field Technician:** L. Casey

Well Volume

A. Well Depth (ft): 44.55	**D. Well Volume (gal/ft):** 0.163	**Depth/Height of Top of PVC:**
B. Depth to Water (ft): 6.29	**E. Well Volume (gal) (C*D):** 6.23	**Pump Type:** Peristaltic
C. Liquid Depth (ft) (A-B): 38.26	**F. Three Well Volumes (gal) (E*3):** 18.71	**Pump Intake Depth:** 38.5 ft.

Water Quality Parameters

Time (hrs)	pH (pH units)	Conductivity (mS/cm)	Turbidity (ntu)	DO (mg/L)	Temperature (°C)	ORP (mV)	DTW (ft btoc)	Rate (Lpm)	Volume (liters)
1020	6.07	0.226	43.1	2.47	19.54	36	6.30	0.25	—
1025	6.39	0.227	43.5	1.55	19.96	63	6.30		1.25
1030	6.42	0.228	42.7	1.46	19.98	76	6.30		2.50
1035	6.31	0.222	32.3	1.41	20.28	60	6.36		3.75
1040	6.28	0.212	23.8	1.07	20.44	59	6.30		5.00
1045	6.20	0.210	23.1	1.00	20.51	58	6.30		6.25
1050	6.21	0.211	23.4	0.97	20.57	55	6.30		7.50
1055	6.22	0.210	23.6	0.89	20.60	53	6.30		8.75

Total Quantity of Water Removed (gal):		**Sampling Time:**	1055
Samplers:	L. Casey	**Split Sample With:**	
Sampling Date:	06/18/24	**Sample Type:**	Grab

COMMENTS AND OBSERVATIONS:

Volume of Water in Casing (gallons/foot):	1" well: 0.041	2" well: 0.163	4" well: 0.653	6" well: 1.469	
Sample Parameter Stabilization Criteria:	Temp.: ±3%	pH: ±0.1	Cond.: ±3%	ORP: ±10 mV	DO/NTU: ±10%

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EA Science and Technology

SURFACE WATER SAMPLE LOG

Job. No. 152033	**Client:** NYSDEC **Project:** Dzus	**Location** West Islip, NY	
Sampling Location Description: Behind Captree Plaza (Eastern stream-bank)		**Sample Location ID:** SW-01	
Sample Method: Perristaltic Pump		Sheet 1 of 1	
Depth of Water Body:		**Sampling Date/Time**	
Width of Water Body:		**Start**	**Finish**
Water Body Location Willetts Creek		DATE	DATE
		TIME	TIME

Coordinates: Northing: Easting:
Surface Water Elevation:
Reference Elevation:
Reference Description:

Surface Conditions:
Weather: 78 °F, Sunny

Water Quality Parameters							
Time (hrs)	**pH** (pH units)	**Cond.** (mS/cm)	**Turb.** (ntu)	**DO** (mg/L)	**Temp** (°C)	**ORP** (mV)	**Description of Surface Water**
-----	6.44	0.306	0.0	6.13	21.50	92	Moderate flow of moving water, deeper than most points, clear

Total Quantity of Water Removed (gal):
Samplers: MB, LBL, LC
Sampling Date: 06/17/24

Sampling Time: 14:40
Split Sample With: FD-01
Sample Type: Grab

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

SURFACE WATER SAMPLE LOG

Job. No. 152033	**Client:** NYSDEC **Project:** Dzus
Location	West Islip, NY
Sampling Location Description:	Behind Captree Plaza (Eastern stream-bank)
Sample Location ID:	SW-01E
Sheet 1 of 1	
Sample Method:	Perristaltic Pump
Depth of Water Body:	
Width of Water Body:	
Water Body Location	Willetts Creek

Coordinates: Northing: Easting:
Surface Water Elevation:
Reference Elevation:
Reference Description:

Sampling Date/Time	Start	Finish
	DATE	DATE
	TIME	TIME

Surface Conditions:
Weather: 78 °F, Sunny

Water Quality Parameters							
Time (hrs)	**pH** (pH units)	**Cond.** (mS/cm)	**Turb.** (ntu)	**DO** (mg/L)	**Temp** (°C)	**ORP** (mV)	**Description of Surface Water**
1455	6.13	0.298	0.0	7.52	20.35	93	Moderate flow of moving water, deeper than most points, clear

Total Quantity of Water Removed (gal):
Samplers: MB, LBL, LC
Sampling Date: 06/17/24

Sampling Time: 1455
Split Sample With: N/A
Sample Type: Grab

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EA Science and Technology

SURFACE WATER SAMPLE LOG

Job. No. 152033	**Client:** NYSDEC **Project:** Dzus	**Location** West Islip, NY	
Sampling Location Description: Behind Captree Plaza (Willetts Creek)		**Sample Location ID:** SW-04	
Sample Method: Perristaltic Pump		Sheet 1 of 1	
Depth of Water Body:		**Sampling Date/Time**	
Width of Water Body:		**Start**	**Finish**
Water Body Location Willetts Creek		DATE	DATE
		TIME	TIME

Coordinates: Northing: Easting:
Surface Water Elevation:
Reference Elevation:
Reference Description:

Surface Conditions:
Weather: 78 °F, Sunny

Water Quality Parameters							
Time (hrs)	**pH** (pH units)	**Cond.** (mS/cm)	**Turb.** (ntu)	**DO** (mg/L)	**Temp** (°C)	**ORP** (mV)	**Description of Surface Water**
1540	6.18	0.321	0.0	5.98	19.26	80	Moderate flow of moving water, shallow, clear

Total Quantity of Water Removed (gal):
Samplers: MB, LBL, LC
Sampling Date: 06/17/24

Sampling Time: 1340
Split Sample With: N/A
Sample Type: Grab

EA Engineering, P.C. and Its Affiliate
EA Science and Technology

SURFACE WATER SAMPLE LOG

Job. No. 152033	**Client:** NYSDEC **Project:** Dzus
Location	West Islip, NY
Sampling Location Description:	Behind Capree Plaza (Eastern stream-bank)
Sample Location ID:	SW-04E
	Sheet 1 of 1
Sample Method:	Perristaltic Pump
Depth of Water Body:	
Width of Water Body:	
Water Body Location	Willetts Creek

Sampling Date/Time

Start	Finish
DATE	DATE
TIME	TIME

Coordinates: Northing: Easting:
Surface Water Elevation:
Reference Elevation:
Reference Description:

Surface Conditions:
Weather: 78 °F, Sunny

Water Quality Parameters

Time (hrs)	pH (pH units)	Cond. (mS/cm)	Turb. (ntu)	DO (mg/L)	Temp (°C)	ORP (mV)	Description of Surface Water
1350	6.40	0.285	0.0	11.77	19.36	186	Moderate flow of moving water, shallow, clear

Total Quantity of Water Removed (gal):
Samplers: MB, LBL, LC
Sampling Date: 06/17/24

Sampling Time: 1350
Split Sample With: N/A
Sample Type: Grab

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SURFACE WATER SAMPLE LOG

Job. No. 152033	**Client:** NYSDEC **Project:** Dzus	**Location** West Islip, NY	
Sampling Location Description: Behind Captree Plaza (Willetts Creek)		**Sample Location ID:** SW-06	
Sample Method: Perristaltic Pump		Sheet 1 of 1	
Depth of Water Body:		**Sampling Date/Time**	
Width of Water Body:		**Start**	**Finish**
Water Body Location Willetts Creek		DATE	DATE
		TIME	TIME

Coordinates: Northing: Easting:
Surface Water Elevation:
Reference Elevation:
Reference Description:

Surface Conditions:
Weather: 78 °F, Sunny

Water Quality Parameters							
Time (hrs)	**pH** (pH units)	**Cond.** (mS/cm)	**Turb.** (ntu)	**DO** (mg/L)	**Temp** (°C)	**ORP** (mV)	**Description of Surface Water**
1420	6.40	0.300	0.0	6.34	20.93	93	Low flow, wider stream-bank body, clear

Total Quantity of Water Removed (gal):
Samplers: MB, LBL, LC
Sampling Date: 06/17/24

Sampling Time: 1420
Split Sample With: N/A
Sample Type: Grab

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EA Science and Technology

SURFACE WATER SAMPLE LOG

Job. No. 152033	**Client:** NYSDEC **Project:** Dzus	**Location** West Islip, NY	
Sampling Location Description: Behind Captree Plaza (eastern stream-bank)		**Sample Location ID:** SW-06E	
Sample Method: Perristaltic Pump		Sheet 1 of 1	
Depth of Water Body:		**Sampling Date/Time**	
Width of Water Body:		**Start**	**Finish**
Water Body Location		DATE	DATE
		TIME	TIME

Coordinates: Northing: Easting:
Surface Water Elevation:
Reference Elevation:
Reference Description:

Surface Conditions:
Weather: 78 °F, Sunny

Water Quality Parameters							
Time (hrs)	**pH** (pH units)	**Cond.** (mS/cm)	**Turb.** (ntu)	**DO** (mg/L)	**Temp** (°C)	**ORP** (mV)	**Description of Surface Water**
1425	6.70	0.299	0.0	11.70	20.03	181	Low flow, wider stream-bank body, clear

Total Quantity of Water Removed (gal):
Samplers: MB, LBL, LC
Sampling Date: 06/17/24

Sampling Time: 1425
Split Sample With: N/A
Sample Type: Grab

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EA Science and Technology

SURFACE WATER SAMPLE LOG

Job. No. 152033	**Client:** NYSDEC **Project:** Dzus
Location	West Islip, NY
Sampling Location Description:	Behind Captree Plaza
Sample Location ID:	SW-11
	Sheet 1 of 1
Sample Method:	Perristaltic Pump
Depth of Water Body:	
Width of Water Body:	
Water Body Location	
Sampling Date/Time	**Start** DATE TIME / **Finish** DATE TIME

Coordinates: Northing: Easting:
Surface Water Elevation:
Reference Elevation:
Reference Description:

Surface Conditions:
Weather: 78 °F, Sunny

Time (hrs)	pH (pH units)	Cond. (mS/cm)	Turb. (ntu)	DO (mg/L)	Temp (°C)	ORP (mV)	Description of Surface Water
1530	6.32	0.302	0.0	6.51	21.33	89	Low flow of moving water, shallow, clear

Total Quantity of Water Removed (gal):
Samplers: MB, LBL, LC
Sampling Date: 06/17/24

Sampling Time: 1530
Split Sample With: MS/MSD
Sample Type: Grab

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SURFACE WATER SAMPLE LOG

Job. No.	**Client:** NYSDEC **Project:** Dzus	**Location**	West Islip, NY
Sampling Location Description:	Behind Beach St. Middle school	**Sample Location ID:**	SW-13
Sample Method:	Perristaltic Pump	Sheet 1 of 1	
Depth of Water Body:		**Sampling Date/Time**	
Width of Water Body:		**Start**	**Finish**
Water Body Location		DATE	DATE
		TIME	TIME

Coordinates: Northing: Easting:
Surface Water Elevation:
Reference Elevation:
Reference Description:

Surface Conditions:
Weather:

Water Quality Parameters							
Time (hrs)	**pH (pH units)**	**Cond. (mS/cm)**	**Turb. (ntu)**	**DO (mg/L)**	**Temp (°C)**	**ORP (mV)**	**Description of Surface Water**
1150	6.40	0.285	0.0	11.77	19.36	186	Low flow of water, clear, some OM

Total Quantity of Water Removed (gal):
Samplers: MB, LBL, LC
Sampling Date: 06/17/24

Sampling Time: 1150
Split Sample With: N/A
Sample Type: Grab

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SURFACE WATER SAMPLE LOG

Job. No.	**Client:** NYSDEC **Project:** Dzus	**Location** Ivy Ct.	
Sampling Location Description:		**Sample Location ID:** SW-14	
		Sheet 1 of 1	
Sample Method: Perristaltic Pump		**Sampling Date/Time**	
Depth of Water Body:		**Start**	**Finish**
Width of Water Body:		DATE	DATE
Water Body Location		TIME	TIME

Coordinates: Northing: Easting:
Surface Water Elevation:
Reference Elevation:
Reference Description:

	Water Quality Parameters							
	Time (hrs)	**pH** (pH units)	**Cond.** (mS/cm)	**Turb.** (ntu)	**DO** (mg/L)	**Temp** (°C)	**ORP** (mV)	**Surface Conditions:** / **Weather:** / **Description of Surface Water**
	1115	6.45	0.294	0.0	11.72	18.97	194	Moderate flow of water, clear,

Total Quantity of Water Removed (gal):
Samplers: MB, LBL, LC
Sampling Date: 06/17/24

Sampling Time: 1115
Split Sample With: MS/MSD
Sample Type: Grab

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Sediment Sampling Log

Site Name Dzus Fastener Co.	**Project No.** 152033
Site Location West Islip, NY	**Date/Time** 6/17/2024
Page 1 of 1	**Field Technician** M. Boyle, L. Backman-Lowe
Surface Conditions: Moderate flow, clear	
Weather / Temperature: 78 °F, Sunny	
Drilling Equipment None	
Sample Collection Equipment/Method Composite, Designated sampling spoon	
Analyses Total Cadmium and Chromium	

Sample Interval (in.)	PID (ppm)	Sample Date	Sample Time	Sample ID	QA/QC Collected	Sample Appearance / Description
6"	-----	6/17/24	-----	152033-SM-SD-01	DUP-01	Dark brown sand, trace silt, some sub-rounded gravel, well graded (WG) Temp: 21.50 °C; pH: 6.44; ORP: 92; Conductivity: 0.306 mS/cm; Turbidity: 0.0 NTU; DO: 6.13 mg/L

Logged by: L. Casey **Signature** LC

EA Engineering, Science, and Technology, Inc., PBC

Sediment Sampling Log

Site Name Dzus Fastener Co.	**Project No.** 152033
Site Location West Islip, NY	**Date/Time** 6/17/2024
Page 1 of 1	**Field Technician** M. Boyle, L. Backman-Lowe
Surface Conditions: Moderate flow, clear	
Weather / Temperature: 78 °F, Sunny	
Drilling Equipment None	
Sample Collection Equipment/Method Composite, Designated sampling spoon	
Analyses Total Cadmium and Chromium	

Sample Interval (in.)	PID (ppm)	Sample Date	Sample Time	Sample ID	QA/QC Collected	Sample Appearance / Description
6"	-----	6/17/24	14:55	152033-SM-SD-01E	N/A	Fine brownish tan sand, some gravel, trace silt Temp: 20.35 °C; pH: 6.13; ORP: 93; Conductivity: 0.298 mS/cm; Turbidity: 0.0 NTU; DO: 7.52 mg/L

Logged by: L. Casey **Signature** LC

EA Engineering, Science, and Technology, Inc., PBC

Sediment Sampling Log

Site Name Dzus Fastener Co.	**Project No.** 152033
Site Location West Islip, NY	**Date/Time** 6/17/2024
Page 1 of 1	**Field Technician** M. Boyle, L. Backman-Lowe
Surface Conditions: Moderate flow, clear	
Weather / Temperature: 78 °F, Sunny	
Drilling Equipment None	
Sample Collection Equipment/Method Composite, Designated sampling spoon	
Analyses Total Cadmium and Chromium	

Sample Interval (in.)	PID (ppm)	Sample Date	Sample Time	Sample ID	QA/QC Collected	Sample Appearance / Description
6"	-----	6/17/24	15:05	152033-SM-SD-02	N/A	Well graded brown sand, some sub-rounded gravel, trace silt Temp: 21.25 °C; pH: 6.56; ORP: 104; Conductivity: 0.306 mS/cm; Turbidity: 0.0 NTU; DO: 6.47 mg/L

Logged by: L. Casey **Signature** LC

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Sediment Sampling Log

Site Name Dzus Fastener Co.	**Project No.** 152033
Site Location West Islip, NY	**Date/Time** 6/17/2024
Page 1 of 1	**Field Technician** M. Boyle, L. Backman-Lowe
Surface Conditions: Moderate flow, clear	
Weather / Temperature: 78 °F, Sunny	
Drilling Equipment None	
Sample Collection Equipment/Method Composite, Designated sampling spoon	
Analyses Total Cadmium and Chromium	

Sample Interval (in.)	PID (ppm)	Sample Date	Sample Time	Sample ID	QA/QC Collected	Sample Appearance / Description
6"	-----	6/17/24	14:05	152033-SM-SD-03	N/A	Well graded brown sand, some sub-rounded gravel, trace silt Temp: 20.67 °C; pH: 6.48; ORP: 97; Conductivity: 0.289 mS/cm; Turbidity: 0.0 NTU; DO: 7.03 mg/L

Logged by: L. Cas **Signature** LC

EA Engineering, Science, and Technology, Inc., PBC

Sediment Sampling Log

Site Name Dzus Fastener Co.	**Project No.** 152033
Site Location West Islip, NY	**Date/Time** 6/17/2024
Page 1 of 1	**Field Technician** M. Boyle, L. Backman-Lowe
Surface Conditions: Moderate flow, clear	
Weather / Temperature: 78 °F, Sunny	
Drilling Equipment None	
Sample Collection Equipment/Method Composite, Designated sampling spoon	
Analyses Total Cadmium and Chromium	

Sample Interval (in.)	PID (ppm)	Sample Date	Sample Time	Sample ID	QA/QC Collected	Sample Appearance / Description
6"	-----	6/17/24	15:40	152033-SM-SD-04	N/A	Fine brown sand, some gravel, some organic matter, trace silt Temp: 19.26 °C; pH: 6.18; ORP: 80; Conductivity: 0.321 mS/cm; Turbidity: 13 NTU; DO: 5.98 mg/L

Logged by: L. Casey **Signature** LC

EA Engineering, Science, and Technology, Inc., PBC

Sediment Sampling Log

Site Name Dzus Fastener Co.	**Project No.** 152033
Site Location West Islip, NY	**Date/Time** 6/17/2024
Page 1 of 1	**Field Technician** M. Boyle, L. Backman-Lowe
Surface Conditions: Moderate flow, clear	
Weather / Temperature: 78 °F, Sunny	
Drilling Equipment None	
Sample Collection Equipment/Method Composite, Designated sampling spoon	
Analyses Total Cadmium and Chromium	

Sample Interval (in.)	PID (ppm)	Sample Date	Sample Time	Sample ID	QA/QC Collected	Sample Appearance / Description
6"	-----	6/17/24	13:50	152033-SM-SD-04E	N/A	Tannish brown f-m sand, some gravel, some organic matter, trace silt Temp: 19.36 °C; pH: 6.40; ORP: 186; Conductivity: 0.285 mS/cm; Turbidity: 0.0 NTU; DO: 11.77 mg/L

Logged by: L. Casey **Signature** LC

EA Engineering, Science, and Technology, Inc., PBC

Sediment Sampling Log

Site Name Dzus Fastener Co.	**Project No.** 152033
Site Location West Islip, NY	**Date/Time** 6/17/2024
Page 1 of 1	**Field Technician** M. Boyle, L. Backman-Lowe
Surface Conditions: Moderate flow, clear	
Weather / Temperature: 78 °F, Sunny	
Drilling Equipment None	
Sample Collection Equipment/Method Composite, Designated sampling spoon	
Analyses Total Cadmium and Chromium	

Sample Interval (in.)	PID (ppm)	Sample Date	Sample Time	Sample ID	QA/QC Collected	Sample Appearance / Description
6"	-----	6/17/24	15:10	152033-SM-SD-05	N/A	Poorly graded brown sand, some silt Temp: 21.06 °C; pH: 6.28; ORP: 85; Conductivity: 0.209 mS/cm; Turbidity: 8.9 NTU; DO: 7.49 mg/L

Logged by: L. Casey **Signature** LC

EA Engineering, Science, and Technology, Inc., PBC

Sediment Sampling Log

Site Name Dzus Fastener Co.	**Project No.** 152033
Site Location West Islip, NY	**Date/Time** 6/17/2024
Page 1 of 1	**Field Technician** M. Boyle, L. Backman-Lowe
Surface Conditions: Moderate flow, clear	
Weather / Temperature: 78 °F, Sunny	
Drilling Equipment None	
Sample Collection Equipment/Method Composite, Designated sampling spoon	
Analyses Total Cadmium and Chromium	

Sample Interval (in.)	PID (ppm)	Sample Date	Sample Time	Sample ID	QA/QC Collected	Sample Appearance / Description
6"	-----	6/17/24	14:20	152033-SM-SD-06	N/A	Well graded dark brown sand, some silt, trace sub-rounded gravel Temp: 20.93 °C; pH: 6.40; ORP: 93; Conductivity: 0.300 mS/cm; Turbidity: 0.0 NTU; DO: 6.34 mg/L

Logged by: L. Casey **Signature** LC

EA Engineering, Science, and Technology, Inc., PBC

Sediment Sampling Log

Site Name Dzus Fastener Co.	**Project No.** 152033
Site Location West Islip, NY	**Date/Time** 6/17/2024
Page 1 of 1	**Field Technician** M. Boyle, L. Backman-Lowe
Surface Conditions: Moderate flow, clear	
Weather / Temperature: 78 °F, Sunny	
Drilling Equipment None	
Sample Collection Equipment/Method Composite, Designated sampling spoon	
Analyses Total Cadmium and Chromium	

Sample Interval (in.)	PID (ppm)	Sample Date	Sample Time	Sample ID	QA/QC Collected	Sample Appearance / Description
6"	-----	6/17/24	14:25	152033-SM-SD-06E	N/A	Fine brown silt and sand, trace gravel Temp: 20.03 °C; pH: 6.70; ORP: 181; Conductivity: 0.299 mS/cm; Turbidity: 0.0 NTU; DO: 11.70 mg/L

Logged by: L. Casey **Signature** LC

EA Engineering, Science, and Technology, Inc., PBC

Sediment Sampling Log

Site Name Dzus Fastener Co.	**Project No.** 152033
Site Location West Islip, NY	**Date/Time** 6/17/2024
Page 1 of 1	**Field Technician** M. Boyle, L. Backman-Lowe
Surface Conditions: Moderate flow, clear	
Weather / Temperature: 78 °F, Sunny	
Drilling Equipment None	
Sample Collection Equipment/Method Composite, Designated sampling spoon	
Analyses Total Cadmium and Chromium	

Sample Interval (in.)	PID (ppm)	Sample Date	Sample Time	Sample ID	QA/QC Collected	Sample Appearance / Description
6"	-----	6/17/24	13:30	152033-SM-SD-07	N/A	Well graded dark brown sand, some silt, trace sub-rounded gravel Temp: 20.81 °C; pH: 6.29; ORP: 84; Conductivity: 0.303 mS/cm; Turbidity: 0.0 NTU; DO: 5.58 mg/L

Logged by: L. Casey **Signature** LC

EA Engineering, Science, and Technology, Inc., PBC

Sediment Sampling Log

Site Name Dzus Fastener Co.	**Project No.** 152033
Site Location West Islip, NY	**Date/Time** 6/17/2024
Page 1 of 1	**Field Technician** M. Boyle, L. Backman-Lowe
Surface Conditions: Moderate flow, clear	
Weather / Temperature: 78 °F, Sunny	
Drilling Equipment None	
Sample Collection Equipment/Method Composite, Designated sampling spoon	
Analyses Total Cadmium and Chromium	

Sample Interval (in.)	PID (ppm)	Sample Date	Sample Time	Sample ID	QA/QC Collected	Sample Appearance / Description
6"	-----	6/17/24	13:25	152033-SM-SD-08	N/A	Fine brown sand, some m-c gravel, trace brown silt Temp: 19.86 °C; pH: 6.06; ORP: 103; Conductivity: 0.325 mS/cm; Turbidity: 0.0 NTU; DO: 7.11 mg/L

Logged by: L. Casey **Signature** LC

EA Engineering, Science, and Technology, Inc., PBC

Sediment Sampling Log

Site Name Dzus Fastener Co.	**Project No.** 152033
Site Location West Islip, NY	**Date/Time** 6/17/2024
Page 1 of 1	**Field Technician** M. Boyle, L. Backman-Lowe
Surface Conditions: Moderate flow, clear	
Weather / Temperature: 78 °F, Sunny	
Drilling Equipment None	
Sample Collection Equipment/Method Composite, Designated sampling spoon	
Analyses Total Cadmium and Chromium	

Sample Interval (in.)	PID (ppm)	Sample Date	Sample Time	Sample ID	QA/QC Collected	Sample Appearance / Description
6"	-----	6/17/24	13:20	152033-SM-SD-09	N/A	Fine-coarse tan sand, some f-m gravel, trace tan silt Temp: 20.64 °C; pH: 6.24; ORP: 86; Conductivity: 0.298 mS/cm; Turbidity: 0.0 NTU; DO: 6.04 mg/L

Logged by: L. Casey **Signature** LC

EA Engineering, Science, and Technology, Inc., PBC

Sediment Sampling Log

Site Name Dzus Fastener Co.	**Project No.** 152033
Site Location West Islip, NY	**Date/Time** 6/17/2024
Page 1 of 1	**Field Technician** M. Boyle, L. Backman-Lowe
Surface Conditions: Moderate flow, clear	
Weather / Temperature: 78 °F, Sunny	
Drilling Equipment None	
Sample Collection Equipment/Method Composite, Designated sampling spoon	
Analyses Total Cadmium and Chromium	

Sample Interval (in.)	PID (ppm)	Sample Date	Sample Time	Sample ID	QA/QC Collected	Sample Appearance / Description
6"	-----	6/17/24	15:15	152033-SM-SD-10	N/A	Fine brown sand, some large gravel, trace silt Temp: 20.36 °C; pH: 6.58; ORP: 83; Conductivity: 0.341 mS/cm; Turbidity: 0.0 NTU; DO: 6.58 mg/L

Logged by: L. Casey **Signature** LC

EA Engineering, Science, and Technology, Inc., PBC

Sediment Sampling Log

Site Name Dzus Fastener Co.	**Project No.** 152033
Site Location West Islip, NY	**Date/Time** 6/17/2024
Page 1 of 1	**Field Technician** M. Boyle, L. Backman-Lowe
Surface Conditions: Moderate flow, clear	
Weather / Temperature: 78 °F, Sunny	
Drilling Equipment None	
Sample Collection Equipment/Method Composite, Designated sampling spoon	
Analyses Total Cadmium and Chromium	

Sample Interval (in.)	PID (ppm)	Sample Date	Sample Time	Sample ID	QA/QC Collected	Sample Appearance / Description
6"	-----	6/17/24	15:30	152033-SM-SD-11	N/A	Well-graded, loose brown sand, sub-rounded gravel, trace silt Temp: 21.33 °C; pH: 6.32; ORP: 89; Conductivity: 0.302 mS/cm; Turbidity: 0.0 NTU; DO: 6.51 mg/L

Logged by: L. Casey **Signature** LC

EA Engineering, Science, and Technology, Inc., PBC

Sediment Sampling Log

Site Name Dzus Fastener Co.	**Project No.** 152033
Site Location West Islip, NY	**Date/Time** 6/17/2024
Page 1 of 1	**Field Technician** M. Boyle, L. Backman-Lowe
Surface Conditions: Moderate flow, clear	
Weather / Temperature: 78 °F, Sunny	
Drilling Equipment None	
Sample Collection Equipment/Method Composite, Designated sampling spoon	
Analyses Total Cadmium and Chromium	

Sample Interval (in.)	PID (ppm)	Sample Date	Sample Time	Sample ID	QA/QC Collected	Sample Appearance / Description
6"	-----	6/17/24	12:45	152033-SM-SD-12	N/A	Brownish-grey fine sand, large gravel Temp: 19.47 °C; pH: 6.62; ORP: 82; Conductivity: 0.415 mS/cm; Turbidity: 0.0 NTU; DO: 8.39 mg/L

Logged by: L. Casey **Signature** LC

EA Engineering, Science, and Technology, Inc., PBC

Sediment Sampling Log

Site Name Dzus Fastener Co.	**Project No.** 152033
Site Location West Islip, NY	**Date/Time** 6/17/2024
Page 1 of 1	**Field Technician** M. Boyle, L. Backman-Lowe
Surface Conditions: Moderate flow, clear	
Weather / Temperature: 78 °F, Sunny	
Drilling Equipment None	
Sample Collection Equipment/Method Composite, Designated sampling spoon	
Analyses Total Cadmium and Chromium	

Sample Interval (in.)	PID (ppm)	Sample Date	Sample Time	Sample ID	QA/QC Collected	Sample Appearance / Description
6"	-----	6/17/24	11:50	152033-SM-SD-13	N/A	Coarse, reddish sand, some f-c gravel Temp: 21.17 °C; pH: 6.49; ORP: 54; Conductivity: 0.186 mS/cm; Turbidity: 0.0 NTU; DO: 7.14 mg/L

Logged by: L. Casey **Signature** LC

EA Engineering, Science, and Technology, Inc., PBC

Sediment Sampling Log

Site Name Dzus Fastener Co.	**Project No.** 152033
Site Location West Islip, NY	**Date/Time** 6/17/2024
Page 1 of 1	**Field Technician** M. Boyle, L. Backman-Lowe
Surface Conditions: Moderate flow, clear	
Weather / Temperature: 78 °F, Sunny	
Drilling Equipment None	
Sample Collection Equipment/Method Composite, Designated sampling spoon	
Analyses Total Cadmium and Chromium	

Sample Interval (in.)	PID (ppm)	Sample Date	Sample Time	Sample ID	QA/QC Collected	Sample Appearance / Description
6"	----	6/17/24	11:15	152033-SM-SD-14	MS/MSD	Loose brown sand, some sub-rounded gravel, trace and brown silt, well graded (WG) Temp: 19.85 °C; pH: 6.71; ORP: 76; Conductivity: 0.291 mS/cm; Turbidity: 0.0 NTU; DO: 6.45 mg/L

Logged by: L. Casey **Signature** LC

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