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September 2022
ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING REPORT
NIAGARA WIND POWER, LLC
STEEL WINDS I FACILITY (Site No. C915205)
LACKAWANNA, NEW YORK

November 2022 (Revised January 2023)
File No. 03.0033579.15

PREPARED FOR:
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November 16, 2022, Revised January 9, 2023
File No. 03.0033579.15

Mr. Cris Basden
Brookfield Renewable
c/o Niagara Wind Power, LLC
200 Liberty Street, 14th Floor
New York, NY 10281

Re: September 2022 Annual/Semi-Annual Groundwater Monitoring Report
Steel Winds I Site (Site No. C915205)
Lackawanna, NY

Dear Mr. Basden:

GZA GeoEnvironmental (GZA) is pleased to submit this annual/semi-annual groundwater monitoring report to Niagara Wind Power, LLC (NWP) summarizing the analytical results of the groundwater sampling event conducted in September 2022 at the above referenced Site. The objective of the sampling event was to collect and analyze groundwater samples from the on-site monitoring wells in accordance with the Site Management Plan, dated September 2007, prepared by Benchmark Environmental Engineering and Science, PLLC (Benchmark) and approved by the New York State Department of Environmental Conservation (NYSDEC).

Should you have any questions or require additional information following your review, please contact Daniel Troy at (716) 570-6673 or Ed Summerly at (401) 427-2707.

Sincerely,

GZA GEOENVIRONMENTAL OF NEW YORK

Daniel J. Troy, P.E.
Senior Project Manager

Richard A. Carlone, P.E
Consultant Reviewer

Edward A. Summerly, P.G.
Principal / District Office Manager

cc: Matt Carson (Brookfield Renewable)
Megan Kuczka (NYSDEC)

Attachments: Report

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1.00 INTRODUCTION

In accordance with our March 16, 2022 proposal, GZA GeoEnvironmental, Inc. (GZA) collected and analyzed groundwater samples at the nine (9) annual site-wide groundwater monitoring well locations (designated the Long-Term Groundwater Monitoring Plan (LTGWM)) and the six (6) semi-annual WT-1 vicinity groundwater monitoring well locations at the Steel Winds I facility located in Lackawanna, New York (Site). A Locus Plan and Site Plan are attached as **Figures 1** and **2**, respectively.

1.10 BACKGROUND AND SITE HISTORY

Tecumseh Redevelopment, Inc. (Tecumseh) owns approximately 1,100 acres of land at 1951 Hamburg Turnpike, as shown on attached **Figure 1**. The property was formerly used for the production of steel, coke and related products by Bethlehem Steel Corporation (BSC). Steel production on the Tecumseh property was discontinued in 1983 and the coke ovens ceased activity in 2000. Tecumseh acquired the property, along with other BSC assets, out of bankruptcy in 2003.

In September 2006, BQ Energy entered into a long-term lease agreement with Tecumseh to construct and operate wind turbines and supporting power generation equipment and infrastructure on an approximately 29-acre parcel of the Tecumseh property, referred to as the Steel Winds I Site. BQ Energy and the NYSDEC also entered into a Brownfield Cleanup Agreement for the Steel Winds Site. The Site is wholly contained within the Slag Fill Area (SFA) Zones 3 and 4 of the Tecumseh property bordered by Lake Erie to the west, Smoke Creek to the south, and former industrial lands of BSC to the north and east. Niagara Wind Power, LLC (NWP) an affiliate of Brookfield Renewable, operates the eight wind turbines installed at the Site. In accordance with an October 30, 2020 letter to NYSDEC, Niagara Wind Power, LLC assumed the Remedial Party status for the Site.

The Brownfield Cleanup Program (BCP) was successful in achieving the remedial objectives for the Steel Winds Site. The Site Management Plan (SMP) and Final Engineering Report (FER) were approved by NYSDEC in December 2007. NYSDEC issued a Certificate of Completion (COC) for the Site on December 18, 2007.

The remedial activities conducted at the Site include:

- Excavation and off-site disposal of impacted slag fill from the eight wind turbine foundations and interconnecting utility trenches;
- In-situ enhanced biodegradation of residual volatile organic compounds (VOCs), including benzene, toluene, total xylenes, and naphthalene, using oxygen release compound (ORC®) socks within the saturated soil and groundwater in the vicinity of monitoring well WT-01 and associated groundwater monitoring; and,
- Completion of a soil cover system (cap).

As a requirement of the SMP, LTGWM is being performed at nine (9) wells across the Site. Additional groundwater monitoring was also performed to monitor the effectiveness of the ORC in-situ treatment in the vicinity of wind turbine WT-01. During 2011, both the LTGWM and WT-01 vicinity groundwater monitoring programs were performed on an annual basis and were done on July 13 and 14, 2011. The five ORC in-situ treatment wells were to be monitored semi-annually, in accordance with the SMP. However, only one ORC monitoring event (on May 4, 2011) was conducted because of the ineffectiveness of the remedy.

An ***Operation, Monitoring and Maintenance Request for Modification*** report, dated November 2011, was submitted to NYSDEC by Benchmark. This report proposed ceasing operation of ORC® groundwater remedy for the WT-01 Vicinity because the remedy was not effective in reducing VOC concentrations, due primarily to the geochemical conditions (i.e., high baseline chemical oxygen demand, highly negative oxidation reduction potential and high pH) of the Site. NYSDEC provided comments to this report on April 10, 2012 and GZA provided a response letter on May 9, 2012. Based on this letter and correspondence with NYSDEC, the ORC® remedy has been terminated (i.e., the ORC socks have been removed from the five treatment wells and disposed of as a solid waste).

In accordance with a letter from GZA to NYSDEC, dated June 22, 2012[1], semi-annual/annual groundwater monitoring will continue at the Site until a Technical Impracticability Waiver (TI Waiver) for groundwater treatment at the Site is submitted to, and approved by NYSDEC.

On September 30, 2013, GZA submitted a ***Technical Impracticability Waiver Supplemental Field Studies Work Plan*** for the Site, detailing sampling, laboratory analysis, data evaluation and reporting to be conducted in support of a TI Waiver request for the Site. This *Work Plan* was approved by NYSDEC on February 24, 2014. Sampling and analysis described in the *Work Plan* was conducted by GZA in summer 2014 and a TI Waiver application was submitted to NYSDEC on November 5, 2014, with a supplemental ***Endangered Species Review*** letter submitted to NYSDEC on January 28, 2015. Based on the remedial evaluation presented in the application, it is GZA's opinion that active remediation is not warranted or feasible, would not result in significant benefit to the environment relative to the cost, and is technically impracticable. The application recommended limited additional sampling to evaluate risk to ecological receptors. NYSDEC verbally approved the additional recommended field work on April 27, 2015. GZA submitted a *Work Plan* to NYSDEC on August 5, 2015 describing the proposed additional field work, which was implemented in September 2015. The ***TI Waiver Supplemental Report*** was submitted to NYSDEC on April 24, 2018.

Due to the length of cold days experienced during the winter of 2014-2015 the semi-annual sampling event, originally scheduled for January 2015, was not able to be completed until March 2015. In order to reduce negative impacts and delays associated from freezing weather conditions, NYSDEC approved rescheduling the future semi-annual and annual sampling events to occur during the months of March and September, respectively.

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[1]GZA's June 22, 2012 letter was prepared in response to NYSDEC's comments on GZA's May 9, 2012 Responses to NYSDEC's April 10, 2012 Comments on the November 2011 *Operation, Monitoring and Maintenance Request for Modification*, prepared by Benchmark.

2.00 PURPOSE AND SCOPE OF WORK

The purpose of the September 2022 annual/semi-annual sampling event was to collect groundwater samples from the nine (9) annual site-wide and six (6) semi-annual WT-1 vicinity groundwater monitoring wells, respectively, in accordance with the routine monitoring protocol described in the September 2007 SMP. To accomplish this, the following activities were completed by GZA:

- Collected one (1) groundwater sample from each annual/semi-annual monitoring well location for laboratory analysis (conducted by Alpha Analytical of Westborough, Massachusetts) in accordance with the analytical testing summary provided in **Table 1**. Test parameters included the following:

    - STARS list VOCs via EPA Method 8260B;
    - Base-Neutral semi-volatile organic compounds (SVOCs) via EPA Method 8270C; and
    - Arsenic, barium, chromium, and/or manganese via EPA Method 6010B (select annual groundwater monitoring wells only).

- Prepared this report, which summarizes the data collected during each sampling event and compared the current results to historic data and assessed contaminant concentration trends.

This report presents GZA's field observations, results, and opinions and is subject to the limitations presented in **Appendix A** and modifications if subsequent information is developed by GZA or any other party.

3.00 FIELD STUDIES

This section describes the field studies conducted as part of GZA's groundwater annual/semi-annual sampling event.

3.10 GROUNDWATER DATA COLLECTION

GZA collected groundwater samples from the nine (9) annual Site-wide monitoring wells (MWN-01, MWN-01B, MWN-02, MWN-02B, MWN-02D, MWN-03, MWN-03B, MWN-03D, and MWN-04), and six (6) WT-1 vicinity semi-annual monitoring wells (MWN-01, MWN-01B, WT1-02, WT1-04, WT1-05, and BCP-ORC-1). Samples were collected on September 13 through 15, 2022. Note, when the two monitoring programs included the same wells, only one sample was collected, and that analysis was used for both programs.

The following tables show the volume of water purged in gallons and the number of well volumes removed from the respective well after a constant head was established. In general, groundwater purge rates were 500(±) millimeter per minute (ml/min). We note that due to complications experienced with the downhole pump in monitoring wells MWN-2D, MWN-3, MW-3B, MWN-03D and MWN-4, alternative sampling methods using a dedicated bailer to remove three well volumes were required for sample collection. The groundwater samples collected using this method were generally observed to have increased turbidity, which required laboratory filtration (from unpreserved samples) prior to inorganic analysis. Well development forms for each monitoring well sampled are included in **Appendix D.**

Annual Site-Wide Monitoring Well ID	Cumulative Volume Purged (gallons)	Well Volumes (#)
MWN-01	25	10
MWN-01B	10	3.7
MWN-02	10	3.0
MWN-02B	10	2.3
MWN-02D	24*	3.0
MWN-03	19*	3.0
MWN-03B	15*	3.1
MWN-03D	39*	3.0
MWN-04	6**	1.3

WT-1 Vicinity Semi-Annual Monitoring Well ID	Cumulative Volume Purged (gallons)	Well Volumes (#)
MWN-01	25	10
MWN-01B	10	3.7
WT1-02	4	0.6
WT1-04	2.5	1.3
WT1-05	19	11.2
BCP-ORC-1	2.0	0.8

Note: wells highlighted in yellow are included in both programs.
*Well was unable to be purged via low flow methods and had 3 well volumes removed with a dedicated bailer.
**Well bailed dry and allowed to recharge for 1 hour prior to sample collection.

As part of the Annual/Semi-annual groundwater monitoring round, static groundwater level measurements were made from top of riser of the monitoring wells listed in the table below prior to purging. Monitoring point elevation data was available from previous groundwater monitoring reports completed by Benchmark, and/or field survey work conducted by GZA. From this data, groundwater flow directions were estimated and are shown on **Figure 2**. Based on the available information, groundwater flow is generally in a westerly direction towards Lake Erie or south toward Smoke Creek (in the immediate vicinity of Smoke Creek only).

Monitoring Well Location	Top of Riser Elevation (ft.)	Groundwater Depth (ft.)	Groundwater Elevation (ft.)
MWN-01	585.14	15.22	569.92
MWN-01B	587.03	15.22	571.81
MWN-02	601.01	28.49	572.52
MWN-02B	601.28	28.73	572.55
MWN-02D	602.95	29.30	573.65
MWN-03	611.96	39.49	572.47
MWN-03B	612.29	39.64	572.65
MWN-03D	613.51	39.49	574.02
MWN-04	623.45	51.36	572.09
WT1-02	600.78	27.82	572.96
WT1-04	586.45	13.76	572.69
WT1-05	584.41	12.48	571.93
BCP-ORC-1	591.97	19.23	572.74

4.00 ANALYTICAL LABORATORY TESTING

Thirteen (13) annual/semi-annual groundwater samples were submitted for analytical testing as part of the September 2022 sampling event. The samples were packed in an ice-filled cooler and, following chain-of-custody procedures, sent to Alpha Analytical for analysis. **Table 1** presents a summary of the samples collected and the analyses completed. As noted above, the samples from monitoring wells MWN-2D, MWN-3, MW-3B, MWN-03D and MWN-4 required laboratory filtering prior to metals analysis as samples were collected with a dedicated bailer and samples from MWN-01 and MWN-01B were included for both semi-annual and annual monitoring programs.

5.00 ANALYTICAL TEST RESULTS

A discussion of the laboratory results for the groundwater samples is presented below. The laboratory reports are provided in **Appendix B** and the analytical test results are summarized on **Tables 2 and 3**.

The analytical test results for the groundwater samples were compared to NYSDEC Class GA criteria presented in the *Division of Water Technical and Operational Guidance Series* (TOGS 1.1.1), dated October 1993, revised June 1998, errata January 1999 and amended April 2000.

The analytical data generated as part of this sampling event has also been provided to NYSDEC electronically for their Environmental Information Management System (EIMS). The data was provided in a standardized electronic data deliverable (EDD) format that uses the database software application EQuIS™ (EQuIS) from EarthSoft® Inc. The laboratory data and required information were imported into the EQuIS Data Processor (EDP) and submitted to NYSDEC on October 25, 2022.

5.10 ANNUAL SITE-WIDE MONITORING WELLS

- MWN-01 (screen depth: 9.2' - 19.2'): Eight (8) VOCs were detected above method reporting limits of which four (4) exceeded their respective NYSDEC Class GA criteria and guidance values, as follows.

    - Benzene at 12 parts per billion (ppb);
    - m,p-Xylene at 6.0 ppb;
    - Total Xylene at 11.0 ppb; and

    Naphthalene was detected as a VOC at a concentration of 240 ppb, which exceeds its guidance value of 10 ppb.

    Sixteen (16) SVOCs were detected above their method reporting limits of which six (6) exceeded their respective NYSDEC Class GA criteria and guidance values, as follows.

    - Naphthalene at 91.9 ppb;
    - Phenanthrene at 69.9 ppb;
    - Biphenyl at 6.48 ppb;
    - Benz [a] Anthracene at 0.380 (estimated value, i.e., J detect);
    - Benzo [b] Fluoranthene at 0.079 (estimated value, i.e., J detect); and
    - Chrysene at 0.214 ppb (estimated value, i.e., J detect).

- MWN-01B (screen depth: 22.2' - 32.2'): Ten (10) VOCs were detected above method reporting limits, of which eight (8) exceeded their respective NYSDEC Class GA criteria and guidance values, as follows.

    - Benzene at 55 ppb;
    - Toluene at 20 ppb;
    - m,p-Xylene at 15 ppb;
    - o-Xylene at 11 ppb;
    - Total Xylene at 26 ppb;
    - 1,3,5-Trimethylbenzene at 5.2 ppb; and
    - 1,2,4-Trimethylbenzene at 7.4 ppb.

    Naphthalene was detected at a concentration of 1,500 ppb, which exceeds its guidance value of 10 ppb.

    Twelve (12) SVOCs were detected above their method reporting limits of which three (3) exceeded their respective NYSDEC Class GA criteria and guidance values, as follows.

    - Naphthalene at 742 ppb;
    - Phenanthrene at 69.5 ppb; and
    - Biphenyl at 7.84 ppb (estimated value, i.e., J detect).

- MWN-02 (screen depth: 23.6' - 33.6'): Two (2) VOCs were detected above method reporting limits of which one (1) exceeded its respective NYSDEC Class GA criteria and guidance values, as follows.

    - Benzene at 1.5 ppb.

  Thirteen (13) SVOCs were detected above their method reporting limits, but all below their respective NYSDEC Class GA criteria or guidance values.

- MWN-02B (screen depth: 46.3' - 56.3'): Seven (7) VOCs were detected above method reporting limits of which six (6) exceeded their respective NYSDEC Class GA criteria and guidance values, as follows.

    - Benzene at 62 ppb;
    - Toluene at 10 ppb;
    - m,p-Xylene at 7.2 ppb;
    - o-Xylene at 10 ppb; and
    - Total Xylene at 17.2 ppb.

  Naphthalene was detected at a concentration of 320 ppb, which exceeds its guidance value of 10 ppb.

  Fourteen (14) SVOCs were detected above method reporting limits, but below their respective NYSDEC Class GA criteria or guidance values, except for Naphthalene. Naphthalene was detected at a concentration of 146 ppb, which exceeds its guidance value of 10 ppb.

  One (1) metal, arsenic, was detected at a concentration of 37.9 ppb, which exceeds its Class GA criteria of 25 ppb.

- MWN-02D (screen depth: 74.3' - 79.3'): One (1) metal was detected above its method reporting limits, but below its respective NYSDEC Class GA criteria.

  Note: Monitoring well MWN-02D was unable to be low-flow sampled with a submersible pump and the sample was collected via a dedicated bailer. Due to potentially elevated turbidity resulting from the sampling technique, metal samples were filtered using a 0.45-micron filter by the laboratory.

- MWN-03 (screen depth: 39.2' - 49.2'): Seven (7) VOCs were detected above method reporting limits of which two (2) exceeded their respective NYSDEC Class GA criteria and guidance value, as follows.

    - Benzene at 11 ppb.

  Naphthalene was detected at a concentration of 25 ppb, which exceeds its guidance value of 10 ppb.

  Fourteen (14) SVOCs were detected above method reporting limits, but below their respective NYSDEC Class GA criteria or guidance values, except for Naphthalene. Naphthalene was detected at a concentration of 15.0 ppb, which exceeds its guidance value of 10 ppb.

Note: Monitoring well MWN-03 was unable to be low-flow sampled with a submersible pump and the sample was collected via a dedicated bailer.

- MWN-03B (screen depth: 60.7' - 70.7'): Three (3) metals were detected above method reporting limits of which one (1) exceeded its respective NYSDEC Class GA criteria, as follows.
    - Barium at 1,320 ppb.

  Note: Monitoring well MWN-03B was unable to be low-flow sampled with a submersible pump and the sample was collected via a dedicated bailer. Due to potentially elevated turbidity resulting from the sampling technique, metal samples were filtered using a 0.45-micron filter by the laboratory.

- MWN-03D (screen depth: 111.3' - 121.3'): No VOCs were detected above method reporting limits. Four (4) SVOCs were detected above method reporting limits all of which were below their respective NYSDEC Class GA criteria.

  Two (2) metals were detected above method reporting limits of which one (1) exceeded its respective NYSDEC Class GA criteria, as follows.
    - Manganese at 333 ppb.

  Note: Monitoring well MWN-03D was unable to be low-flow sampled with a submersible pump and the sample was collected via a dedicated bailer. Due to potentially elevated turbidity resulting from the sampling technique, metal samples were filtered using a 0.45-micron filter by the laboratory.

- MWN-04 (screen depth: 48.5' - 58.5'): Two (2) VOCs were detected above method reporting limits of which only naphthalene was detected at 16.0 ppb which exceeds its guidance value of 10 ppb.

  Fifteen (15) SVOCs were detected above method reporting limits of which three (3) exceeded their respective NYSDEC Class GA criteria and guidance values, as follows
    - Naphthalene at 11.2 ppb;
    - Benzo [b] Fluoranthene at 0.125 ppb (estimated value, i.e., J detect); and
    - Benzo [a] Pyrene at 0.076 ppb (estimated value, i.e., J detect).

  Note: Monitoring well MWN-04 was unable to be low-flow sampled with a submersible pump and the sample was collected via a dedicated bailer. Sample results from MWN-04 were elevated compared to previous rounds, potentially due to the elevated turbidity of the samples.

In general, contaminant concentrations were consistent with historical data collected during previous sampling events completed at the Site. A more detailed discussion, including trend analysis, is provided in Section 6.00 of

this report. Bis(2-Ethylhexyl)Phthalate was detected in MWN-03D at 44.9 ug/l in 2020 and was significantly lower in 2021 (7.15 ug/l) and 2022 (0.376 J ug/L). This trend will continue to be evaluated.

5.20 SEMI-ANNUAL WT-1 VICINITY MONITORING WELLS

Monitoring well locations MWN-01 and MWN-01B are included in both annual and semi-annual sampling schedules. The analytical results for these monitoring locations are discussed above in Section 5.10. Results from the remaining semi-annual wells are discussed below.

- WT1-02 (screen depth: 27.8' - 37.8'): Eight (8) VOCs were detected above method reporting limits of which two (2) exceeded their respective NYSDEC Class GA criteria and guidance values, as follows.
    - Benzene at 8.7 ppb.

  Naphthalene was detected at a concentration of 27 ppb, which exceeds its guidance value of 10 ppb.

  Thirteen (13) SVOCs were detected above their method reporting limits, but below their respective NYSDEC Class GA criteria or guidance values with the exception of Naphthalene. Naphthalene was detected at a concentration of 17.2 ppb, which exceeds its guidance value of 10 ppb.

- WT1-04 (screen depth: 15.5' - 25.5'): Eight (8) VOCs were detected above method reporting limits of which three (3) exceeded their respective NYSDEC Class GA criteria and guidance values, as follows.
    - Benzene at 14 ppb; and
    - Total Xylene at 6.1 ppb.

  Naphthalene was detected at a concentration of 66 ppb, which exceeds its respective guidance value of 10 ppb.

  Sixteen (16) SVOCs were detected above their method reporting limits and four (4) exceeded their respective NYSDEC Class GA guidance values, as follows.
    - Naphthalene at 32.6 ppb;
    - Benzo [a] Anthracene at 0.342 ppb (estimated value, i.e., J detect);
    - Benzo [b] Fluoranthene at 0.093 ppb (estimated value, i.e., J detect); and
    - Chrysene at 0.250 ppb (estimated value, i.e., J detect).

- WT1-05 (screen depth: 13.3' - 23.3'): Eight (8) VOCs were detected above method reporting limits of which four (4) exceeded their respective NYSDEC Class GA criteria and guidance values, as follows.
    - Benzene at 9.7 ppb;
    - m,p-Xylene at 5.4 ppb; and
    - Total Xylene at 9.4 ppb (estimated value, i.e., J detect).

Naphthalene was detected at a concentration of 220 ppb which exceeds its guidance value of 10 ppb.

Thirteen (13) SVOCs were detected above method reporting limits, of which two (2) exceeded their respective NYSDEC Class GA guidance values as follows.

- Naphthalene at 106 ppb; and
- Biphenyl at 5.70 ppb.

- BCP-ORC-1 (screen depth: 24.7' - 34.7'): Six (6) VOCs were detected above method reporting limits of which three (3) exceeded their respective NYSDEC Class GA criteria and guidance values, as follows.

  - Benzene at 25 ppb; and
  - Total Xylene at 8.2 ppb (estimated value, i.e., J detect).

  Naphthalene was detected at a concentration of 460 ppb, which exceeds its guidance value of 10 ppb.

  Fifteen (15) SVOCs were detected above method reporting limits, of which three (3) exceeded their respective NYSDEC Class GA guidance values as follows.

  - Naphthalene at 198 ppb;
  - Benzo [a] Anthracene at 0.214 ppb (estimated value, i.e., J detect); and
  - Chrysene at 0.145 ppb (estimated value, i.e., J detect).

In general, VOC and SVOC concentrations were consistent with historical data collected during previous sampling events. A more detailed discussion, including a trend analysis, is provided in Section 6.00 of this report.

6.00 STATISTICAL ANALYSIS

As stated in Section 2.4 of Attachment A4 (LTGWM Plan) of the September 2007 ***Site Management Plan***, a statistical analysis is required for all detected constituents (in groundwater) that are observed at concentrations above NYSDEC Class GA criteria or guidance values. In lieu of performing moving trend analysis, as described in the LTGWM Plan, GZA generated time series plots for parameters which exceeded the NYSDEC Class GA criteria, either during this monitoring round or in previous routine monitoring rounds (routine monitoring started in 2008). These plots were evaluated for trends over the routine monitoring period time, which started in 2008 (approximately 14 years) at a 95% confidence interval, and outliers. Sen's Test for trends were performed to evaluate statistically significant trends in the data with respect to time. Time series plots were generated on a well-by-well basis and are presented in **Appendix C**. During future monitoring rounds, the time series plots may be evaluated over the most recent five-year period, rather than the entire routine monitoring period.

Thirty-one statistically significantly decreasing trends in contaminant concentrations were identified by the Sen's Tests:

- BCP-ORC-1: benzene and biphenyl;
- MWN-01: 1,2,4-trimethylbenzene, benzene, biphenyl, fluorene, m, p-xylene, naphthalene, o-xylene, phenanthrene, toluene and xylenes;
- MWN-01B: benzene;
- MWN-02: benzene and xylenes;
- MWN-02B: benzene and toluene;
- MWN-03B: manganese;
- WT1-02: 1,3,5-trimethylbenzene, benzene, m,p-xylene, o-xylene, toluene and xylenes; and
- WT1-04: 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, benzene, m, p-xylene, o-xylene, toluene and xylenes.

The Sen's Tests also identified two statistically significant increasing trends:

- BCP-ORC-1: o-xylene; and
- WT1-05: phenanthrene.

Time series plots were also evaluated for seasonality and outliers. There does not appear to be significant seasonal fluctuations of contaminant concentrations or outliers in the current monitoring data.

7.00 SUMMARY

GZA was retained to collect and analyze groundwater samples from thirteen (13) annual/semi-annual monitoring wells at the Steel Winds I facility in accordance with the ***Site Management Plan***. A summary of our findings follows.

Annual Well Locations

- Static groundwater level measurements indicate that groundwater flows predominantly in a westerly direction at the Site, toward Lake Erie. Groundwater in the vicinity of WT-01 was observed to flow south-southwesterly towards Smoke Creek and Lake Erie.

- VOCs were detected at concentrations above NYSDEC Class GA criteria in the groundwater samples collected from LTGWM wells MWN-01, MWN-01B, MWN-02, MWN-02B, MWN-03 and MWN-04.

- VOCs were not detected above method reporting limits (and therefore not above NYSDEC Class GA criteria) in LTGWM monitoring well location MWN-03D.

- SVOCs were detected at concentrations above NYSDEC Class GA or their respective guidance criteria in the groundwater samples collected from LTGWM wells MWN-01, MWN-01B, MWN-02B, MWN-03, and MWN-04.

- Arsenic was detected at concentrations above NYSDEC Class GA criteria in LTGWM well MWN-02B.

- Barium was detected at concentrations above NYSDEC Class GA criteria in LTGWM well MWN-03B.

- Manganese detected at concentrations above NYSDEC Class GA criteria in LTGWM well MWN-03D.

Semi-Annual Well Locations

- VOCs were detected at concentrations above NYSDEC Class GA criteria in the groundwater samples collected from the semi-annual WT1 vicinity wells MWN-01, MWN-01B, WT1-02, WT1-04, WT1-05 and BCP-ORC-1.

- SVOCs were detected at concentrations above NYSDEC Class GA or their respective guidance criteria in the groundwater samples collected from the semi-annual WT1 vicinity wells MWN-01, MWN-01B, WT1-02, WT1-04, WT1-05, and BCP-ORC-1.

- Based on our review of the historic and current analytical data, the analytical test results from the September 2022 round of sampling are generally consistent with historical data. Statistically significant trends in contaminant concentrations were identified as noted in Section 6.00.

TABLES

TABLE 1
September 2022 Analytical Testing Program Summary
Steel Winds I Facility
Lackawanna, New York

Well Designation	Sample ID	Date Collected	Screened Interval (TOR)	STARS VOCs	SVOCs (BN)	Total Arsenic	Total Barium	Total Chromium	Total Manganese
Annual Monitoring Well Sample Locations (LTGWM Network)									
MWN-01	MWN-01-091322	9/13/2022	9.2 - 19.2	X	X				
MWN-01B	MWN-01B-091322	9/13/2022	22.2 - 32.2	X	X				
MWN-02	MWN-02-091422	9/14/2022	23.6 - 33.6	X	X				
MWN-02B	MWN-02B-091422	9/14/2022	46.3 - 56.3	X	X	X			
MWN-02D	MWN-02D-091522	9/15/2022	74.3 - 79.3			X	X	X	
MWN-03	MWN-03-091522	9/15/2022	39.2 - 49.2	X	X				
MWN-03B	MWN-03B-091522	9/15/2022	60.7 - 70.7			X	X	X	X
MWN-03D	MWN-03D-091522	9/15/2022	111.3 - 121.3	X	X		X		X
MWN-04	MWN-04-091522	9/15/2022	48.5 - 58.5	X	X				
Semi-Annual Monitoring Well Sample Locations (WT-1 Vicinity Network)									
MWN-01	MWN-01-091322	9/13/2022	9.2 - 19.2	X	X				
MWN-01B	MWN-01B-091322	9/13/2022	22.2 - 32.2	X	X				
WT1-02	WT1-02-091322	9/13/2022	27.8 - 37.8	X	X				
WT1-04	WT1-04-091322	9/13/2022	15.5 - 25.5	X	X				
WT1-05	WT1-05-091322	9/13/2022	13.3 - 23.3	X	X				
BCP-ORC-1	BCP-ORC-1-091322	9/13/2022	24.7 - 34.7	X	X				

Notes:

1. VOCs = Volatile Organic Compounds STARS list via EPA Method 8260C.
2. SVOCs = Semi-Volatile Organic Compounds Base-Neutrals list via EPA Method 8270D.
3. Arsenic, Barium, Chromium, and Manganese via EPA Method 6010D.
4. "WT", "MWN", and "BCP-ORC" monitoring well information provided in Table 1 was referenced from Turnkey Environmental Restoration, LLC's *2009 Annual LTGWM & First Semi-Annual WT-1 Vicinity Monitoring Report.*
5. TOR = measurement recorded in feet below top-of-well riser.

Table 2

September 2022 Annual Groundwater Analytical Data Summary
Steel Winds I Facility
Lackawanna, New York

Parameter	NYSDEC Class GA Criteria	MWN-01					MWN-01B					MWN-02				
		9/17/2020 Result	4/2/2021 Result	9/2/2021 Result	3/30/2022 Result	9/13/2022 Result	9/17/2020 Result	4/2/2021 Result	9/2/2021 Result	3/30/2022 Result	9/13/2022 Result	9/18/2018 Result	9/25/2019 Result	9/17/2020 Result	9/3/2021 Result	9/14/2022 Result
Water Quality Field Measurements																
pH (units)	6.5 - 8.5	7.81	7.66	**11.53**	**13.19**	**11.81**	7.83	8.01	**11.1**	**13.03**	**11.46**	**12.28**	**11.94**	**8.31**	**11.7**	**11.85**
Temperature (°C)	NV	14.4	10.5	10.8	9.6	12.0	10.9	11	9.8	9.4	10.6	12.6	11.3	12.35	12.6	12.6
Specific Conductance (mS/cm)	NV	1.450	1.380	1.212	1.170	1.258	0.991	1.010	0.831	0.808	0.891	1.886	1.763	2.04	1.776	1.965
Turbidity (NTU)	5	2.9	2.4	2.61	1.08	2.80	**7.3**	**5.4**	**7.67**	**22.3**	**22.18**	3.0	**38.6**	**6.8**	2.51	2.54
Dissolved Oxygen (mg/L)	NV	116.7	132.3	1.2	2.2	5.9	134.7	115.9	0.8	20.7	11.3	1.51	0.060	97.2	2.8	13.6
Oxygen Reduction Potential (mV)	NV	-237	-231	-159.2	-347.1	-104.5	-247	-204	-214.2	-244.3	-118.8	-87.2	-121.0	-281	-115.1	137.8
Volatile Organic Compounds - EPA Method 8260C (ug/L)																
Benzene	1	**17**	**14**	**14**	**14**	**12**	**59**	**57**	**55**	**54**	**55**	**2.5**	**2.2**	1	**5.1**	**1.5**
Toluene	5	4.2	4.0 J	3.6 J	3.1 J	2.8 J	**18 J**	**20 J**	**19 J**	**16 J**	**20**	<	<	<	1.4 J	<
Ethylbenzene	5	0.98 J	<	<	<	<	<	<	<	<	0.95 J	<	<	<	<	<
m,p-Xylene	5	**10**	**9.3**	**8.7**	**7.9**	**6.0**	**13 J**	**15 J**	**12 J**	**12 J**	**15**	1.3 J	1.1 J	0.76 J	2.4 J	<
o-Xylene	5	**8**	**7.1**	**6.5**	**5.8**	5.0	**9.1 J**	**10 J**	**9.0 J**	**8.9 J**	**11**	1.2 J	1.1 J	<	2.1 J	<
Xylene (Total)	5	**18.0**	**16.0**	**15.2**	**14**	**11.0**	**22.1**	**25 J**	**21 J**	**21 J**	**26**	2.5	2.2	0.76 J	4.5 J	<
Isopropylbenzene	5	<	<	<	<	<	<	<	<	<	1.4 J	<	<	<	<	<
1,3,5-Trimethylbenzene	5	4	4.5 J	4.2 J	3.9 J	2.8 J	<	<	<	<	**5.2**	1.8 J	1.4 J	0.91 J	1.8 J	<
1,2,4-Trimethylbenzene	5	4.3	4.8 J	4.6 J	4.1 J	3.0 J	<	**7.6 J**	**7.1 J**	<	**7.4**	<	<	<	1.2 J	<
Naphthalene*	10	**240**	**310**	**270**	**290**	**240**	**1,500**	**1,800**	**1,500**	**1,700**	**1,500**	7.3	9.4	**20**	**20**	4.2
Semi-Volatile Organic Compounds - EPA Method 8270D (ug/L)																
Acetophenone	NV	<	<	<	<	0.570 J	<	<	<	<	<	0.368 J	<	<	<	0.246 J
Acenaphthylene	NV	22.4	34	22.3	30.3	23.5	54.6	44	44.0	33.8	54.3	0.815	1.36	0.727	1.98	1.03
Naphthalene*	10	**139.0**	**140**	**96.2**	**141**	**91.9**	**1,030**	**910**	**962**	**970**	**742**	1.19	2.87	2.38	5.23	3.44
2-Methylnaphthalene	NV	27.1	35	21.9	40.0	27.8	48.0	41	35.8	46.2	52.4	0.302 J	1.02	0.552	1.78	1.01
Acenaphthene*	20	8.34	13	8.66	11.9	10.1	11.2	10	12.0	10.5	11.8	0.538	0.758	0.431 J	1.20	0.603
Dibenzofuran	NV	25.9	44	28.9	39.6	29.7	29.4	23	30.3	24.8	30.6	0.156J	0.922	0.584	2.35	0.967
Fluorene*	50	38.3	**70**	41.9	**58.8**	44.4	43.9	38	43.7	35.7	42.3	0.92	2.98	1.52	4.76	2.26
Phenanthrene*	50	45.3	**110**	**71.0**	**81.5**	**69.9**	**64.3**	**55**	**61.9**	**53.6**	**69.5**	<	2.55	1.46	4.14	1.76
Dibenzo (a,h)Anthracene	NV	<	0.05 J	<	<	<	<	<	<	<	<	<	<	<	<	<
Carbazole	NV	20.30	26	19.6	24.1	19.7	62.4	52	60.0	55.4	61.3	0.598	1.34	0.702	3.67	1.28
Anthracene*	50	5.81	19	7.74	11.9	12.2	11.00	5.3	8.19	6.46	11.8	0.212J	0.635	0.467 J	0.983	0.588
Fluoranthene*	50	5.72	24	9.44	10.6	12.3	10.3	10	8.97	8.33	10.8	1.86	1.4	1.14	1.56	0.971
Biphenyl	5	**6.41**	**8.8**	**5.85**	**7.86**	**6.48**	**8.19**	**6.5**	**7.45**	**6.09**	**7.84 J**	0.199 J	0.412 J	0.198 J	0.732	0.332 J
Pyrene*	50	4.47	**14**	6.16	6.38	6.81	6.62	5.9	6.44	4.95	5.57 J	1.28	1.26	1.41	1.56	1.70
Butyl benzyl phthalate*	50	<	<	0.104 J	<	<	<	<	<	<	<	<	<	<	0.093 J	<
Benzo [a] Anthracene	0.002	<	**1.4**	<	**0.372 J**	**0.380 J**	<	0.38	**0.461 J**	**0.316 J**	<	<	<	<	<	<
Benzo [b] Fluoranthene*	0.002	<	**0.4**	<	<	**0.079 J**	<	**0.10 J**	**0.105 J**	**0.105 J**	<	<	<	<	<	<
Benzo [k] Fluoranthene*	0.002	<	**0.14**	<	<	<	<	**0.04 J**	<	<	<	<	<	<	<	<
Benzo [a] Pyrene	ND	<	**0.26**	<	<	<	<	**0.05 J**	**0.072 J**	**0.079 J**	<	<	<	<	<	<
Indeno [1,2,3-cd] Pyrene*	0.002	<	**0.11**	<	<	<	<	**0.04 J**	<	<	<	<	<	<	<	<
Benzo (g,h,i) Perylene	NV	<	0.09 J	<	<	<	<	0.03 J	<	<	<	<	<	<	<	<
Chrysene	0.002	<	**0.82**	**0.216 J**	**0.187 J**	**0.214 J**	<	**0.22**	**0.256 J**	**0.180 J**	<	<	<	<	<	<
bis(2-Ethylhexyl)Phthalate	5	0.456 J	<	<	<	<	1.10	<	<	<	<	<	0.098 J	0.602	<	<
Metals - EPA Method 6010D (ug/L)																
Arsenic	25	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Barium	1,000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chromium	50	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Manganese	300	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Notes:
1. Compounds detected in one or more sample are presented on this table. Refer to Appendix B for list of all compounds included in analysis.
2. Analytical testing completed by Alpha Analytical, Westborough, Massachusetts.
3. NYSDEC Groundwater Class GA criteria obtained from Division of Water Technical and Operational Guidance Series (TOGS 1.1.1), dated October 1993, revised June 1998, errata January 1999 and amended April 2000 (Class GA).
4. ug/L = part per billion (ppb).
5. < indicates compound was not detected above method detection limits.
6. "J" qualifier = Analyte detected below quantitation limits.
7. Value shown in **bold** indicate exceedance of respective Class GA Criteria or guidance value.
8. NV = no value, NT = not tested, ND = Not detected above method detection limit
9. * = value shown is a guidance value rather than a groundwater standard.
10. The equipment used to collect water quality data was calibrated prior to and during use in accordance with the manufacturer's recommendations.
11. DO and pH measurements are routinely made using the same model water quality meter, however the measurements made on 9/2020 and 4/2021 appear erroneous.

Table 2

September 2022 Annual Groundwater Analytical Data Summary
Steel Winds I Facility
Lackawanna, New York

Parameter	NYSDEC Class GA Criteria	MWN-02B					MWN-02D					MWN-03				
		9/17/2018 Result	9/25/2019 Result	9/17/2020 Result	9/3/2021 Result	9/14/2022 Result	9/18/2018 Result	9/24/2019 Result	9/18/2020 Result	9/3/2021 Result	9/15/2022 Result	9/18/2018 Result	9/25/2019 Result	9/17/2020 Result	9/2/2021 Result	9/15/2022 Result
Water Quality Field Measurements																
pH (units)	6.5 - 8.5	**11.57**	**11.34**	8.21	**11.30**	**11.17**	7.10	7.00	6.99	6.61	7.86	**12.39**	**12.32**	**8.53**	**12.00**	**12.49**
Temperature (°c)	NV	13.1	12.1	12.92	12.6	13.9	13.7	12.6	13.61	12.9	13.8	13.5	12.8	13.57	13.3	14.3
Specific Conductance (mS/cm)	NV	0.942	0.958	1.13	0.910	0.902	1.864	1.890	1.970	1.354	2.027	2.825	2.724	2.89	2.729	3.058
Turbidity (NTU)	5	2.8	1.9	**6.9**	2.52	2.57	3.8	**15.1**	**7.2**	**5.15**	**189.3**	3.1	3.9	3.9	4.82	4.06
Dissolved Oxygen (mg/L)	NV	0.14	0.15	95.5	1.2	6.5	0.15	0.09	6.1	1.5	29.9	0.17	0.11	115.2	2.1	43.0
Oxygen Reduction Potential (mV)	NV	-284.9	-220.6	-256	-202.6	-56.1	-70.5	-96.3	-72	-51.6	49.8	-352.6	-412.1	-361	-267.3	-39.3
Volatile Organic Compounds - EPA Method 8260C (ug/L)																
Benzene	1	**71**	**64**	**69**	**61**	**62**	NT	NT	NT	NT	NT	**12**	**8.0**	**10**	**7.1**	**11**
Toluene	5	**12**	**11**	**11**	**11**	**10**	NT	NT	NT	NT	NT	2.7	2.0 J	2.2 J	1.8 J	2.4 J
Ethylbenzene	5	<	0.76 J	<	<	<	NT	NT	NT	NT	NT	<	<	<	<	<
m,p-Xylene	5	**8.2**	**8.2**	**8.5**	**9.2**	**7.2**	NT	NT	NT	NT	NT	2.4 J	1.4 J	1.5 J	1.3 J	1.6 J
o-Xylene	5	**12**	**12**	**13.0**	**13**	**10**	NT	NT	NT	NT	NT	2.7	1.5 J	1.8 J	1.4 J	1.7 J
Xylene (Total)	5	**20.2**	**20.2**	**21.5**	**22.2**	**17.2**	NT	NT	NT	NT	NT	**5.1**	2.9	3.3	2.7 J	3.3 J
1,3,5-Trimethylbenzene	5	<	1.5 J	1.5 J	2.0 J	<	NT	NT	NT	NT	NT	1.4 J	0.90 J	0.97 J	0.93 J	0.97 J
1,2,4-Trimethylbenzene	5	2.8 J	2.5	2.6 J	3.5 J	1.9 J	NT	NT	NT	NT	NT	<	<	<	<	<
Naphthalene*	10	**340**	**240**	**270**	**280**	**320**	NT	NT	NT	NT	NT	20	**23**	**26**	**19**	**25**
Semi-Volatile Organic Compounds - EPA Method 8270D (ug/L)																
Acetophenone	NV	0.451 J	<	<	<	0.770 J	NT	NT	NT	NT	NT	0.271 J	<	<	<	0.308 J
Acenaphthylene	NV	3.77	4.58	3.90	3.18	2.83	NT	NT	NT	NT	NT	1.78	1.73	0.980	1.23	2.70
1,2-Dichlorobenzene	3	0.178J	0.171 J	0.168 J	0.162 J	0.200 J	NT	NT	NT	NT	NT	0.104 J	0.099 J	0.121 J	0.102 J	0.115 J
Naphthalene*	10	**150**	**217**	**205**	**183**	**146**	NT	NT	NT	NT	NT	**16.5**	**17.1**	**18.1**	**11.2**	**15.0**
2-Methylnaphthalene	NV	9.6	8.05	8.83	6.89	8.48	NT	NT	NT	NT	NT	3.26	2.7	3.10	1.93	3.03
Acenaphthene*	20	7.39	7.09	7.47	7.46	6.20	NT	NT	NT	NT	NT	1.63	1.3	1.45	1.11	1.54
Dibenzofuran	NV	5.58	5.76	6.24	6.32	4.50	NT	NT	NT	NT	NT	3.12	2.34	2.81	1.99	2.92
Fluorene*	50	8.44	10.7	11.40	10.2	7.72	NT	NT	NT	NT	NT	5.47	4.5	4.82	3.48	5.10
Phenanthrene*	50	15.4	17.5	18.30	18.0	13.7	NT	NT	NT	NT	NT	8.69	8.23	8.29	7.54	9.37
Carbazole	NV	21.9	23.2	24.40	23.1	21.2	NT	NT	NT	NT	NT	4.88	4.30	4.58	3.26	5.17
Anthracene*	50	2.33	2.32	2.35	1.67	1.88	NT	NT	NT	NT	NT	0.86	1.00	0.612	0.884	1.38
Fluoranthene*	50	3.96	3.32	4.13	3.34	3.51	NT	NT	NT	NT	NT	2.48	2.7	2.53	2.18	3.19
Biphenyl	5	1.41	1.64	1.62	1.52	1.11	NT	NT	NT	NT	NT	0.868	0.707	0.792	0.512	0.715
Pyrene*	50	2.5	2.22	2.82	2.49	2.00	NT	NT	NT	NT	NT	1.76	1.66	1.63	1.78	1.91
Butylbenzylphthalate*	50	<	<	<	0.124 J	<	NT	NT	NT	NT	NT	<	<	<	<	<
bis(2-Ethylhexyl)Phthalate	5	<	<	<	<	<	NT	NT	NT	NT	NT	<	<	0.336 J	<	<
Benzo [b] Fluoranthene	0.002	<	<	<	<	<	NT	NT	NT	NT	NT	0.171J	<	<	<	<
Metals - EPA Method 6010D (ug/L)																
Arsenic	25	**30.81**	**32**	**28.44**	**27.68**	**37.9**	0.72	0.60	0.63	0.62	<	NT	NT	NT	NT	NT
Barium	1,000	NT	NT	NT	NT	NT	957	931.9	912.8	922.5	860	NT	NT	NT	NT	NT
Chromium	50	NT	NT	NT	NT	NT	0.19 J	<	0.30 J	0.60 J	<	NT	NT	NT	NT	NT
Manganese	300	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Notes:
1. Compounds detected in one or more sample are presented on this table. Refer to Appendix B for list of all compounds included in analysis.
2. Analytical testing completed by Alpha Analytical, Westborough, Massachusetts.
3. NYSDEC Groundwater Class GA criteria obtained from Division of Water Technical and Operational Guidance Series (TOGS 1.1.1), dated October 1993, revised June 1998, errata January 1999 and amended April 2000 (Class GA).
4. ug/L = part per billion (ppb).
5. < indicates compound was not detected above method detection limits.
6. "J" qualifier = Analyte detected below quantitation limits.
7. Value shown in **bold** indicate exceedance of respective Class GA Criteria or guidance value.
8. NV = no value, NT = not tested, ND = Not detected above method detection limit
9. * = value shown is a guidance value rather than a groundwater standard.
10. The equipment used to collect water quality data was calibrated prior to and during use in accordance with the manufacturer's recommendations.
11. DO and pH measurements are routinely made using the same model water quality meter, however the measurements made on 9/2020 and 4/2021 appear erroneous.
12. WellS MWN-02D and MWN-03 were unable to be low flow sampled. Hand bailing techniques were required. Metals analysis required laboratory filtration.

Table 2

September 2022 Annual Groundwater Analytical Data Summary
Steel Winds I Facility
Lackawanna, New York

Parameter	NYSDEC Class GA Criteria	MWN-3B					MWN-03D					MWN-04				
		9/18/2018 Result	9/25/2019 Result	10/1/2020 Result	9/3/2021 Result	9/15/2022 Result	9/18/2018 Result	9/25/2019 Result	9/24/2020 Result	9/3/2021 Result[11]	9/15/2022 Result	9/18/2018 Result	9/25/2019 Result	9/17/2020 Result	9/2/2021 Result	9/15/2022 Result
Water Quality Field Measurements																
pH (units)	6.5 - 8.5	7.21	7.80	7.2	7.29	6.62	6.52	**6.17**	**6.25**	7.31	7.26	**11.71**	**12.05**	7.98	**11.57**	**11.35**
Temperature (°c)	NV	14.3	13.7	13.9	14.7	14.2	13.5	12.9	14.4	13.5	13.5	16.7	16.0	15.97	15.7	17.3
Specific Conductance (mS/cm)	NV	3.126	3.139	2.413	2.586	27.710	26.69	24.662	25.881	24.410	26.110	2.490	2.311	2.35	2.313	3.540
Turbidity (NTU)	5	**6.2**	**25.6**	**38.04**	**16.44**	**40.12**	4.4	**29.4**	**14.31**	**35.83**	**165.2**	2.2	2.6	2.4	1.98	**33.47**
Dissolved Oxygen (mg/L)	NV	0.17	0.15	49.7	2.9	25.3	0.12	0.56	36.5	5.5	16.2	4.11	5.56	107.4	3.0	69.6
Oxygen Reduction Potential (mV)	NV	-188.8	-188.8	-63.7	-146.7	97.7	-32.0	-32.4	-45.3	41.6	50.8	-101.3	-99.7	-65	-81.2	35.4
Volatile Organic Compounds - EPA Method 8260C (ug/L)																
Benzene	1	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	0.51
Toluene	5	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	<
Ethylbenzene	5	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	<
m,p-Xylene	5	NT	NT	NT	NT	NT	1.1 J	<	<	<	<	<	<	<	<	<
o-Xylene	5	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	<
Xylene (Total)	5	NT	NT	NT	NT	NT	1.1	<	<	<	<	<	<	<	<	<
1,3,5-Trimethylbenzene	5	NT	NT	NT	NT	NT	<	<	0.73 J	<	<	<	<	<	<	<
1,2,4-Trimethylbenzene	5	NT	NT	NT	NT	NT	0.74 J	<	<	<	<	<	<	<	<	<
Naphthalene*	10	NT	NT	NT	NT	NT	<	<	<	<	<	1.0 J	<	1.4 J	<	**16**
Semi-Volatile Organic Compounds - EPA Method 8270D (ug/L)																
Acetophenone	NV	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	0.967 J
Acenaphthylene	NV	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	0.167 J
Naphthalene*	10	NT	NT	NT	NT	NT	0.420 J	0.196 J	<	0.121 J	<	0.090 J	<	0.163 J	<	**11.2**
2-Methylnaphthalene	NV	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	2.49
Acenaphthene*	20	NT	NT	NT	NT	NT	<	<	<	<	0.536	<	<	0.377 J	<	5.26
Dibenzofuran	NV	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	0.107 J	<	2.54
Fluorene*	50	NT	NT	NT	NT	NT	<	<	<	<	0.187 J	<	<	0.304 J	<	4.37
Phenanthrene*	50	NT	NT	NT	NT	NT	<	<	<	<	0.434 J	0.212 J	<	0.302 J	<	7.31
Carbazole	NV	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	8.59
Anthracene*	50	NT	NT	NT	NT	NT	<	<	<	<	<	0.156 J	<	<	<	1.39
Fluoranthene*	50	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	0.168 J	<	1.55
Biphenyl	5	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	0.394 J
Pyrene*	50	NT	NT	NT	NT	NT	<	<	<	<	<	0.536	0.640	0.447 J	0.459 J	1.90
Benzo [b] Fluoranthene*	0.002	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	**0.125 J**
Benzo [a] Pyrene*	0.002	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	**0.076 J**
Di-n-octylphthalate*	50	NT	NT	NT	NT	NT	<	<	0.690 J	<	<	<	<	<	<	<
Butylbenzylphthalate*	50	NT	NT	NT	NT	NT	<	0.211 J	0.091 J	0.137 J	<	<	<	<	<	<
Diethylphthalate*	50	NT	NT	NT	NT	NT	<	<	0.518	0.549	<	<	<	<	<	<
bis(2-Ethylhexyl)Phthalate	5	NT	NT	NT	NT	NT	0.232 J	0.514	**44.9**	**7.15**	0.376 J	0.083J	0.123 J	0.342 J	<	<
Metals - EPA Method 6010D (ug/L)																
Arsenic	25	**38**	**36.12**	2.73	**86.97**	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Barium	1,000	**1,348**	**1,291**	837.3	**1,049**	**1,320**	**1,404**	**1,286**	**1,234**	**1,318**	779	NT	NT	NT	NT	NT
Chromium	50	1.89	1.74	0.28 J	5.10	3.2 J	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Manganese	300	**471.8**	267.4	**336.7**	**400.2**	178	245.6	38.19	41.49	24.52	**333**	NT	NT	NT	NT	NT

Notes:
1. Compounds detected in one or more sample are presented on this table. Refer to Appendix B for list of all compounds included in analysis.
2. Analytical testing completed by Alpha Analytical, Westborough, Massachusetts.
3. NYSDEC Groundwater Class GA criteria obtained from Division of Water Technical and Operational Guidance Series (TOGS 1.1.1), dated October 1993, revised June 1998, errata January 1999 and amended April 2000 (Class GA).
4. ug/L = part per billion (ppb).
5. < indicates compound was not detected above method detection limits.
6. "J" qualifier = Analyte detected below quantitation limits.
7. Value shown in **bold** indicate exceedance of respective Class GA Criteria or guidance value.
8. NV = no value, NT = not tested, ND = Not detected above method detection limit
9. * = value shown is a guidance value rather than a groundwater standard.
10. The equipment used to collect water quality data was calibrated prior to and during use in accordance with the manufacturer's recommendations.
11. DO and pH measurements are routinely made using the same model water quality meter, however the measurements made on 9/2020 and 4/2021 appear erroneous.
12. Wells MWN-03B, MWN-03D and MWN-04 were unable to be low flow sampled. Hand bailing techniques were required. Metals analysis required laboratory filtration.

Table 3

September 2022 Semi-Annual Groundwater Analytical Data Summary
Steel Winds I Facility
Lackawanna, New York

Parameter	NYSDEC Class GA Criteria	MWN-01					MWN-01B					WT1-02				
		9/17/2020 Result	4/2/2021 Result	9/2/2021 Result	3/30/2022 Result	9/13/2022 Result	9/17/2020 Result	4/2/2021 Result	9/2/2021 Result	3/30/2022 Result	9/13/2022 Result	9/18/2020 Result	4/2/2021 Result	9/2/2021 Result	3/30/2022 Result	9/14/2022 Result
Water Quality Field Measurements																
pH (units)	6.5 - 8.5	7.81	7.66	**11.53**	**13.19**	**11.81**	7.83	8.01	**11.1**	**13.03**	**11.46**	**9.07**	7.68	**11.85**	**13.45**	**11.98**
Temperature (˚C)	NV	14.4	10.5	10.8	9.6	12.0	10.9	11.0	9.8	9.4	10.6	13.08	11.5	12.3	11.6	13.1
Specific Conductance (mS/cm)	NV	1.450	1.380	1.212	1.170	1.258	0.991	1.01	0.831	0.808	0.891	2.090	1.84	1.770	1.746	1.592
Turbidity (NTU)	5	2.9	2.4	2.61	1.08	2.80	**7.30**	**5.4**	**7.67**	**22.3**	**22.18**	**16**	**8.6**	2.7	1.37	1.43
Dissolved Oxygen (mg/L)	NV	116.7	132.3	1.2	2.2	5.9	134.7	115.9	0.8	20.7	11.3	28.3	33.6	4.7	3.9	7.6
Oxygen Reduction Potential (mV)	NV	-237	-231	-159.2	-347.1	-104.5	-247	-204	-214.2	-244.3	-118.8	-200	-177	-160.7	-271.7	-41.2
Volatile Organic Compounds - EPA Method 8260C (ug/L)																
Benzene	1	**17**	**14**	**14**	**14**	**12**	**59**	**57**	**55**	**54**	**55**	**7.6**	**6.0**	**12**	**11.0**	**8.7**
Toluene	5	4.2	4.0 J	3.6 J	3.1 J	2.8 J	**18 J**	**20 J**	**19 J**	**16 J**	**20**	1.6 J	1.3 J	2.4 J	2.1 J	1.7 J
Ethylbenzene	5	0.98 J	<	<	<	<	<	<	<	<	0.95 J	<	<	<	<	<
m,p-Xylene	5	**10**	**9.3**	**8.7**	**7.9**	**6.0**	**13 J**	**15 J**	**12 J**	**12 J**	**15**	3.1	2.2 J	4.2	4	2.6
o-Xylene	5	**8**	**7.1**	**6.5**	**5.8**	5.0	**9.1 J**	**10 J**	**9.0 J**	**8.9 J**	**11**	2.6	1.6 J	3.0	2.9	1.9 J
Xylene (Total)	5	**18.0**	**16**	**15.2**	**14**	**11.0**	**22.1**	**25 J**	**21 J**	**21 J**	**26**	**5.7**	3.8 J	**7.2**	**6.9**	4.5 J
Isopropylbenzene	5	<	<	<	<	<	<	<	<	<	1.4 J	<	<	<	<	<
1,3,5-Trimethylbenzene	5	4	4.5 J	4.2 J	3.9 J	2.8 J	<	<	<	<	**5.2**	1.5 J	1.3 J	2.0 J	2.0 J	1.2 J
1,2,4-Trimethylbenzene	5	4.3	4.8 J	4.6 J	4.1 J	3.0 J	<	**7.6 J**	**7.1 J**	<	**7.4**	1.1 J	0.86 J	1.5 J	1.5 J	0.84 J
Naphthalene*	10	**240**	**310**	**270**	**290**	**240**	**1,500**	**1,800**	**1,500**	**1,700**	**1,500**	**36**	**22**	**43**	**45**	**27**
Semi-Volatile Organic Compounds - EPA Method 8270D (ug/L)																
Acetophenone	NV	<	<	<	<	0.570 J	<	<	<	<	<	<	<	<	<	0.317 J
Acenaphthylene	NV	22.4	34	22.3	30.3	23.5	54.6	44	44.0	33.8	54.3	1.08	1.1	0.651	1.30	1.16
Naphthalene*	10	**139.0**	**140**	**96.2**	**141**	**91.9**	**1,030**	**910**	**962**	**970**	**742**	**16.90**	**14**	9.38	**16.8**	**17.2**
2-Methylnaphthalene	NV	27.1	35	21.9	40.0	27.8	48.0	41	35.8	46.2	52.4	3.57	3.3	2.11	4.05	4.62
Acenaphthene*	20	8.34	13	8.66	11.9	10.1	11.2	10	12.0	10.5	11.8	1.08	1.3	0.710	1.51	1.47
Dibenzofuran	NV	25.9	44	28.9	39.6	29.7	29.4	23.0	30.3	24.8	30.6	3.94	3.7	2.47	4.92	4.92
Fluorene*	50	38.30	**70**	41.9	**58.8**	44.4	43.9	38	43.7	35.7	42.3	6.14	7.3	3.50	7.51	7.48
Phenanthrene*	50	45.30	**110**	**71.0**	**81.5**	**69.9**	**64.3**	**55**	**61.9**	**53.6**	**69.5**	13.30	17	8.10	14.1	13.7
Dibenzo (a,h)Anthracene	NV	<	0.05 J	<	<	<	<	<	<	<	<	<	<	<	<	<
Carbazole	NV	20.30	26	19.6	24.1	19.7	62.4	52.0	60.0	55.4	61.3	3.75	2.9	2.88	4.80	6.02
Anthracene*	50	5.81	19	7.74	11.9	12.2	11.00	5.3	8.19	6.46	11.8	2.40	2.8	1.44	2.52	2.74
Fluoranthene*	50	5.72	24	9.44	10.6	12.3	10.3	10	8.97	8.33	10.8	4.02	6.6	3.18	5.42	4.61
Biphenyl	5	**6.41**	**8.8**	**5.85**	**7.86**	**6.48**	**8.19**	**6.50**	**7.45**	**6.09**	**7.84 J**	0.99	0.82 J	0.548	1.02	1.13
Pyrene*	50	4.47	14	6.16	6.38	6.81	6.62	5.90	6.44	4.95	5.57 J	3.45	4.8	2.39	3.57	2.93
Butyl benzyl phthalate*	50	<	<	0.104 J	<	<	<	<	<	<	<	<	<	<	<	<
Benz [a] Anthracene*	0.002	<	**1.4**	<	**0.372 J**	**0.380 J**	<	**0.38**	**0.461 J**	**0.316 J**	<	<	**0.24**	<	**0.202 J**	<
Benzo [b] Fluoranthene*	0.002	<	**0.40**	<	<	**0.079 J**	<	**0.10 J**	**0.105 J**	**0.105 J**	<	<	**0.03 J**	<	<	<
Benzo [k] Fluoranthene*	0.002	<	**0.14**	<	<	<	<	**0.04 J**	<	<	<	<	**0.01 J**	<	<	<
Benzo [a] Pyrene	ND	<	**0.26**	<	<	<	<	**0.05 J**	**0.072 J**	**0.079 J**	<	<	<	<	<	<
Indeno [1,2,3-cd] Pyrene*	0.002	<	**0.11**	<	<	<	<	**0.04 J**	<	<	<	<	<	<	<	<
Benzo (g,h,i) Perylene	NV	<	0.09 J	<	<	<	<	0.03 J	<	<	<	<	<	<	<	<
Chrysene*	0.002	<	**0.82**	**0.216 J**	**0.187 J**	**0.214 J**	<	**0.22**	**0.256 J**	**0.180 J**	<	<	**0.17**	<	**0.146 J**	<
bis(2-Ethylhexyl)phthalate	5	0.456 J	<	<	<	<	1.10	<	<	<	<	0.334 JB	<	<	<	<

Notes:
1. Compounds detected in one or more sample for the past five sampling events are presented on this table. Refer to Appendix B for list of all compounds included in analysis.
2. Analytical testing completed by Alpha Analytical in Westborough, MA .
3. NYSDEC Groundwater Class GA criteria obtained from Division of Water Technical and Operational Guidance Series (TOGS 1.1.1), dated October 1993, revised June 1998, errata January 1999 and amended April 2000 (Class GA).
4. ug/L = part per billion (ppb).
5. < indicates compound was not detected above method detection limits.
6. "J" qualifier = Analyte detected below quantitation limits.
7. "B" qualifier = indicates compound was detected in the method blank sample.
8. "D" qualifier = indicates the compound concentration was obtained from a secondary dilution analysis.
7. Value shown in **bold** indicates exceedance of respective Class GA Criteria or guidance value.
8. NV = no value, NT = not tested, ND = Not detected above method detection limit
9. * = value shown is a guidance value rather than a groundwater standard.
10. The equipment used to collect water quality data was calibrated prior to and during use in accordance with the manufacturer's recommendations.
11. DO and pH measurements are routinely made using the same model water quality meter, however the measurements made on 9/2020 and 4/2021 appear erroneous.

Table 3

September 2021 Semi-Annual Groundwater Analytical Data Summary
Steel Winds I Facility
Lackawanna, New York

Parameter	NYSDEC Class GA Criteria	WT1-04					WT1-05					BCP-ORC-1				
		9/18/2020 Result	4/2/2021 Result	9/2/2021 Result	3/30/2022 Result	9/13/2022 Result	9/18/2020 Result	4/2/2021 Result	9/2/2021 Result	3/30/2022 Result	9/13/2022 Result	9/18/2020 Result	4/2/2021 Result	9/2/2021 Result	3/30/2022 Result	9/13/2022 Result
Water Quality Field Measurements																
pH (units)	6.5 - 8.5	8.28	8.27	**11.51**	**13.81**	**11.75**	**8.6**	7.83	**11.46**	**12.99**	**11.61**	**8.64**	7.85	**11.21**	**13.47**	**11.6**
Temperature (˚C)	NV	13.27	10.8	11.1	8.4	13.3	12.57	10.9	11.2	9.2	13.0	12.02	11.1	10.0	9.0	11.5
Specific Conductance (mS/cm)	NV	1.410	1.550	1.326	1.294	1.326	1.340	1.490	1.200	1.182	1.292	1.230	1.360	0.957	1.00	1.060
Turbidity (NTU)	5	**8.3**	**6.1**	3.76	0.41	3.8	4.6	**5.3**	1.74	2.48	0.98	2.1	**6.1**	2.17	0.11	1.56
Dissolved Oxygen (mg/L)	NV	1.9	4.3	1.0	1.5	5.5	100.90	77.30	1.2	10.3	5.7	4.2	16.5	4.7	36.2	11.0
Oxygen Reduction Potential (mV)	NV	-288	-223	-172.4	-327.3	-118.5	-190	-175	-157.2	-261.8	-68.7	-248	-207	-188.1	-181.1	20.7
Volatile Organic Compounds - EPA Method 8260C (ug/L)																
Benzene	1	**16**	**7.2**	**14**	**9.6**	**14**	**10**	**9.0**	**9.3**	**13**	**9.7**	**22**	**29**	**27**	**11**	**25**
Toluene	5	3.1	1.7 J	2.3 J	1.9 J	2.1 J	2.6	3.0	2.6 J	3.2 J	2.3 J	2.8 J	4.3 J	4.0 J	1.4 J	3.2 J
Ethylbenzene	5	<	<	<	<	<	<	0.78 J	<	<	<	<	<	<	<	<
m,p-Xylene	5	**6.1**	3.7	4.1	4.4	3.5	**6.3**	**7.8**	**6.7**	**8.8**	**5.4**	2.1 J	**5.2 J**	3.9 J	1.4 J	3.4 J
o-Xylene	5	**5.2**	2.9	3.2	3.3	2.6	**5.4**	**5.7**	**5.1**	**6.3**	4.0 J	4.2 J	**6.8 J**	**6.1 J**	2.2 J	4.8 J
Xylene (Total)	5	**11.3**	**6.6**	**7.3**	**7.7**	**6.1**	**11.7**	**14.0**	**11.8**	**15**	**9.4 J**	**6.3**	**12 J**	**10.0 J**	3.6 J	**8.2 J**
1,3,5-Trimethylbenzene	5	2.6	2.3 J	2.2 J	2.3 J	1.7 J	2.4 J	3.1	3.1 J	3.8 J	2.7 J	1.8 J	<	<	1.1 J	<
1,2,4-Trimethylbenzene	5	2.2 J	1.8 J	1.7 J	1.8 J	1.4 J	2.8	3.6	3.5 J	4.3 J	2.7 J	2.4 J	3.4 J	3.0 J	1.2 J	<
Naphthalene*	10	**93**	**60**	**54**	**66**	**66**	**230**	**160**	**200**	**270**	**220**	**490**	**500**	**460**	**190**	**460**
Semi-Volatile Organic Compounds - EPA Method 8270D (ug/L)																
Acetophenone	NV	<	<	<	<	0.413 J	<	0.58 J	<	<	0.561 J	<	<	<	<	0.492 J
Acenaphthylene	NV	3.28	3.50	2.66	1.95	3.24	20.4	30.0	19.8	28.4	22.1	15.7	26	19.3	7.61	17.0
Naphthalene*	10	**43.6**	**36.00**	**31.1**	**21.8**	**32.6**	**108**	**150**	**111**	**141**	**106**	**198**	**240**	**246**	**63.3**	**198**
2-Methylnaphthalene	NV	7.04	8.50	6.14	6.77	8.39	17.4	29.0	18.2	30.8	27.0	14.9	24	22.7	6.86	23.2
Acenaphthene*	20	3.58	3.90	3.24	2.39	3.42	6.04	8.80	6.44	10.2	8.69	4.83	6.5	7.06	2.21	5.68
Dibenzofuran	NV	10.9	9.40	9.20	6.80	10.1	20.1	28.0	19.7	32.0	24.5	9.82	16	18.2	4.24	13.8
Fluorene*	50	17.2	19.00	14.3	10.4	15.2	27.3	42.0	27.0	46.7	34.7	17.7	30	29.0	7.45	21.4
Phenanthrene*	50	**53.1**	42.00	42.8	25.3	36.3	27.4	**56.0**	20.6	33.8	30.7	26.9	38	44.5	8.84	30.0
Dibenzo (a,h)Anthracene*	NV	<	0.04 J	<	<	<	<	1.6	<	<	<	<	<	<	<	<
Carbazole	NV	8.82	5.60	6.64	4.44	8.48	18.7	20.0	15.9	18.8	19.8	29.1	31	37.6	9.37	26.2
Anthracene*	50	6.19	6.00	5.10	4.04	7.70	2.47	13.00	2.44	4.46	4.93	1.91	3.8	3.59	1.56	3.76
Fluoranthene*	50	11.6	11.00	9.41	5.78	10.9	2.63	39.00	2.03	2.78	3.38	4.69	7.3	5.95	2.44	6.32
Biphenyl	5	1.86	1.9 J	1.67	1.17	1.96	4.31	**5.90**	4.39	**7.74**	**5.70**	2.42	3.9	4.03	1.07	3.06
Pyrene*	50	8.10	7.00	6.28	3.51	6.39	2.50	33.00	1.90	2.64	2.59	4.02	4.9	4.90	1.84	4.06
Butyl benzyl phthalate*	50	<	<	0.083 J	<	<	<	<	<	<	<	<	<	<	<	<
Benz [a] Anthracene*	0.002	**0.590**	**0.61**	**0.402 J**	**0.226 J**	**0.342 J**	**0.242 J**	**14**	<	**<**	<	**0.298 J**	**0.28**	**0.295 J**	**<**	**0.214 J**
Benzo [b] Fluoranthene*	0.002	**0.255 J**	**0.37**	**0.136 J**	**0.073 J**	**0.093 J**	**0.140 J**	**17**	<	**0.076 J**	<	**0.111 J**	**0.06 J**	<	**<**	<
Benzo [k] Fluoranthene*	0.002	<	**0.15**	**<**	**<**	**<**	<	**5.6**	<	**<**	<	<	**0.01 J**	<	**<**	<
Benzo [a] Pyrene	ND	**0.156 J**	**0.27**	**0.091 J**	**<**	**<**	**0.092 J**	**12**	<	**<**	<	**0.065 J**	**0.02 J**	<	**<**	<
Indeno [1,2,3-cd] Pyrene	0.002	**0.110 J**	**0.19**	**<**	**<**	**<**	<	**8.6**	<	**<**	<	<	<	<	<	<
Benzo (g,h,i) Perylene	NV	0.114 J	0.17	<	<	<	<	7.6	<	<	<	<	<	<	<	<
Chrysene*	0.002	**0.461 J**	**0.48**	**0.331 J**	**0.166 J**	**0.250 J**	**0.198 J**	**14**	<	**<**	<	**0.208 J**	**0.19**	**0.225 J**	**<**	**0.145 J**
bis(2-Ethylhexyl)Phthalate	5	0.086 JB	<	<	<	<	0.094 JB	4.0	<	<	<	<	<	<	<	<

Notes:
1. Compounds detected in one or more sample for the past five sampling events are presented on this table. Refer to Appendix B for list of all compounds included in analysis.
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7. Value shown in **bold** indicates exceedance of respective Class GA Criteria or guidance value.
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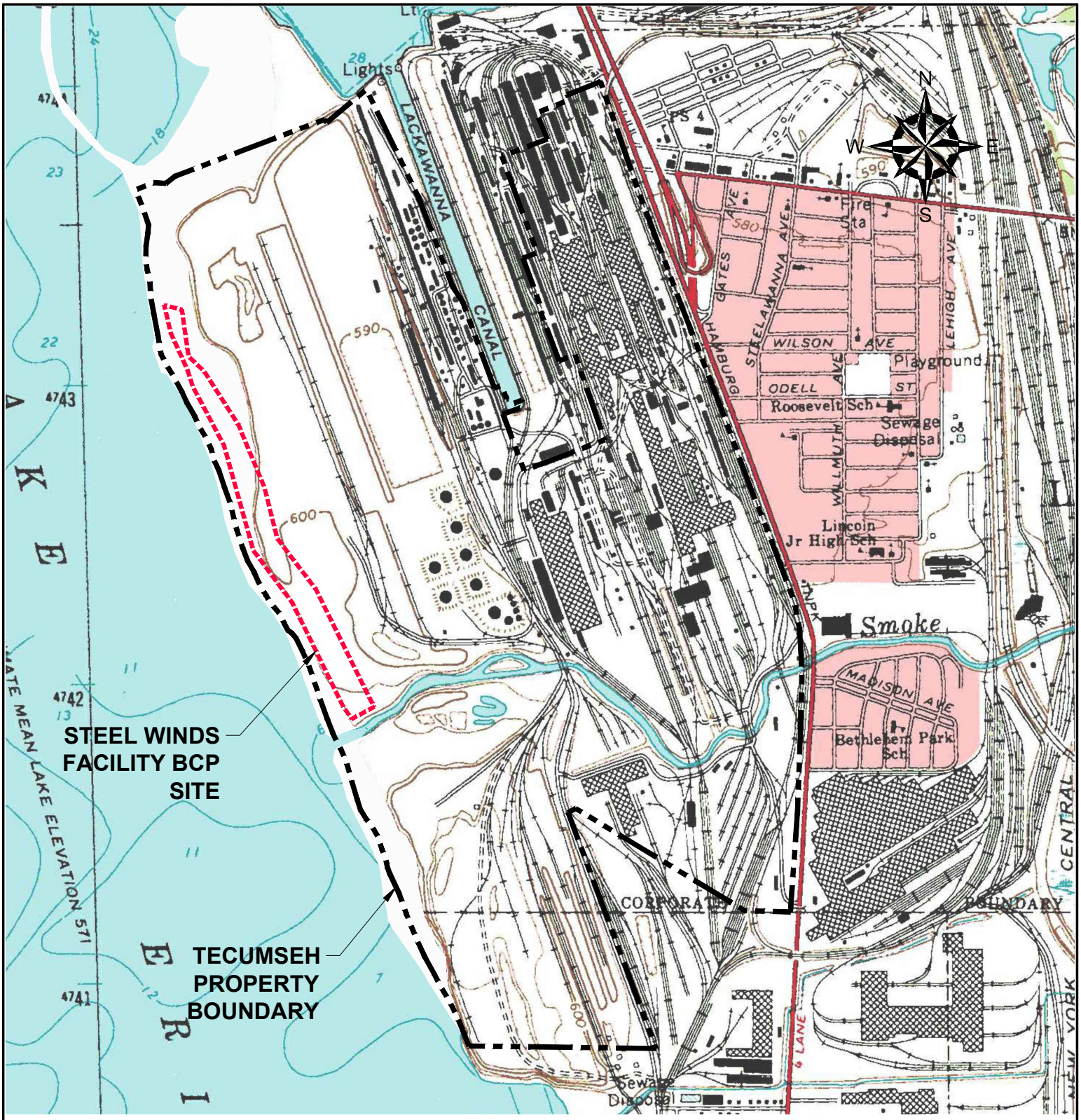
11. DO and pH measurements are routinely made using the same model water quality meter, however the measurements made on 9/2020 and 4/2021 appear erroneous.

FIGURES



NOTE:
BASE MAP ADAPTED FROM A 1965 U.S.G.S. TOPOGRAPHIC MAPS DOWNLOADED FROM http://store.usgs.gov

0 750 1500 3000
SCALE IN FEET

NO.	ISSUE/DESCRIPTION	BY	DATE

PREPARED BY:
GZA GeoEnvironmental of N.Y.
Engineers and Scientists
300 PEARL STREET, SUITE 700
BUFFALO, NEW YORK 14202
(716) 685-2300

PREPARED FOR:
NIAGARA WIND POWER, LLC.

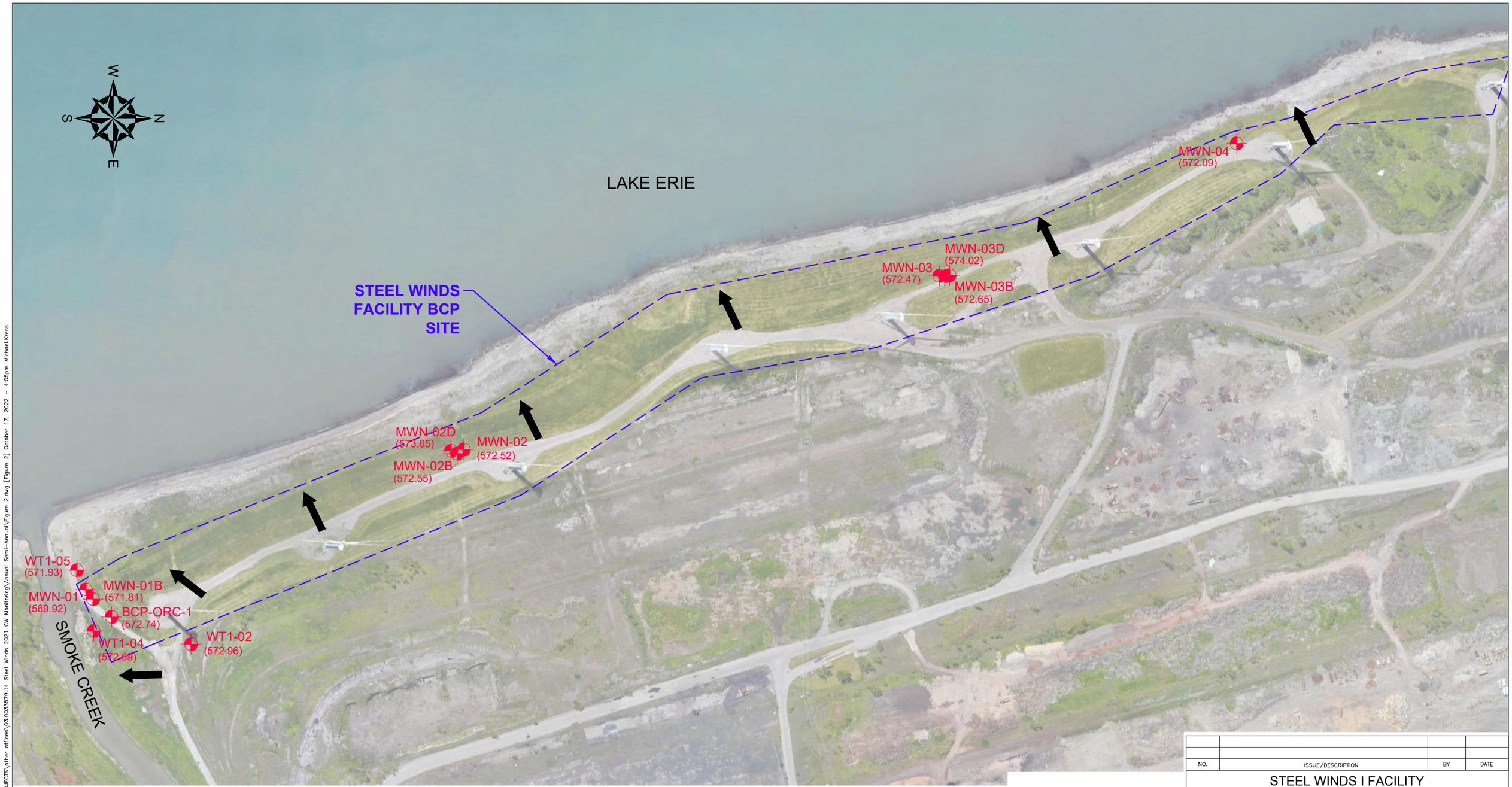
STEEL WINDS I FACILITY
ROUTE 5
LACKAWANNA, NEW YORK

2022 ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING REPORT

LOCUS PLAN

FIGURE 1

PROJ MGR: DJT	REVIEWED BY: EAS	CHECKED BY:	DATE	PROJECT NO.	REVISION NO.
DESIGNED BY:	DRAWN BY: MDK	SCALE: AS SHOWN	OCTOBER 2022	03.0033579.15	



LEGEND:

MWN-01 (569.92) — APPROXIMATE LOCATION AND DESIGNATION OF EXISTING MONITORING WELLS SHOWN WITH GROUNDWATER ELEVATIONS MEASURED BY GZA IN SEPTEMBER 2022

PRESUMED GROUNDWATER FLOW DIRECTION

NOTES:

1. BASE MAP ADAPTED FROM AN AERIAL PHOTO DOWNLOADED FROM GOOGLE EARTH AND FIELD OBSERVATIONS.

2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

0 150 300 600
SCALE IN FEET

NO.	ISSUE/DESCRIPTION	BY	DATE

STEEL WINDS I FACILITY
ROUTE 5
LACKAWANNA, NEW YORK

2022 ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING REPORT

SITE PLAN

PREPARED BY:
GZA GeoEnvironmental of N.Y.
Engineers and Scientists
300 PEARL STREET, SUITE 700
BUFFALO, NEW YORK 14202
(716) 685-2300

PREPARED FOR:
NIAGARA WIND POWER, LLC.

PROJ MGR: DJT	REVIEWED BY: EAS	CHECKED BY:	FIGURE 2
DESIGNED BY:	DRAWN BY: MDK	SCALE: AS SHOWN	
DATE OCTOBER 2022	PROJECT NO. 03.0033579.15	REVISION NO.	

APPENDIX A

LIMITATIONS

GEOHYDROLOGICAL LIMITATIONS

Use of Report

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of our Client for the stated purpose(s) and location(s) identified in the Proposal for Services and/or Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not expressly identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

Standard of Care

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Proposal for Services and/or Report and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).

3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made. Specifically, GZA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by GZA during its study. Additionally, GZA makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a local, state or federal agency.

4. In conducting our work, GZA relied upon certain information made available by public agencies, Client and/or others. GZA did not attempt to independently verify the accuracy or completeness of that information. Inconsistencies in this information which we have noted, if any, are discussed in the Report.

Subsurface Conditions

5. The generalized soil profile(s) provided in our Report are based on widely-spaced subsurface explorations and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs. The nature and extent of variations between these explorations may not become evident until further exploration or construction. If variations or other latent conditions then become evident, it will be necessary to reevaluate the conclusions and recommendations of this report.

6. Water level readings have been made, as described in this Report, in and monitoring wells at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this report. Fluctuations in the level of the groundwater however occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, the presence of subsurface utilities, and/or natural or artificially induced perturbations. The observed water table may be other than indicated in the Report.

Compliance with Codes and Regulations

7. We used reasonable care in identifying and interpreting applicable codes and regulations necessary to execute our scope of work. These codes and regulations are subject to various, and possibly contradictory, interpretations. Interpretations and compliance with codes and regulations by other parties is beyond our control.

Screening and Analytical Testing

8. GZA collected environmental samples at the locations identified in the Report. These samples were analyzed for the specific parameters identified in the report. Additional constituents, for which analyses were not conducted, may be present in soil, groundwater, surface water, sediment and/or air. Future Site activities and uses may result in a requirement for additional testing.

9. Our interpretation of field screening and laboratory data is presented in the Report. Unless otherwise noted, we relied upon the laboratory's QA/QC program to validate these data.

10. Variations in the types and concentrations of contaminants observed at a given location or time may occur due to release mechanisms, disposal practices, changes in flow paths, and/or the influence of various physical, chemical, biological or radiological processes. Subsequently observed concentrations may be other than indicated in the Report.

Interpretation of Data

11. Our opinions are based on available information as described in the Report, and on our professional judgment. Additional observations made over time, and/or space, may not support the opinions provided in the Report.

Additional Information

12. In the event that the Client or others authorized to use this report obtain additional information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

Additional Services

13. GZA recommends that we be retained to provide services during any future investigations, design, implementation activities, construction, and/or property development/ redevelopment at the Site. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.

APPENDIX B

ANALYTICAL TEST RESULTS

ANALYTICAL REPORT

Lab Number:	L2249775
Client:	GZA GeoEnvironmental of New York 300 Pearl Street Suite 700 Buffalo, NY 14202
ATTN:	Dan Troy
Phone:	(716) 844-7050
Project Name:	STEELWINDS ANNUAL/SEMIANNUAL
Project Number:	03.0033579.15
Report Date:	10/11/22

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: STEELWINDS ANNUAL/SEMIANNUAL
Project Number: 03.0033579.15

Lab Number: L2249775
Report Date: 10/11/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2249775-01	WT1-05-091322	WATER	LACKAWANNA NY	09/13/22 07:55	09/13/22
L2249775-02	MWN-01-091322	WATER	LACKAWANNA NY	09/13/22 09:05	09/13/22
L2249775-03	MWN-01B-091322	WATER	LACKAWANNA NY	09/13/22 10:15	09/13/22
L2249775-04	WT1-04-091322	WATER	LACKAWANNA NY	09/13/22 10:55	09/13/22
L2249775-05	BCP-ORC-1-091322	WATER	LACKAWANNA NY	09/13/22 13:25	09/13/22
L2249775-06	WT1-02-091322	WATER	LACKAWANNA NY	09/13/22 14:15	09/13/22
L2249775-07	TRIP BLANK-1	WATER	LACKAWANNA NY	09/13/22 00:00	09/13/22

Project Name:	STEELWINDS ANNUAL/SEMIANNUAL	**Lab Number:**	L2249775
Project Number:	03.0033579.15	**Report Date:**	10/11/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	STEELWINDS ANNUAL/SEMIANNUAL	**Lab Number:**	L2249775
Project Number:	03.0033579.15	**Report Date:**	10/11/22

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Cristin Walker

Title: Technical Director/Representative Date: 10/11/22

ORGANICS

VOLATILES

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-01 D
Client ID: WT1-05-091322
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 07:55
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/24/22 20:33
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	9.7		ug/l	1.0	0.32	2
Toluene	2.3	J	ug/l	5.0	1.4	2
Ethylbenzene	ND		ug/l	5.0	1.4	2
Methyl tert butyl ether	ND		ug/l	5.0	1.4	2
p/m-Xylene	5.4		ug/l	5.0	1.4	2
o-Xylene	4.0	J	ug/l	5.0	1.4	2
n-Butylbenzene	ND		ug/l	5.0	1.4	2
sec-Butylbenzene	ND		ug/l	5.0	1.4	2
tert-Butylbenzene	ND		ug/l	5.0	1.4	2
Isopropylbenzene	ND		ug/l	5.0	1.4	2
p-Isopropyltoluene	ND		ug/l	5.0	1.4	2
Naphthalene	220		ug/l	5.0	1.4	2
n-Propylbenzene	ND		ug/l	5.0	1.4	2
1,3,5-Trimethylbenzene	2.7	J	ug/l	5.0	1.4	2
1,2,4-Trimethylbenzene	2.7	J	ug/l	5.0	1.4	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	101		70-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-02 D
Client ID: MWN-01-091322
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 09:05
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/24/22 20:12
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	12		ug/l	1.0	0.32	2
Toluene	2.8	J	ug/l	5.0	1.4	2
Ethylbenzene	ND		ug/l	5.0	1.4	2
Methyl tert butyl ether	ND		ug/l	5.0	1.4	2
p/m-Xylene	6.0		ug/l	5.0	1.4	2
o-Xylene	5.0		ug/l	5.0	1.4	2
n-Butylbenzene	ND		ug/l	5.0	1.4	2
sec-Butylbenzene	ND		ug/l	5.0	1.4	2
tert-Butylbenzene	ND		ug/l	5.0	1.4	2
Isopropylbenzene	ND		ug/l	5.0	1.4	2
p-Isopropyltoluene	ND		ug/l	5.0	1.4	2
Naphthalene	240		ug/l	5.0	1.4	2
n-Propylbenzene	ND		ug/l	5.0	1.4	2
1,3,5-Trimethylbenzene	2.8	J	ug/l	5.0	1.4	2
1,2,4-Trimethylbenzene	3.0	J	ug/l	5.0	1.4	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	110		70-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-03
Client ID: MWN-01B-091322
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 10:15
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/24/22 20:54
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	55		ug/l	0.50	0.16	1
Toluene	20		ug/l	2.5	0.70	1
Ethylbenzene	0.95	J	ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	15		ug/l	2.5	0.70	1
o-Xylene	11		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	1.4	J	ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	780	E	ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	5.2		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	7.4		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	99		70-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-03 D
Client ID: MWN-01B-091322
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 10:15
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/27/22 11:27
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Naphthalene	1500		ug/l	50	14.	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	113		70-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-04
Client ID: WT1-04-091322
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 10:55
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/24/22 19:51
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	14		ug/l	0.50	0.16	1
Toluene	2.1	J	ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	3.5		ug/l	2.5	0.70	1
o-Xylene	2.6		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	66		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	1.7	J	ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	1.4	J	ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	125		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	113		70-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-05 D
Client ID: BCP-ORC-1-091322
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 13:25
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/24/22 19:30
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	25		ug/l	2.0	0.64	4
Toluene	3.2	J	ug/l	10	2.8	4
Ethylbenzene	ND		ug/l	10	2.8	4
Methyl tert butyl ether	ND		ug/l	10	2.8	4
p/m-Xylene	3.4	J	ug/l	10	2.8	4
o-Xylene	4.8	J	ug/l	10	2.8	4
n-Butylbenzene	ND		ug/l	10	2.8	4
sec-Butylbenzene	ND		ug/l	10	2.8	4
tert-Butylbenzene	ND		ug/l	10	2.8	4
Isopropylbenzene	ND		ug/l	10	2.8	4
p-Isopropyltoluene	ND		ug/l	10	2.8	4
Naphthalene	460		ug/l	10	2.8	4
n-Propylbenzene	ND		ug/l	10	2.8	4
1,3,5-Trimethylbenzene	ND		ug/l	10	2.8	4
1,2,4-Trimethylbenzene	ND		ug/l	10	2.8	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	87		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	109		70-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-06
Client ID: WT1-02-091322
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 14:15
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/24/22 19:09
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	8.7		ug/l	0.50	0.16	1
Toluene	1.7	J	ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	2.6		ug/l	2.5	0.70	1
o-Xylene	1.9	J	ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	27		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	1.2	J	ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	0.84	J	ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	84		70-130
Dibromofluoromethane	108		70-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-07
Client ID: TRIP BLANK-1
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 00:00
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/24/22 18:47
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	114		70-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/24/22 13:34
Analyst: TMS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-07 Batch: WG1692517-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	104		70-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/27/22 11:02
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1692957-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	113		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: STEELWINDS ANNUAL/SEMIANNUAL

Project Number: 03.0033579.15

Lab Number: L2249775

Report Date: 10/11/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-07 Batch: WG1692517-3 WG1692517-4								
Benzene	95		97		70-130	2		20
Toluene	100		100		70-130	0		20
Ethylbenzene	96		95		70-130	1		20
Methyl tert butyl ether	82		69		63-130	17		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	95		95		70-130	0		20
n-Butylbenzene	100		99		53-136	1		20
sec-Butylbenzene	97		93		70-130	4		20
tert-Butylbenzene	92		88		70-130	4		20
Isopropylbenzene	88		86		70-130	2		20
p-Isopropyltoluene	95		90		70-130	5		20
Naphthalene	72		74		70-130	3		20
n-Propylbenzene	95		93		69-130	2		20
1,3,5-Trimethylbenzene	96		92		64-130	4		20
1,2,4-Trimethylbenzene	93		88		70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	110		112		70-130
Toluene-d8	102		101		70-130
4-Bromofluorobenzene	93		94		70-130
Dibromofluoromethane	102		101		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: STEELWINDS ANNUAL/SEMIANNUAL

Project Number: 03.0033579.15

Lab Number: L2249775

Report Date: 10/11/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1692957-3 WG1692957-4								
Benzene	110		110		70-130	0		20
Toluene	98		100		70-130	2		20
Ethylbenzene	100		100		70-130	0		20
Methyl tert butyl ether	85		89		63-130	5		20
p/m-Xylene	100		105		70-130	5		20
o-Xylene	95		100		70-130	5		20
n-Butylbenzene	97		100		53-136	3		20
sec-Butylbenzene	96		100		70-130	4		20
tert-Butylbenzene	81		98		70-130	19		20
Isopropylbenzene	95		100		70-130	5		20
p-Isopropyltoluene	94		100		70-130	6		20
Naphthalene	84		90		70-130	7		20
n-Propylbenzene	99		100		69-130	1		20
1,3,5-Trimethylbenzene	92		97		64-130	5		20
1,2,4-Trimethylbenzene	92		97		70-130	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	93		96		70-130
Toluene-d8	96		96		70-130
4-Bromofluorobenzene	94		94		70-130
Dibromofluoromethane	103		105		70-130

SEMIVOLATILES

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-01
Client ID: WT1-05-091322
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 07:55
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/19/22 12:11
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
bis(2-Chloroethyl)ether	ND		ug/l	0.495	0.092	1
1,3-Dichlorobenzene	ND		ug/l	0.495	0.078	1
1,4-Dichlorobenzene	ND		ug/l	0.495	0.082	1
1,2-Dichlorobenzene	ND		ug/l	0.495	0.067	1
Benzyl alcohol	ND		ug/l	0.495	0.122	1
bis(2-chloroisopropyl)ether	ND		ug/l	0.495	0.107	1
Acetophenone	0.561	J	ug/l	0.990	0.205	1
Hexachloroethane	ND		ug/l	0.495	0.101	1
Nitrobenzene	ND		ug/l	0.495	0.101	1
Isophorone	ND		ug/l	0.495	0.125	1
bis(2-Chloroethoxy)methane	ND		ug/l	0.495	0.085	1
1,2,4-Trichlorobenzene	ND		ug/l	0.495	0.095	1
Naphthalene	62.1	E	ug/l	0.495	0.087	1
4-Chloroaniline	ND		ug/l	0.495	0.127	1
Hexachlorobutadiene	ND		ug/l	0.495	0.085	1
2-Methylnaphthalene	27.0		ug/l	0.495	0.090	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.495	0.079	1
Hexachlorocyclopentadiene	ND		ug/l	0.495	0.151	1
Biphenyl	5.70		ug/l	0.495	0.110	1
2-Chloronaphthalene	ND		ug/l	0.495	0.089	1
2-Nitroaniline	ND		ug/l	0.495	0.137	1
Acenaphthylene	22.1		ug/l	0.495	0.111	1
Dimethylphthalate	ND		ug/l	0.495	0.116	1
2,6-Dinitrotoluene	ND		ug/l	0.495	0.166	1
Acenaphthene	8.69		ug/l	0.495	0.095	1
3-Nitroaniline	ND		ug/l	0.495	0.110	1
Dibenzofuran	24.5		ug/l	0.495	0.090	1
2,4-Dinitrotoluene	ND		ug/l	0.495	0.161	1

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-01 Date Collected: 09/13/22 07:55

Client ID: WT1-05-091322 Date Received: 09/13/22

Sample Location: LACKAWANNA NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
Fluorene	34.7		ug/l	0.495	0.103	1
Diethylphthalate	ND		ug/l	0.495	0.178	1
4-Nitroaniline	ND		ug/l	0.495	0.111	1
n-Nitrosodiphenylamine	ND		ug/l	0.495	0.071	1
Hexachlorobenzene	ND		ug/l	0.495	0.121	1
Phenanthrene	30.7		ug/l	0.495	0.110	1
Anthracene	4.93		ug/l	0.495	0.136	1
Carbazole	19.8		ug/l	0.495	0.142	1
Di-n-butylphthalate	ND		ug/l	0.495	0.099	1
Fluoranthene	3.38		ug/l	0.495	0.154	1
Pyrene	2.59		ug/l	0.495	0.168	1
Butylbenzylphthalate	ND		ug/l	0.495	0.084	1
3,3'-Dichlorobenzidine	ND		ug/l	0.495	0.191	1
Benz(a)anthracene	ND		ug/l	0.495	0.182	1
Chrysene	ND		ug/l	0.495	0.140	1
bis(2-Ethylhexyl)phthalate	ND		ug/l	0.495	0.080	1
Di-n-octylphthalate	ND		ug/l	0.990	0.078	1
Benzo(b)fluoranthene	ND		ug/l	0.495	0.065	1
Benzo(k)fluoranthene	ND		ug/l	0.495	0.159	1
Benzo(a)pyrene	ND		ug/l	0.495	0.060	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.495	0.089	1
Dibenz(a,h)anthracene	ND		ug/l	0.495	0.064	1
Benzo(g,h,i)perylene	ND		ug/l	0.495	0.108	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		15-115
Phenol-d5	42		15-115
Nitrobenzene-d5	94		30-130
2-Fluorobiphenyl	78		30-130
2,4,6-Tribromophenol	112		15-115
Terphenyl-d14	97		30-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL
Lab Number: L2249775
Project Number: 03.0033579.15
Report Date: 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-01 D
Client ID: WT1-05-091322
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 07:55
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/20/22 12:24
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
Naphthalene	106		ug/l	2.48	0.434	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		15-115
Phenol-d5	41		15-115
Nitrobenzene-d5	88		30-130
2-Fluorobiphenyl	86		30-130
2,4,6-Tribromophenol	101		15-115
Terphenyl-d14	100		30-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-02
Client ID: MWN-01-091322
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 09:05
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/19/22 12:40
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
bis(2-Chloroethyl)ether	ND		ug/l	0.495	0.092	1
1,3-Dichlorobenzene	ND		ug/l	0.495	0.078	1
1,4-Dichlorobenzene	ND		ug/l	0.495	0.082	1
1,2-Dichlorobenzene	ND		ug/l	0.495	0.067	1
Benzyl alcohol	ND		ug/l	0.495	0.122	1
bis(2-chloroisopropyl)ether	ND		ug/l	0.495	0.107	1
Acetophenone	0.570	J	ug/l	0.990	0.205	1
Hexachloroethane	ND		ug/l	0.495	0.101	1
Nitrobenzene	ND		ug/l	0.495	0.101	1
Isophorone	ND		ug/l	0.495	0.125	1
bis(2-Chloroethoxy)methane	ND		ug/l	0.495	0.085	1
1,2,4-Trichlorobenzene	ND		ug/l	0.495	0.095	1
Naphthalene	59.4	E	ug/l	0.495	0.087	1
4-Chloroaniline	ND		ug/l	0.495	0.127	1
Hexachlorobutadiene	ND		ug/l	0.495	0.085	1
2-Methylnaphthalene	27.8		ug/l	0.495	0.090	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.495	0.079	1
Hexachlorocyclopentadiene	ND		ug/l	0.495	0.151	1
Biphenyl	6.48		ug/l	0.495	0.110	1
2-Chloronaphthalene	ND		ug/l	0.495	0.089	1
2-Nitroaniline	ND		ug/l	0.495	0.137	1
Acenaphthylene	23.5		ug/l	0.495	0.111	1
Dimethylphthalate	ND		ug/l	0.495	0.116	1
2,6-Dinitrotoluene	ND		ug/l	0.495	0.166	1
Acenaphthene	10.1		ug/l	0.495	0.095	1
3-Nitroaniline	ND		ug/l	0.495	0.110	1
Dibenzofuran	29.7		ug/l	0.495	0.090	1
2,4-Dinitrotoluene	ND		ug/l	0.495	0.161	1

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-02 Date Collected: 09/13/22 09:05

Client ID: MWN-01-091322 Date Received: 09/13/22

Sample Location: LACKAWANNA NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
Fluorene	44.4		ug/l	0.495	0.103	1
Diethylphthalate	ND		ug/l	0.495	0.178	1
4-Nitroaniline	ND		ug/l	0.495	0.111	1
n-Nitrosodiphenylamine	ND		ug/l	0.495	0.071	1
Hexachlorobenzene	ND		ug/l	0.495	0.121	1
Phenanthrene	57.0	E	ug/l	0.495	0.110	1
Anthracene	12.2		ug/l	0.495	0.136	1
Carbazole	19.7		ug/l	0.495	0.142	1
Di-n-butylphthalate	ND		ug/l	0.495	0.099	1
Fluoranthene	12.3		ug/l	0.495	0.154	1
Pyrene	6.81		ug/l	0.495	0.168	1
Butylbenzylphthalate	ND		ug/l	0.495	0.084	1
3,3'-Dichlorobenzidine	ND		ug/l	0.495	0.191	1
Benz(a)anthracene	0.380	J	ug/l	0.495	0.182	1
Chrysene	0.214	J	ug/l	0.495	0.140	1
bis(2-Ethylhexyl)phthalate	ND		ug/l	0.495	0.080	1
Di-n-octylphthalate	ND		ug/l	0.990	0.078	1
Benzo(b)fluoranthene	0.079	J	ug/l	0.495	0.065	1
Benzo(k)fluoranthene	ND		ug/l	0.495	0.159	1
Benzo(a)pyrene	ND		ug/l	0.495	0.060	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.495	0.089	1
Dibenz(a,h)anthracene	ND		ug/l	0.495	0.064	1
Benzo(g,h,i)perylene	ND		ug/l	0.495	0.108	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		15-115
Phenol-d5	42		15-115
Nitrobenzene-d5	92		30-130
2-Fluorobiphenyl	78		30-130
2,4,6-Tribromophenol	102		15-115
Terphenyl-d14	92		30-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-02 D
Client ID: MWN-01-091322
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 09:05
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/20/22 12:54
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
Naphthalene	91.9		ug/l	2.48	0.434	5
Phenanthrene	69.6		ug/l	2.48	0.550	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		15-115
Phenol-d5	40		15-115
Nitrobenzene-d5	89		30-130
2-Fluorobiphenyl	85		30-130
2,4,6-Tribromophenol	95		15-115
Terphenyl-d14	91		30-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-03 D
Client ID: MWN-01B-091322
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 10:15
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/20/22 13:24
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
bis(2-Chloroethyl)ether	ND		ug/l	9.80	1.82	20
1,3-Dichlorobenzene	ND		ug/l	9.80	1.54	20
1,4-Dichlorobenzene	ND		ug/l	9.80	1.62	20
1,2-Dichlorobenzene	ND		ug/l	9.80	1.33	20
Benzyl alcohol	ND		ug/l	9.80	2.41	20
bis(2-chloroisopropyl)ether	ND		ug/l	9.80	2.12	20
Acetophenone	ND		ug/l	19.6	4.06	20
Hexachloroethane	ND		ug/l	9.80	2.00	20
Nitrobenzene	ND		ug/l	9.80	2.00	20
Isophorone	ND		ug/l	9.80	2.47	20
bis(2-Chloroethoxy)methane	ND		ug/l	9.80	1.67	20
1,2,4-Trichlorobenzene	ND		ug/l	9.80	1.88	20
Naphthalene	742		ug/l	9.80	1.72	20
4-Chloroaniline	ND		ug/l	9.80	2.51	20
Hexachlorobutadiene	ND		ug/l	9.80	1.68	20
2-Methylnaphthalene	52.4		ug/l	9.80	1.79	20
1,2,4,5-Tetrachlorobenzene	ND		ug/l	9.80	1.56	20
Hexachlorocyclopentadiene	ND		ug/l	9.80	3.00	20
Biphenyl	7.84	J	ug/l	9.80	2.18	20
2-Chloronaphthalene	ND		ug/l	9.80	1.76	20
2-Nitroaniline	ND		ug/l	9.80	2.70	20
Acenaphthylene	54.3		ug/l	9.80	2.20	20
Dimethylphthalate	ND		ug/l	9.80	2.29	20
2,6-Dinitrotoluene	ND		ug/l	9.80	3.29	20
Acenaphthene	11.8		ug/l	9.80	1.87	20
3-Nitroaniline	ND		ug/l	9.80	2.18	20
Dibenzofuran	30.6		ug/l	9.80	1.78	20
2,4-Dinitrotoluene	ND		ug/l	9.80	3.20	20

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-03 D
Client ID: MWN-01B-091322
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 10:15
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
Fluorene	42.3		ug/l	9.80	2.04	20
Diethylphthalate	ND		ug/l	9.80	3.53	20
4-Nitroaniline	ND		ug/l	9.80	2.20	20
n-Nitrosodiphenylamine	ND		ug/l	9.80	1.41	20
Hexachlorobenzene	ND		ug/l	9.80	2.39	20
Phenanthrene	69.5		ug/l	9.80	2.18	20
Anthracene	11.8		ug/l	9.80	2.69	20
Carbazole	61.3		ug/l	9.80	2.80	20
Di-n-butylphthalate	ND		ug/l	9.80	1.95	20
Fluoranthene	10.8		ug/l	9.80	3.06	20
Pyrene	5.57	J	ug/l	9.80	3.33	20
Butylbenzylphthalate	ND		ug/l	9.80	1.66	20
3,3'-Dichlorobenzidine	ND		ug/l	9.80	3.78	20
Benz(a)anthracene	ND		ug/l	9.80	3.61	20
Chrysene	ND		ug/l	9.80	2.78	20
bis(2-Ethylhexyl)phthalate	ND		ug/l	9.80	1.59	20
Di-n-octylphthalate	ND		ug/l	19.6	1.54	20
Benzo(b)fluoranthene	ND		ug/l	9.80	1.28	20
Benzo(k)fluoranthene	ND		ug/l	9.80	3.16	20
Benzo(a)pyrene	ND		ug/l	9.80	1.18	20
Indeno(1,2,3-cd)pyrene	ND		ug/l	9.80	1.76	20
Dibenz(a,h)anthracene	ND		ug/l	9.80	1.26	20
Benzo(g,h,i)perylene	ND		ug/l	9.80	2.14	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		15-115
Phenol-d5	37		15-115
Nitrobenzene-d5	85		30-130
2-Fluorobiphenyl	84		30-130
2,4,6-Tribromophenol	83		15-115
Terphenyl-d14	89		30-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-04
Client ID: WT1-04-091322
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 10:55
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/19/22 13:39
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
bis(2-Chloroethyl)ether	ND		ug/l	0.495	0.092	1
1,3-Dichlorobenzene	ND		ug/l	0.495	0.078	1
1,4-Dichlorobenzene	ND		ug/l	0.495	0.082	1
1,2-Dichlorobenzene	ND		ug/l	0.495	0.067	1
Benzyl alcohol	ND		ug/l	0.495	0.122	1
bis(2-chloroisopropyl)ether	ND		ug/l	0.495	0.107	1
Acetophenone	0.413	J	ug/l	0.990	0.205	1
Hexachloroethane	ND		ug/l	0.495	0.101	1
Nitrobenzene	ND		ug/l	0.495	0.101	1
Isophorone	ND		ug/l	0.495	0.125	1
bis(2-Chloroethoxy)methane	ND		ug/l	0.495	0.085	1
1,2,4-Trichlorobenzene	ND		ug/l	0.495	0.095	1
Naphthalene	32.6		ug/l	0.495	0.087	1
4-Chloroaniline	ND		ug/l	0.495	0.127	1
Hexachlorobutadiene	ND		ug/l	0.495	0.085	1
2-Methylnaphthalene	8.39		ug/l	0.495	0.090	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.495	0.079	1
Hexachlorocyclopentadiene	ND		ug/l	0.495	0.151	1
Biphenyl	1.96		ug/l	0.495	0.110	1
2-Chloronaphthalene	ND		ug/l	0.495	0.089	1
2-Nitroaniline	ND		ug/l	0.495	0.137	1
Acenaphthylene	3.24		ug/l	0.495	0.111	1
Dimethylphthalate	ND		ug/l	0.495	0.116	1
2,6-Dinitrotoluene	ND		ug/l	0.495	0.166	1
Acenaphthene	3.42		ug/l	0.495	0.095	1
3-Nitroaniline	ND		ug/l	0.495	0.110	1
Dibenzofuran	10.1		ug/l	0.495	0.090	1
2,4-Dinitrotoluene	ND		ug/l	0.495	0.161	1

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-04 Date Collected: 09/13/22 10:55

Client ID: WT1-04-091322 Date Received: 09/13/22

Sample Location: LACKAWANNA NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
Fluorene	15.2		ug/l	0.495	0.103	1
Diethylphthalate	ND		ug/l	0.495	0.178	1
4-Nitroaniline	ND		ug/l	0.495	0.111	1
n-Nitrosodiphenylamine	ND		ug/l	0.495	0.071	1
Hexachlorobenzene	ND		ug/l	0.495	0.121	1
Phenanthrene	36.3		ug/l	0.495	0.110	1
Anthracene	7.70		ug/l	0.495	0.136	1
Carbazole	8.48		ug/l	0.495	0.142	1
Di-n-butylphthalate	ND		ug/l	0.495	0.099	1
Fluoranthene	10.9		ug/l	0.495	0.154	1
Pyrene	6.39		ug/l	0.495	0.168	1
Butylbenzylphthalate	ND		ug/l	0.495	0.084	1
3,3'-Dichlorobenzidine	ND		ug/l	0.495	0.191	1
Benz(a)anthracene	0.342	J	ug/l	0.495	0.182	1
Chrysene	0.250	J	ug/l	0.495	0.140	1
bis(2-Ethylhexyl)phthalate	ND		ug/l	0.495	0.080	1
Di-n-octylphthalate	ND		ug/l	0.990	0.078	1
Benzo(b)fluoranthene	0.093	J	ug/l	0.495	0.065	1
Benzo(k)fluoranthene	ND		ug/l	0.495	0.159	1
Benzo(a)pyrene	ND		ug/l	0.495	0.060	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.495	0.089	1
Dibenz(a,h)anthracene	ND		ug/l	0.495	0.064	1
Benzo(g,h,i)perylene	ND		ug/l	0.495	0.108	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		15-115
Phenol-d5	43		15-115
Nitrobenzene-d5	88		30-130
2-Fluorobiphenyl	79		30-130
2,4,6-Tribromophenol	106		15-115
Terphenyl-d14	97		30-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-05
Client ID: BCP-ORC-1-091322
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 13:25
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/19/22 14:09
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
bis(2-Chloroethyl)ether	ND		ug/l	0.490	0.091	1
1,3-Dichlorobenzene	ND		ug/l	0.490	0.077	1
1,4-Dichlorobenzene	ND		ug/l	0.490	0.081	1
1,2-Dichlorobenzene	ND		ug/l	0.490	0.067	1
Benzyl alcohol	ND		ug/l	0.490	0.120	1
bis(2-chloroisopropyl)ether	ND		ug/l	0.490	0.106	1
Acetophenone	0.492	J	ug/l	0.980	0.203	1
Hexachloroethane	ND		ug/l	0.490	0.100	1
Nitrobenzene	ND		ug/l	0.490	0.100	1
Isophorone	ND		ug/l	0.490	0.124	1
bis(2-Chloroethoxy)methane	ND		ug/l	0.490	0.084	1
1,2,4-Trichlorobenzene	ND		ug/l	0.490	0.094	1
Naphthalene	90.4	E	ug/l	0.490	0.086	1
4-Chloroaniline	ND		ug/l	0.490	0.125	1
Hexachlorobutadiene	ND		ug/l	0.490	0.084	1
2-Methylnaphthalene	23.2		ug/l	0.490	0.089	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.490	0.078	1
Hexachlorocyclopentadiene	ND		ug/l	0.490	0.150	1
Biphenyl	3.06		ug/l	0.490	0.109	1
2-Chloronaphthalene	ND		ug/l	0.490	0.088	1
2-Nitroaniline	ND		ug/l	0.490	0.135	1
Acenaphthylene	17.0		ug/l	0.490	0.110	1
Dimethylphthalate	ND		ug/l	0.490	0.115	1
2,6-Dinitrotoluene	ND		ug/l	0.490	0.165	1
Acenaphthene	5.68		ug/l	0.490	0.094	1
3-Nitroaniline	ND		ug/l	0.490	0.109	1
Dibenzofuran	13.8		ug/l	0.490	0.089	1
2,4-Dinitrotoluene	ND		ug/l	0.490	0.160	1

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-05 Date Collected: 09/13/22 13:25

Client ID: BCP-ORC-1-091322 Date Received: 09/13/22

Sample Location: LACKAWANNA NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
Fluorene	21.4		ug/l	0.490	0.102	1
Diethylphthalate	ND		ug/l	0.490	0.176	1
4-Nitroaniline	ND		ug/l	0.490	0.110	1
n-Nitrosodiphenylamine	ND		ug/l	0.490	0.071	1
Hexachlorobenzene	ND		ug/l	0.490	0.120	1
Phenanthrene	30.0		ug/l	0.490	0.109	1
Anthracene	3.76		ug/l	0.490	0.134	1
Carbazole	26.2		ug/l	0.490	0.140	1
Di-n-butylphthalate	ND		ug/l	0.490	0.098	1
Fluoranthene	6.32		ug/l	0.490	0.153	1
Pyrene	4.06		ug/l	0.490	0.167	1
Butylbenzylphthalate	ND		ug/l	0.490	0.083	1
3,3'-Dichlorobenzidine	ND		ug/l	0.490	0.189	1
Benz(a)anthracene	0.214	J	ug/l	0.490	0.180	1
Chrysene	0.145	J	ug/l	0.490	0.139	1
bis(2-Ethylhexyl)phthalate	ND		ug/l	0.490	0.079	1
Di-n-octylphthalate	ND		ug/l	0.980	0.077	1
Benzo(b)fluoranthene	ND		ug/l	0.490	0.064	1
Benzo(k)fluoranthene	ND		ug/l	0.490	0.158	1
Benzo(a)pyrene	ND		ug/l	0.490	0.059	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.490	0.088	1
Dibenz(a,h)anthracene	ND		ug/l	0.490	0.063	1
Benzo(g,h,i)perylene	ND		ug/l	0.490	0.107	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		15-115
Phenol-d5	24		15-115
Nitrobenzene-d5	83		30-130
2-Fluorobiphenyl	67		30-130
2,4,6-Tribromophenol	88		15-115
Terphenyl-d14	84		30-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL
Lab Number: L2249775
Project Number: 03.0033579.15
Report Date: 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-05 D
Client ID: BCP-ORC-1-091322
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 13:25
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/20/22 13:54
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
Naphthalene	198		ug/l	4.90	0.859	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	37		15-115
Phenol-d5	22		15-115
Nitrobenzene-d5	75		30-130
2-Fluorobiphenyl	75		30-130
2,4,6-Tribromophenol	78		15-115
Terphenyl-d14	86		30-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-06
Client ID: WT1-02-091322
Sample Location: LACKAWANNA NY

Date Collected: 09/13/22 14:15
Date Received: 09/13/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/19/22 14:38
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
bis(2-Chloroethyl)ether	ND		ug/l	0.495	0.092	1
1,3-Dichlorobenzene	ND		ug/l	0.495	0.078	1
1,4-Dichlorobenzene	ND		ug/l	0.495	0.082	1
1,2-Dichlorobenzene	ND		ug/l	0.495	0.067	1
Benzyl alcohol	ND		ug/l	0.495	0.122	1
bis(2-chloroisopropyl)ether	ND		ug/l	0.495	0.107	1
Acetophenone	0.317	J	ug/l	0.990	0.205	1
Hexachloroethane	ND		ug/l	0.495	0.101	1
Nitrobenzene	ND		ug/l	0.495	0.101	1
Isophorone	ND		ug/l	0.495	0.125	1
bis(2-Chloroethoxy)methane	ND		ug/l	0.495	0.085	1
1,2,4-Trichlorobenzene	ND		ug/l	0.495	0.095	1
Naphthalene	17.2		ug/l	0.495	0.087	1
4-Chloroaniline	ND		ug/l	0.495	0.127	1
Hexachlorobutadiene	ND		ug/l	0.495	0.085	1
2-Methylnaphthalene	4.62		ug/l	0.495	0.090	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.495	0.079	1
Hexachlorocyclopentadiene	ND		ug/l	0.495	0.151	1
Biphenyl	1.13		ug/l	0.495	0.110	1
2-Chloronaphthalene	ND		ug/l	0.495	0.089	1
2-Nitroaniline	ND		ug/l	0.495	0.137	1
Acenaphthylene	1.16		ug/l	0.495	0.111	1
Dimethylphthalate	ND		ug/l	0.495	0.116	1
2,6-Dinitrotoluene	ND		ug/l	0.495	0.166	1
Acenaphthene	1.47		ug/l	0.495	0.095	1
3-Nitroaniline	ND		ug/l	0.495	0.110	1
Dibenzofuran	4.92		ug/l	0.495	0.090	1
2,4-Dinitrotoluene	ND		ug/l	0.495	0.161	1

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

SAMPLE RESULTS

Lab ID: L2249775-06 Date Collected: 09/13/22 14:15

Client ID: WT1-02-091322 Date Received: 09/13/22

Sample Location: LACKAWANNA NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
Fluorene	7.48		ug/l	0.495	0.103	1
Diethylphthalate	ND		ug/l	0.495	0.178	1
4-Nitroaniline	ND		ug/l	0.495	0.111	1
n-Nitrosodiphenylamine	ND		ug/l	0.495	0.071	1
Hexachlorobenzene	ND		ug/l	0.495	0.121	1
Phenanthrene	13.7		ug/l	0.495	0.110	1
Anthracene	2.74		ug/l	0.495	0.136	1
Carbazole	6.02		ug/l	0.495	0.142	1
Di-n-butylphthalate	ND		ug/l	0.495	0.099	1
Fluoranthene	4.61		ug/l	0.495	0.154	1
Pyrene	2.93		ug/l	0.495	0.168	1
Butylbenzylphthalate	ND		ug/l	0.495	0.084	1
3,3'-Dichlorobenzidine	ND		ug/l	0.495	0.191	1
Benz(a)anthracene	ND		ug/l	0.495	0.182	1
Chrysene	ND		ug/l	0.495	0.140	1
bis(2-Ethylhexyl)phthalate	ND		ug/l	0.495	0.080	1
Di-n-octylphthalate	ND		ug/l	0.990	0.078	1
Benzo(b)fluoranthene	ND		ug/l	0.495	0.065	1
Benzo(k)fluoranthene	ND		ug/l	0.495	0.159	1
Benzo(a)pyrene	ND		ug/l	0.495	0.060	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.495	0.089	1
Dibenz(a,h)anthracene	ND		ug/l	0.495	0.064	1
Benzo(g,h,i)perylene	ND		ug/l	0.495	0.108	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		15-115
Phenol-d5	27		15-115
Nitrobenzene-d5	81		30-130
2-Fluorobiphenyl	75		30-130
2,4,6-Tribromophenol	103		15-115
Terphenyl-d14	92		30-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/19/22 10:43
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Mansfield Lab for sample(s): 01-06 Batch: WG1688692-1					
bis(2-Chloroethyl)ether	ND		ug/l	0.500	0.093
1,3-Dichlorobenzene	ND		ug/l	0.500	0.078
1,4-Dichlorobenzene	ND		ug/l	0.500	0.083
1,2-Dichlorobenzene	ND		ug/l	0.500	0.068
Benzyl alcohol	ND		ug/l	0.500	0.123
bis(2-chloroisopropyl)ether	ND		ug/l	0.500	0.108
Acetophenone	ND		ug/l	1.00	0.207
Hexachloroethane	ND		ug/l	0.500	0.102
Nitrobenzene	ND		ug/l	0.500	0.102
Isophorone	ND		ug/l	0.500	0.126
bis(2-Chloroethoxy)methane	ND		ug/l	0.500	0.085
1,2,4-Trichlorobenzene	ND		ug/l	0.500	0.096
Naphthalene	ND		ug/l	0.500	0.088
4-Chloroaniline	ND		ug/l	0.500	0.128
Hexachlorobutadiene	ND		ug/l	0.500	0.086
2-Methylnaphthalene	ND		ug/l	0.500	0.091
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.500	0.080
Hexachlorocyclopentadiene	ND		ug/l	0.500	0.153
Biphenyl	ND		ug/l	0.500	0.111
2-Chloronaphthalene	ND		ug/l	0.500	0.090
2-Nitroaniline	ND		ug/l	0.500	0.138
Acenaphthylene	ND		ug/l	0.500	0.112
Dimethylphthalate	ND		ug/l	0.500	0.117
2,6-Dinitrotoluene	ND		ug/l	0.500	0.168
Acenaphthene	ND		ug/l	0.500	0.096
3-Nitroaniline	ND		ug/l	0.500	0.111
Dibenzofuran	ND		ug/l	0.500	0.091
2,4-Dinitrotoluene	ND		ug/l	0.500	0.163
Fluorene	ND		ug/l	0.500	0.104

Project Name: STEELWINDS ANNUAL/SEMIANNUAL **Lab Number:** L2249775

Project Number: 03.0033579.15 **Report Date:** 10/11/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/19/22 10:43
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Mansfield Lab for sample(s): 01-06 Batch: WG1688692-1					
Diethylphthalate	ND		ug/l	0.500	0.180
4-Nitroaniline	ND		ug/l	0.500	0.112
n-Nitrosodiphenylamine	ND		ug/l	0.500	0.072
Hexachlorobenzene	ND		ug/l	0.500	0.122
Phenanthrene	ND		ug/l	0.500	0.111
Anthracene	ND		ug/l	0.500	0.137
Carbazole	ND		ug/l	0.500	0.143
Di-n-butylphthalate	ND		ug/l	0.500	0.100
Fluoranthene	ND		ug/l	0.500	0.156
Pyrene	ND		ug/l	0.500	0.170
Butylbenzylphthalate	ND		ug/l	0.500	0.085
3,3'-Dichlorobenzidine	ND		ug/l	0.500	0.193
Benz(a)anthracene	ND		ug/l	0.500	0.184
Chrysene	ND		ug/l	0.500	0.142
bis(2-Ethylhexyl)phthalate	ND		ug/l	0.500	0.081
Di-n-octylphthalate	ND		ug/l	1.00	0.079
Benzo(b)fluoranthene	ND		ug/l	0.500	0.066
Benzo(k)fluoranthene	ND		ug/l	0.500	0.161
Benzo(a)pyrene	ND		ug/l	0.500	0.060
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.500	0.090
Dibenz(a,h)anthracene	ND		ug/l	0.500	0.064
Benzo(g,h,i)perylene	ND		ug/l	0.500	0.109

Project Name: STEELWINDS ANNUAL/SEMIANNUAL
Project Number: 03.0033579.15
Lab Number: L2249775
Report Date: 10/11/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/19/22 10:43
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Mansfield Lab for sample(s): 01-06 Batch: WG1688692-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		15-115
Phenol-d5	42		15-115
Nitrobenzene-d5	93		30-130
2-Fluorobiphenyl	90		30-130
2,4,6-Tribromophenol	95		15-115
Terphenyl-d14	106		30-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: STEELWINDS ANNUAL/SEMIANNUAL
Project Number: 03.0033579.15

Lab Number: L2249775
Report Date: 10/11/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Mansfield Lab Associated sample(s): 01-06 Batch: WG1688692-2 WG1688692-3								
bis(2-Chloroethyl)ether	84		88		40-140	5		20
1,3-Dichlorobenzene	44		53		40-140	19		20
1,4-Dichlorobenzene	46		54		40-140	16		20
1,2-Dichlorobenzene	48		56		40-140	15		20
bis(2-chloroisopropyl)ether	75		80		40-140	6		20
Acetophenone	82		85		40-140	4		20
Hexachloroethane	40		49		10-97	20		20
Nitrobenzene	83		88		40-140	6		20
Isophorone	82		86		40-140	5		20
bis(2-Chloroethoxy)methane	89		93		40-140	4		20
1,2,4-Trichlorobenzene	50		57		40-140	13		20
Naphthalene	65		71		40-140	9		20
4-Chloroaniline	93		97		40-140	4		20
Hexachlorobutadiene	41		47		40-140	14		20
2-Methylnaphthalene	64		69		40-140	8		20
1,2,4,5-Tetrachlorobenzene	56		61		40-140	9		20
Hexachlorocyclopentadiene	40		48		10-109	18		20
Biphenyl	75		74		40-140	1		20
2-Chloronaphthalene	68		73		40-140	7		20
2-Nitroaniline	93		98		40-140	5		20
Acenaphthylene	77		81		40-140	5		20
Dimethylphthalate	84		80		40-140	5		20
2,6-Dinitrotoluene	101		106		40-140	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: STEELWINDS ANNUAL/SEMIANNUAL

Project Number: 03.0033579.15

Lab Number: L2249775

Report Date: 10/11/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Mansfield Lab Associated sample(s): 01-06 Batch: WG1688692-2 WG1688692-3								
Acenaphthene	76		80		40-140	5		20
3-Nitroaniline	100		106		40-140	6		20
Dibenzofuran	84		87		40-140	4		20
2,4-Dinitrotoluene	106		110		40-140	4		20
Fluorene	86		89		40-140	3		20
Diethylphthalate	92		92		40-140	0		20
4-Nitroaniline	108		113		40-140	5		20
n-Nitrosodiphenylamine	99		103		40-140	4		20
Hexachlorobenzene	95		98		40-140	3		20
Phenanthrene	93		96		40-140	3		20
Anthracene	96		100		40-140	4		20
Carbazole	100		106		40-140	6		20
Di-n-butylphthalate	101		104		40-140	3		20
Fluoranthene	98		103		40-140	5		20
Pyrene	94		99		40-140	5		20
Butylbenzylphthalate	97		101		40-140	4		20
3,3'-Dichlorobenzidine	92		99		40-140	7		20
Benz(a)anthracene	91		97		40-140	6		20
Chrysene	99		105		40-140	6		20
bis(2-Ethylhexyl)phthalate	99		105		40-140	6		20
Di-n-octylphthalate	103		108		40-140	5		20
Benzo(b)fluoranthene	89		93		40-140	4		20
Benzo(k)fluoranthene	105		111		40-140	6		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: STEELWINDS ANNUAL/SEMIANNUAL

Project Number: 03.0033579.15

Lab Number: L2249775

Report Date: 10/11/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Mansfield Lab Associated sample(s): 01-06 Batch: WG1688692-2 WG1688692-3								
Benzo(a)pyrene	97		101		40-140	4		20
Indeno(1,2,3-cd)pyrene	102		109		40-140	7		20
Dibenz(a,h)anthracene	101		105		40-140	4		20
Benzo(g,h,i)perylene	91		95		40-140	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	58		61		15-115
Phenol-d5	42		43		15-115
Nitrobenzene-d5	86		89		30-130
2-Fluorobiphenyl	80		81		30-130
2,4,6-Tribromophenol	99		102		15-115
Terphenyl-d14	95		100		30-130

Project Name: STEELWINDS ANNUAL/SEMIANNUAL
Project Number: 03.0033579.15

Lab Number: L2249775
Report Date: 10/11/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2249775-01A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)
L2249775-01B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)
L2249775-01C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)
L2249775-01D	Amber 1000ml unpreserved	A	7	7	3.1	Y	Absent		A2-SVOC-8270(7)
L2249775-01E	Amber 1000ml unpreserved	A	7	7	3.1	Y	Absent		A2-SVOC-8270(7)
L2249775-02A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)
L2249775-02B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)
L2249775-02C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)
L2249775-02D	Amber 1000ml unpreserved	A	7	7	3.1	Y	Absent		A2-SVOC-8270(7)
L2249775-02E	Amber 1000ml unpreserved	A	7	7	3.1	Y	Absent		A2-SVOC-8270(7)
L2249775-03A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)
L2249775-03B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)
L2249775-03C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)
L2249775-03D	Amber 1000ml unpreserved	A	7	7	3.1	Y	Absent		A2-SVOC-8270(7)
L2249775-03E	Amber 1000ml unpreserved	A	7	7	3.1	Y	Absent		A2-SVOC-8270(7)
L2249775-04A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)
L2249775-04B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)
L2249775-04C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)
L2249775-04D	Amber 1000ml unpreserved	A	7	7	3.1	Y	Absent		A2-SVOC-8270(7)
L2249775-04E	Amber 1000ml unpreserved	A	7	7	3.1	Y	Absent		A2-SVOC-8270(7)
L2249775-05A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)
L2249775-05B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)
L2249775-05C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)

*Values in parentheses indicate holding time in days

Project Name: STEELWINDS ANNUAL/SEMIANNUAL
Project Number: 03.0033579.15

Lab Number: L2249775
Report Date: 10/11/22

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2249775-05D	Amber 1000ml unpreserved	A	7	7	3.1	Y	Absent		A2-SVOC-8270(7)
L2249775-05E	Amber 1000ml unpreserved	A	7	7	3.1	Y	Absent		A2-SVOC-8270(7)
L2249775-06A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)
L2249775-06B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)
L2249775-06C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)
L2249775-06D	Amber 1000ml unpreserved	A	7	7	3.1	Y	Absent		A2-SVOC-8270(7)
L2249775-06E	Amber 1000ml unpreserved	A	7	7	3.1	Y	Absent		A2-SVOC-8270(7)
L2249775-07A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYCP51-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	STEELWINDS ANNUAL/SEMIANNUAL	**Lab Number:**	L2249775
Project Number:	03.0033579.15	**Report Date:**	10/11/22

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	STEELWINDS ANNUAL/SEMIANNUAL	**Lab Number:**	L2249775
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Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	STEELWINDS ANNUAL/SEMIANNUAL	**Lab Number:**	L2249775
Project Number:	03.0033579.15	**Report Date:**	10/11/22

Data Qualifiers

Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name:	STEELWINDS ANNUAL/SEMIANNUAL	**Lab Number:**	L2249775
Project Number:	03.0033579.15	**Report Date:**	10/11/22

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

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Page 1 of 1

Date Rec'd in Lab: 9/14/22

ALPHA Job #: L2249775

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Email: DANIEL.TROY@GZA.COM

Project Information

Project Name: STEEL WINDS ANNUAL/SEMI-ANNUAL
Project Location: LACKAWANA NY
Project # 03.0033579.15
(Use Project name as Project #) ☐
Project Manager: DANIEL TROY
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☒ EQuIS (4 File)
☐ Other * CAT B *

Billing Information

☐ Same as Client Info
PO #

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

8260 STARS
8270 PAH/SIM

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Total Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	8260 STARS	8270 PAH/SIM	Sample Specific Comments
2249775.01	WT1-05-091322	9-13-22	0755	GW	PSN	X	X	
.02	MWN-01-091322		0905			X	X	
.03	MWN-01B-091322		1015			X	X	
.04	WT1-04-091322		1055			X	X	
.05	BCP-ORC-1-091322		1325			X	X	
.06	WT1-02-091322		1415	↓		X	X	
.07	TRIP BLANK-1	↓	X	W	↓	X		

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type									
Preservative									

Relinquished By:	Date/Time	Received By:	Date/Time
	9-13-22 1441	AAL	9-13-22 1441
AAL	9-13-22 1445		9/14/22 0030

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L2250076
Client:	GZA GeoEnvironmental of New York 300 Pearl Street Suite 700 Buffalo, NY 14202
ATTN:	Dan Troy
Phone:	(716) 844-7050
Project Name:	STEELWINDS ANNUAL/ SEMIANNUAL
Project Number:	03.0033579.15
Report Date:	10/12/22

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL
Project Number: 03.0033579.15

Lab Number: L2250076
Report Date: 10/12/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2250076-01	MWN-02-091422	WATER	LACKAWANNA NY	09/14/22 08:00	09/14/22
L2250076-02	MWN-02B-091422	WATER	LACKAWANNA NY	09/14/22 08:45	09/14/22
L2250076-03	TRIP BLANK-2	WATER	LACKAWANNA NY	09/14/22 00:00	09/14/22

Project Name:	STEELWINDS ANNUAL/ SEMIANNUAL	**Lab Number:**	L2250076
Project Number:	03.0033579.15	**Report Date:**	10/12/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	STEELWINDS ANNUAL/ SEMIANNUAL	**Lab Number:**	L2250076
Project Number:	03.0033579.15	**Report Date:**	10/12/22

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L2250076-03: A sample identified as "TRIP BLANK-2" was listed on the Chain of Custody, but not received. This was verified by the client.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative Date: 10/12/22

ORGANICS

VOLATILES

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL **Lab Number:** L2250076

Project Number: 03.0033579.15 **Report Date:** 10/12/22

SAMPLE RESULTS

Lab ID: L2250076-01
Client ID: MWN-02-091422
Sample Location: LACKAWANNA NY

Date Collected: 09/14/22 08:00
Date Received: 09/14/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/24/22 22:08
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	1.5		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	4.2		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	108		70-130

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL **Lab Number:** L2250076

Project Number: 03.0033579.15 **Report Date:** 10/12/22

SAMPLE RESULTS

Lab ID: L2250076-02 D
Client ID: MWN-02B-091422
Sample Location: LACKAWANNA NY

Date Collected: 09/14/22 08:45
Date Received: 09/14/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/24/22 22:31
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	62		ug/l	1.2	0.40	2.5
Toluene	10		ug/l	6.2	1.8	2.5
Ethylbenzene	ND		ug/l	6.2	1.8	2.5
Methyl tert butyl ether	ND		ug/l	6.2	1.8	2.5
p/m-Xylene	7.2		ug/l	6.2	1.8	2.5
o-Xylene	10		ug/l	6.2	1.8	2.5
n-Butylbenzene	ND		ug/l	6.2	1.8	2.5
sec-Butylbenzene	ND		ug/l	6.2	1.8	2.5
tert-Butylbenzene	ND		ug/l	6.2	1.8	2.5
Isopropylbenzene	ND		ug/l	6.2	1.8	2.5
p-Isopropyltoluene	ND		ug/l	6.2	1.8	2.5
Naphthalene	320		ug/l	6.2	1.8	2.5
n-Propylbenzene	ND		ug/l	6.2	1.8	2.5
1,3,5-Trimethylbenzene	ND		ug/l	6.2	1.8	2.5
1,2,4-Trimethylbenzene	1.9	J	ug/l	6.2	1.8	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	106		70-130

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL **Lab Number:** L2250076

Project Number: 03.0033579.15 **Report Date:** 10/12/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/24/22 17:52
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1692585-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	107		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL

Project Number: 03.0033579.15

Lab Number: L2250076

Report Date: 10/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1692585-3 WG1692585-4								
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	98		100		70-130	2		20
Methyl tert butyl ether	94		100		63-130	6		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	95		100		70-130	5		20
n-Butylbenzene	99		100		53-136	1		20
sec-Butylbenzene	99		100		70-130	1		20
tert-Butylbenzene	97		97		70-130	0		20
Isopropylbenzene	96		99		70-130	3		20
p-Isopropyltoluene	98		99		70-130	1		20
Naphthalene	89		100		70-130	12		20
n-Propylbenzene	98		100		69-130	2		20
1,3,5-Trimethylbenzene	94		96		64-130	2		20
1,2,4-Trimethylbenzene	95		98		70-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	104		107		70-130
Toluene-d8	103		103		70-130
4-Bromofluorobenzene	94		94		70-130
Dibromofluoromethane	107		106		70-130

SEMIVOLATILES

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL **Lab Number:** L2250076

Project Number: 03.0033579.15 **Report Date:** 10/12/22

SAMPLE RESULTS

Lab ID: L2250076-01
Client ID: MWN-02-091422
Sample Location: LACKAWANNA NY

Date Collected: 09/14/22 08:00
Date Received: 09/14/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/19/22 15:08
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
bis(2-Chloroethyl)ether	ND		ug/l	0.495	0.092	1
1,3-Dichlorobenzene	ND		ug/l	0.495	0.078	1
1,4-Dichlorobenzene	ND		ug/l	0.495	0.082	1
1,2-Dichlorobenzene	ND		ug/l	0.495	0.067	1
Benzyl alcohol	ND		ug/l	0.495	0.122	1
bis(2-chloroisopropyl)ether	ND		ug/l	0.495	0.107	1
Acetophenone	0.246	J	ug/l	0.990	0.205	1
Hexachloroethane	ND		ug/l	0.495	0.101	1
Nitrobenzene	ND		ug/l	0.495	0.101	1
Isophorone	ND		ug/l	0.495	0.125	1
bis(2-Chloroethoxy)methane	ND		ug/l	0.495	0.085	1
1,2,4-Trichlorobenzene	ND		ug/l	0.495	0.095	1
Naphthalene	3.44		ug/l	0.495	0.087	1
4-Chloroaniline	ND		ug/l	0.495	0.127	1
Hexachlorobutadiene	ND		ug/l	0.495	0.085	1
2-Methylnaphthalene	1.01		ug/l	0.495	0.090	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.495	0.079	1
Hexachlorocyclopentadiene	ND		ug/l	0.495	0.151	1
Biphenyl	0.332	J	ug/l	0.495	0.110	1
2-Chloronaphthalene	ND		ug/l	0.495	0.089	1
2-Nitroaniline	ND		ug/l	0.495	0.137	1
Acenaphthylene	1.03		ug/l	0.495	0.111	1
Dimethylphthalate	ND		ug/l	0.495	0.116	1
2,6-Dinitrotoluene	ND		ug/l	0.495	0.166	1
Acenaphthene	0.603		ug/l	0.495	0.095	1
3-Nitroaniline	ND		ug/l	0.495	0.110	1
Dibenzofuran	0.967		ug/l	0.495	0.090	1
2,4-Dinitrotoluene	ND		ug/l	0.495	0.161	1

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL **Lab Number:** L2250076

Project Number: 03.0033579.15 **Report Date:** 10/12/22

SAMPLE RESULTS

Lab ID: L2250076-01 Date Collected: 09/14/22 08:00

Client ID: MWN-02-091422 Date Received: 09/14/22

Sample Location: LACKAWANNA NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
Fluorene	2.26		ug/l	0.495	0.103	1
Diethylphthalate	ND		ug/l	0.495	0.178	1
4-Nitroaniline	ND		ug/l	0.495	0.111	1
n-Nitrosodiphenylamine	ND		ug/l	0.495	0.071	1
Hexachlorobenzene	ND		ug/l	0.495	0.121	1
Phenanthrene	1.76		ug/l	0.495	0.110	1
Anthracene	0.588		ug/l	0.495	0.136	1
Carbazole	1.28		ug/l	0.495	0.142	1
Di-n-butylphthalate	ND		ug/l	0.495	0.099	1
Fluoranthene	0.971		ug/l	0.495	0.154	1
Pyrene	1.70		ug/l	0.495	0.168	1
Butylbenzylphthalate	ND		ug/l	0.495	0.084	1
3,3'-Dichlorobenzidine	ND		ug/l	0.495	0.191	1
Benz(a)anthracene	ND		ug/l	0.495	0.182	1
Chrysene	ND		ug/l	0.495	0.140	1
bis(2-Ethylhexyl)phthalate	ND		ug/l	0.495	0.080	1
Di-n-octylphthalate	ND		ug/l	0.990	0.078	1
Benzo(b)fluoranthene	ND		ug/l	0.495	0.065	1
Benzo(k)fluoranthene	ND		ug/l	0.495	0.159	1
Benzo(a)pyrene	ND		ug/l	0.495	0.060	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.495	0.089	1
Dibenz(a,h)anthracene	ND		ug/l	0.495	0.064	1
Benzo(g,h,i)perylene	ND		ug/l	0.495	0.108	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		15-115
Phenol-d5	27		15-115
Nitrobenzene-d5	86		30-130
2-Fluorobiphenyl	78		30-130
2,4,6-Tribromophenol	107		15-115
Terphenyl-d14	96		30-130

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL **Lab Number:** L2250076

Project Number: 03.0033579.15 **Report Date:** 10/12/22

SAMPLE RESULTS

Lab ID: L2250076-02
Client ID: MWN-02B-091422
Sample Location: LACKAWANNA NY

Date Collected: 09/14/22 08:45
Date Received: 09/14/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/19/22 15:38
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
bis(2-Chloroethyl)ether	ND		ug/l	0.490	0.091	1
1,3-Dichlorobenzene	ND		ug/l	0.490	0.077	1
1,4-Dichlorobenzene	ND		ug/l	0.490	0.081	1
1,2-Dichlorobenzene	0.200	J	ug/l	0.490	0.067	1
Benzyl alcohol	ND		ug/l	0.490	0.120	1
bis(2-chloroisopropyl)ether	ND		ug/l	0.490	0.106	1
Acetophenone	0.770	J	ug/l	0.980	0.203	1
Hexachloroethane	ND		ug/l	0.490	0.100	1
Nitrobenzene	ND		ug/l	0.490	0.100	1
Isophorone	ND		ug/l	0.490	0.124	1
bis(2-Chloroethoxy)methane	ND		ug/l	0.490	0.084	1
1,2,4-Trichlorobenzene	ND		ug/l	0.490	0.094	1
Naphthalene	83.8	E	ug/l	0.490	0.086	1
4-Chloroaniline	ND		ug/l	0.490	0.125	1
Hexachlorobutadiene	ND		ug/l	0.490	0.084	1
2-Methylnaphthalene	8.48		ug/l	0.490	0.089	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.490	0.078	1
Hexachlorocyclopentadiene	ND		ug/l	0.490	0.150	1
Biphenyl	1.11		ug/l	0.490	0.109	1
2-Chloronaphthalene	ND		ug/l	0.490	0.088	1
2-Nitroaniline	ND		ug/l	0.490	0.135	1
Acenaphthylene	2.83		ug/l	0.490	0.110	1
Dimethylphthalate	ND		ug/l	0.490	0.115	1
2,6-Dinitrotoluene	ND		ug/l	0.490	0.165	1
Acenaphthene	6.20		ug/l	0.490	0.094	1
3-Nitroaniline	ND		ug/l	0.490	0.109	1
Dibenzofuran	4.50		ug/l	0.490	0.089	1
2,4-Dinitrotoluene	ND		ug/l	0.490	0.160	1

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL **Lab Number:** L2250076

Project Number: 03.0033579.15 **Report Date:** 10/12/22

SAMPLE RESULTS

Lab ID: L2250076-02 Date Collected: 09/14/22 08:45

Client ID: MWN-02B-091422 Date Received: 09/14/22

Sample Location: LACKAWANNA NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
Fluorene	7.72		ug/l	0.490	0.102	1
Diethylphthalate	ND		ug/l	0.490	0.176	1
4-Nitroaniline	ND		ug/l	0.490	0.110	1
n-Nitrosodiphenylamine	ND		ug/l	0.490	0.071	1
Hexachlorobenzene	ND		ug/l	0.490	0.120	1
Phenanthrene	13.7		ug/l	0.490	0.109	1
Anthracene	1.88		ug/l	0.490	0.134	1
Carbazole	21.2		ug/l	0.490	0.140	1
Di-n-butylphthalate	ND		ug/l	0.490	0.098	1
Fluoranthene	3.51		ug/l	0.490	0.153	1
Pyrene	2.00		ug/l	0.490	0.167	1
Butylbenzylphthalate	ND		ug/l	0.490	0.083	1
3,3'-Dichlorobenzidine	ND		ug/l	0.490	0.189	1
Benz(a)anthracene	ND		ug/l	0.490	0.180	1
Chrysene	ND		ug/l	0.490	0.139	1
bis(2-Ethylhexyl)phthalate	ND		ug/l	0.490	0.079	1
Di-n-octylphthalate	ND		ug/l	0.980	0.077	1
Benzo(b)fluoranthene	ND		ug/l	0.490	0.064	1
Benzo(k)fluoranthene	ND		ug/l	0.490	0.158	1
Benzo(a)pyrene	ND		ug/l	0.490	0.059	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.490	0.088	1
Dibenz(a,h)anthracene	ND		ug/l	0.490	0.063	1
Benzo(g,h,i)perylene	ND		ug/l	0.490	0.107	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		15-115
Phenol-d5	27		15-115
Nitrobenzene-d5	92		30-130
2-Fluorobiphenyl	69		30-130
2,4,6-Tribromophenol	104		15-115
Terphenyl-d14	92		30-130

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL **Lab Number:** L2250076

Project Number: 03.0033579.15 **Report Date:** 10/12/22

SAMPLE RESULTS

Lab ID: L2250076-02 D
Client ID: MWN-02B-091422
Sample Location: LACKAWANNA NY

Date Collected: 09/14/22 08:45
Date Received: 09/14/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/20/22 14:24
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
Naphthalene	146		ug/l	2.45	0.429	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		15-115
Phenol-d5	26		15-115
Nitrobenzene-d5	84		30-130
2-Fluorobiphenyl	80		30-130
2,4,6-Tribromophenol	99		15-115
Terphenyl-d14	96		30-130

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL **Lab Number:** L2250076

Project Number: 03.0033579.15 **Report Date:** 10/12/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/19/22 10:43
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Mansfield Lab for sample(s): 01-02 Batch: WG1688692-1					
bis(2-Chloroethyl)ether	ND		ug/l	0.500	0.093
1,3-Dichlorobenzene	ND		ug/l	0.500	0.078
1,4-Dichlorobenzene	ND		ug/l	0.500	0.083
1,2-Dichlorobenzene	ND		ug/l	0.500	0.068
Benzyl alcohol	ND		ug/l	0.500	0.123
bis(2-chloroisopropyl)ether	ND		ug/l	0.500	0.108
Acetophenone	ND		ug/l	1.00	0.207
Hexachloroethane	ND		ug/l	0.500	0.102
Nitrobenzene	ND		ug/l	0.500	0.102
Isophorone	ND		ug/l	0.500	0.126
bis(2-Chloroethoxy)methane	ND		ug/l	0.500	0.085
1,2,4-Trichlorobenzene	ND		ug/l	0.500	0.096
Naphthalene	ND		ug/l	0.500	0.088
4-Chloroaniline	ND		ug/l	0.500	0.128
Hexachlorobutadiene	ND		ug/l	0.500	0.086
2-Methylnaphthalene	ND		ug/l	0.500	0.091
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.500	0.080
Hexachlorocyclopentadiene	ND		ug/l	0.500	0.153
Biphenyl	ND		ug/l	0.500	0.111
2-Chloronaphthalene	ND		ug/l	0.500	0.090
2-Nitroaniline	ND		ug/l	0.500	0.138
Acenaphthylene	ND		ug/l	0.500	0.112
Dimethylphthalate	ND		ug/l	0.500	0.117
2,6-Dinitrotoluene	ND		ug/l	0.500	0.168
Acenaphthene	ND		ug/l	0.500	0.096
3-Nitroaniline	ND		ug/l	0.500	0.111
Dibenzofuran	ND		ug/l	0.500	0.091
2,4-Dinitrotoluene	ND		ug/l	0.500	0.163
Fluorene	ND		ug/l	0.500	0.104

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL **Lab Number:** L2250076

Project Number: 03.0033579.15 **Report Date:** 10/12/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/19/22 10:43
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Mansfield Lab for sample(s): 01-02 Batch: WG1688692-1					
Diethylphthalate	ND		ug/l	0.500	0.180
4-Nitroaniline	ND		ug/l	0.500	0.112
n-Nitrosodiphenylamine	ND		ug/l	0.500	0.072
Hexachlorobenzene	ND		ug/l	0.500	0.122
Phenanthrene	ND		ug/l	0.500	0.111
Anthracene	ND		ug/l	0.500	0.137
Carbazole	ND		ug/l	0.500	0.143
Di-n-butylphthalate	ND		ug/l	0.500	0.100
Fluoranthene	ND		ug/l	0.500	0.156
Pyrene	ND		ug/l	0.500	0.170
Butylbenzylphthalate	ND		ug/l	0.500	0.085
3,3'-Dichlorobenzidine	ND		ug/l	0.500	0.193
Benz(a)anthracene	ND		ug/l	0.500	0.184
Chrysene	ND		ug/l	0.500	0.142
bis(2-Ethylhexyl)phthalate	ND		ug/l	0.500	0.081
Di-n-octylphthalate	ND		ug/l	1.00	0.079
Benzo(b)fluoranthene	ND		ug/l	0.500	0.066
Benzo(k)fluoranthene	ND		ug/l	0.500	0.161
Benzo(a)pyrene	ND		ug/l	0.500	0.060
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.500	0.090
Dibenz(a,h)anthracene	ND		ug/l	0.500	0.064
Benzo(g,h,i)perylene	ND		ug/l	0.500	0.109

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL
Project Number: 03.0033579.15
Lab Number: L2250076
Report Date: 10/12/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/19/22 10:43
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Mansfield Lab for sample(s): 01-02 Batch: WG1688692-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		15-115
Phenol-d5	42		15-115
Nitrobenzene-d5	93		30-130
2-Fluorobiphenyl	90		30-130
2,4,6-Tribromophenol	95		15-115
Terphenyl-d14	106		30-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL

Project Number: 03.0033579.15

Lab Number: L2250076

Report Date: 10/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Mansfield Lab Associated sample(s): 01-02 Batch: WG1688692-2 WG1688692-3								
bis(2-Chloroethyl)ether	84		88		40-140	5		20
1,3-Dichlorobenzene	44		53		40-140	19		20
1,4-Dichlorobenzene	46		54		40-140	16		20
1,2-Dichlorobenzene	48		56		40-140	15		20
bis(2-chloroisopropyl)ether	75		80		40-140	6		20
Acetophenone	82		85		40-140	4		20
Hexachloroethane	40		49		10-97	20		20
Nitrobenzene	83		88		40-140	6		20
Isophorone	82		86		40-140	5		20
bis(2-Chloroethoxy)methane	89		93		40-140	4		20
1,2,4-Trichlorobenzene	50		57		40-140	13		20
Naphthalene	65		71		40-140	9		20
4-Chloroaniline	93		97		40-140	4		20
Hexachlorobutadiene	41		47		40-140	14		20
2-Methylnaphthalene	64		69		40-140	8		20
1,2,4,5-Tetrachlorobenzene	56		61		40-140	9		20
Hexachlorocyclopentadiene	40		48		10-109	18		20
Biphenyl	75		74		40-140	1		20
2-Chloronaphthalene	68		73		40-140	7		20
2-Nitroaniline	93		98		40-140	5		20
Acenaphthylene	77		81		40-140	5		20
Dimethylphthalate	84		80		40-140	5		20
2,6-Dinitrotoluene	101		106		40-140	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL

Project Number: 03.0033579.15

Lab Number: L2250076

Report Date: 10/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Mansfield Lab Associated sample(s): 01-02 Batch: WG1688692-2 WG1688692-3								
Acenaphthene	76		80		40-140	5		20
3-Nitroaniline	100		106		40-140	6		20
Dibenzofuran	84		87		40-140	4		20
2,4-Dinitrotoluene	106		110		40-140	4		20
Fluorene	86		89		40-140	3		20
Diethylphthalate	92		92		40-140	0		20
4-Nitroaniline	108		113		40-140	5		20
n-Nitrosodiphenylamine	99		103		40-140	4		20
Hexachlorobenzene	95		98		40-140	3		20
Phenanthrene	93		96		40-140	3		20
Anthracene	96		100		40-140	4		20
Carbazole	100		106		40-140	6		20
Di-n-butylphthalate	101		104		40-140	3		20
Fluoranthene	98		103		40-140	5		20
Pyrene	94		99		40-140	5		20
Butylbenzylphthalate	97		101		40-140	4		20
3,3'-Dichlorobenzidine	92		99		40-140	7		20
Benz(a)anthracene	91		97		40-140	6		20
Chrysene	99		105		40-140	6		20
bis(2-Ethylhexyl)phthalate	99		105		40-140	6		20
Di-n-octylphthalate	103		108		40-140	5		20
Benzo(b)fluoranthene	89		93		40-140	4		20
Benzo(k)fluoranthene	105		111		40-140	6		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL

Project Number: 03.0033579.15

Lab Number: L2250076

Report Date: 10/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Mansfield Lab Associated sample(s): 01-02 Batch: WG1688692-2 WG1688692-3								
Benzo(a)pyrene	97		101		40-140	4		20
Indeno(1,2,3-cd)pyrene	102		109		40-140	7		20
Dibenz(a,h)anthracene	101		105		40-140	4		20
Benzo(g,h,i)perylene	91		95		40-140	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	58		61		15-115
Phenol-d5	42		43		15-115
Nitrobenzene-d5	86		89		30-130
2-Fluorobiphenyl	80		81		30-130
2,4,6-Tribromophenol	99		102		15-115
Terphenyl-d14	95		100		30-130

METALS

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL
Lab Number: L2250076
Project Number: 03.0033579.15
Report Date: 10/12/22

SAMPLE RESULTS

Lab ID: L2250076-02
Client ID: MWN-02B-091422
Sample Location: LACKAWANNA NY
Date Collected: 09/14/22 08:45
Date Received: 09/14/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	0.0379		mg/l	0.0050	0.0019	1	09/17/22 07:02	10/10/22 07:54	EPA 3005A	1,6010D	EW

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL **Lab Number:** L2250076

Project Number: 03.0033579.15 **Report Date:** 10/12/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02 Batch: WG1688660-1										
Arsenic, Total	ND		mg/l	0.0050	0.0019	1	09/17/22 07:02	10/06/22 12:46	1,6010D	NB

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL

Project Number: 03.0033579.15

Lab Number: L2250076

Report Date: 10/12/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1688660-2								
Arsenic, Total	105		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL
Project Number: 03.0033579.15

Lab Number: L2250076
Report Date: 10/12/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1688660-3 QC Sample: L2249023-01 Client ID: MS Sample												
Arsenic, Total	ND	0.12	0.131	109		-	-		75-125	-		20

Project Name: STEELWINDS ANNUAL/ SEMIANNUAL
Project Number: 03.0033579.15

Lab Number: L2250076
Report Date: 10/12/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2250076-01A	Vial HCl preserved	A	NA		2.4	Y	Absent		NYCP51-8260(14)
L2250076-01B	Vial HCl preserved	A	NA		2.4	Y	Absent		NYCP51-8260(14)
L2250076-01C	Vial HCl preserved	A	NA		2.4	Y	Absent		NYCP51-8260(14)
L2250076-01D	Amber 1000ml unpreserved	A	7	7	2.4	Y	Absent		A2-SVOC-8270(7)
L2250076-01E	Amber 1000ml unpreserved	A	7	7	2.4	Y	Absent		A2-SVOC-8270(7)
L2250076-02A	Vial HCl preserved	A	NA		2.4	Y	Absent		NYCP51-8260(14)
L2250076-02B	Vial HCl preserved	A	NA		2.4	Y	Absent		NYCP51-8260(14)
L2250076-02C	Vial HCl preserved	A	NA		2.4	Y	Absent		NYCP51-8260(14)
L2250076-02D	Plastic 250ml HNO3 preserved	A	<2	<2	2.4	Y	Absent		AS-TI(180)
L2250076-02E	Amber 1000ml unpreserved	A	7	7	2.4	Y	Absent		A2-SVOC-8270(7)
L2250076-02F	Amber 1000ml unpreserved	A	7	7	2.4	Y	Absent		A2-SVOC-8270(7)

*Values in parentheses indicate holding time in days

Project Name:	STEELWINDS ANNUAL/ SEMIANNUAL	**Lab Number:**	L2250076
Project Number:	03.0033579.15	**Report Date:**	10/12/22

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	STEELWINDS ANNUAL/ SEMIANNUAL	**Lab Number:**	L2250076
Project Number:	03.0033579.15	**Report Date:**	10/12/22

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	STEELWINDS ANNUAL/ SEMIANNUAL	**Lab Number:**	L2250076
Project Number:	03.0033579.15	**Report Date:**	10/12/22

Data Qualifiers

Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name:	STEELWINDS ANNUAL/ SEMIANNUAL	**Lab Number:**	L2250076
Project Number:	03.0033579.15	**Report Date:**	10/12/22

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 9/15/22

ALPHA Job #: L2250076

Client Information

Client: GZA
Address: 300 PEARL ST. SUITE 700
BUFFALO, NY 14202
Phone: (716) 517-5703
Fax:
Email: DANIEL.TROY@GZA.COM

Project Information

Project Name: STEEL WINDS ANNUAL/SEMI-ANNUAL
Project Location: LACKAWANA NY
Project # 03.0033579.15
(Use Project name as Project #) ☐
Project Manager: DANIEL TROY
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☒ EQuIS (4 File)
☐ Other ★ CAT B ★

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	8260 STARS	8270 PAH/SIMS	6010D, AR, BR, CR	6010D, Arsenic	6010D, Barium	6010D, Mag	6010D, CR	Sample Specific Comments	Total Bottle
50076-01	MWN-02-091422	9-14-22	0800	GW	PN	X	X							
-02	MWN-02B-091422	↓	0845	↓	↓	X	X		X					
9/15 -03	TRIP BLANK-2	↓	—	W	↓	X								

Container Type
Preservative

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	9-14-22 / 1250		9/14/22 12:50
(AAL)	9/14/22 12:50	(AAL)	9/15/22 0010

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L2250575
Client:	GZA GeoEnvironmental of New York 300 Pearl Street Suite 700 Buffalo, NY 14202
ATTN:	Dan Troy
Phone:	(716) 844-7050
Project Name:	STEELWINDS ANNUAL/SEMI-ANNUAL
Project Number:	03.0033579.15
Report Date:	10/13/22

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL
Project Number: 03.0033579.15

Lab Number: L2250575
Report Date: 10/13/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2250575-01	MWN-03D-091522	WATER	LACKAWANNA NY	09/15/22 08:30	09/15/22
L2250575-02	MWN-03B-091522	WATER	LACKAWANNA NY	09/15/22 09:45	09/15/22
L2250575-03	MWN-03-091522	WATER	LACKAWANNA NY	09/15/22 10:30	09/15/22
L2250575-04	MWN-02D-091522	WATER	LACKAWANNA NY	09/15/22 13:45	09/15/22
L2250575-05	MWN-04-091522	WATER	LACKAWANNA NY	09/15/22 14:50	09/15/22
L2250575-06	TRIP BLANK	WATER	LACKAWANNA NY	09/15/22 00:00	09/15/22

Project Name:	STEELWINDS ANNUAL/SEMI-ANNUAL	**Lab Number:**	L2250575
Project Number:	03.0033579.15	**Report Date:**	10/13/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	STEELWINDS ANNUAL/SEMI-ANNUAL	**Lab Number:**	L2250575
Project Number:	03.0033579.15	**Report Date:**	10/13/22

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative Date: 10/13/22

ORGANICS

VOLATILES

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL **Lab Number:** L2250575

Project Number: 03.0033579.15 **Report Date:** 10/13/22

SAMPLE RESULTS

Lab ID: L2250575-01
Client ID: MWN-03D-091522
Sample Location: LACKAWANNA NY

Date Collected: 09/15/22 08:30
Date Received: 09/15/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/26/22 15:59
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	119		70-130

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL **Lab Number:** L2250575

Project Number: 03.0033579.15 **Report Date:** 10/13/22

SAMPLE RESULTS

Lab ID: L2250575-03
Client ID: MWN-03-091522
Sample Location: LACKAWANNA NY

Date Collected: 09/15/22 10:30
Date Received: 09/15/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/26/22 16:24
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	11		ug/l	0.50	0.16	1
Toluene	2.4	J	ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	1.6	J	ug/l	2.5	0.70	1
o-Xylene	1.7	J	ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	25		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	0.97	J	ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	115		70-130

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL **Lab Number:** L2250575

Project Number: 03.0033579.15 **Report Date:** 10/13/22

SAMPLE RESULTS

Lab ID: L2250575-05
Client ID: MWN-04-091522
Sample Location: LACKAWANNA NY

Date Collected: 09/15/22 14:50
Date Received: 09/15/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/26/22 16:48
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	0.51		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	16		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	123		70-130

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL **Lab Number:** L2250575

Project Number: 03.0033579.15 **Report Date:** 10/13/22

SAMPLE RESULTS

Lab ID: L2250575-06 Date Collected: 09/15/22 00:00
Client ID: TRIP BLANK Date Received: 09/15/22
Sample Location: LACKAWANNA NY Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/05/22 11:02
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	98		70-130

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL **Lab Number:** L2250575

Project Number: 03.0033579.15 **Report Date:** 10/13/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/26/22 11:03
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03,05 Batch: WG1692636-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	116		70-130

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL **Lab Number:** L2250575

Project Number: 03.0033579.15 **Report Date:** 10/13/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/05/22 10:39
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1696331-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL

Project Number: 03.0033579.15

Lab Number: L2250575

Report Date: 10/13/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03,05 Batch: WG1692636-3 WG1692636-4								
Benzene	110		120		70-130	9		20
Toluene	110		110		70-130	0		20
Ethylbenzene	110		110		70-130	0		20
Methyl tert butyl ether	85		89		63-130	5		20
p/m-Xylene	105		110		70-130	5		20
o-Xylene	100		110		70-130	10		20
n-Butylbenzene	110		120		53-136	9		20
sec-Butylbenzene	110		110		70-130	0		20
tert-Butylbenzene	87		100		70-130	14		20
Isopropylbenzene	100		110		70-130	10		20
p-Isopropyltoluene	100		110		70-130	10		20
Naphthalene	85		93		70-130	9		20
n-Propylbenzene	110		120		69-130	9		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		99		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	97		95		70-130
Dibromofluoromethane	100		105		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL

Project Number: 03.0033579.15

Lab Number: L2250575

Report Date: 10/13/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1696331-3 WG1696331-4								
Benzene	110		110		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	99		99		70-130	0		20
Methyl tert butyl ether	99		100		63-130	1		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
n-Butylbenzene	98		99		53-136	1		20
sec-Butylbenzene	98		100		70-130	2		20
tert-Butylbenzene	98		99		70-130	1		20
Isopropylbenzene	99		99		70-130	0		20
p-Isopropyltoluene	97		100		70-130	3		20
Naphthalene	83		92		70-130	10		20
n-Propylbenzene	99		99		69-130	0		20
1,3,5-Trimethylbenzene	96		97		64-130	1		20
1,2,4-Trimethylbenzene	97		98		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	94		95		70-130
Toluene-d8	96		96		70-130
4-Bromofluorobenzene	99		99		70-130
Dibromofluoromethane	101		100		70-130

SEMIVOLATILES

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL **Lab Number:** L2250575

Project Number: 03.0033579.15 **Report Date:** 10/13/22

SAMPLE RESULTS

Lab ID: L2250575-01
Client ID: MWN-03D-091522
Sample Location: LACKAWANNA NY

Date Collected: 09/15/22 08:30
Date Received: 09/15/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/19/22 16:08
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
bis(2-Chloroethyl)ether	ND		ug/l	0.495	0.092	1
1,3-Dichlorobenzene	ND		ug/l	0.495	0.078	1
1,4-Dichlorobenzene	ND		ug/l	0.495	0.082	1
1,2-Dichlorobenzene	ND		ug/l	0.495	0.067	1
Benzyl alcohol	ND		ug/l	0.495	0.122	1
bis(2-chloroisopropyl)ether	ND		ug/l	0.495	0.107	1
Acetophenone	ND		ug/l	0.990	0.205	1
Hexachloroethane	ND		ug/l	0.495	0.101	1
Nitrobenzene	ND		ug/l	0.495	0.101	1
Isophorone	ND		ug/l	0.495	0.125	1
bis(2-Chloroethoxy)methane	ND		ug/l	0.495	0.085	1
1,2,4-Trichlorobenzene	ND		ug/l	0.495	0.095	1
Naphthalene	ND		ug/l	0.495	0.087	1
4-Chloroaniline	ND		ug/l	0.495	0.127	1
Hexachlorobutadiene	ND		ug/l	0.495	0.085	1
2-Methylnaphthalene	ND		ug/l	0.495	0.090	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.495	0.079	1
Hexachlorocyclopentadiene	ND		ug/l	0.495	0.151	1
Biphenyl	ND		ug/l	0.495	0.110	1
2-Chloronaphthalene	ND		ug/l	0.495	0.089	1
2-Nitroaniline	ND		ug/l	0.495	0.137	1
Acenaphthylene	ND		ug/l	0.495	0.111	1
Dimethylphthalate	ND		ug/l	0.495	0.116	1
2,6-Dinitrotoluene	ND		ug/l	0.495	0.166	1
Acenaphthene	0.536		ug/l	0.495	0.095	1
3-Nitroaniline	ND		ug/l	0.495	0.110	1
Dibenzofuran	ND		ug/l	0.495	0.090	1
2,4-Dinitrotoluene	ND		ug/l	0.495	0.161	1

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL **Lab Number:** L2250575

Project Number: 03.0033579.15 **Report Date:** 10/13/22

SAMPLE RESULTS

Lab ID: L2250575-01 Date Collected: 09/15/22 08:30

Client ID: MWN-03D-091522 Date Received: 09/15/22

Sample Location: LACKAWANNA NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
Fluorene	0.187	J	ug/l	0.495	0.103	1
Diethylphthalate	ND		ug/l	0.495	0.178	1
4-Nitroaniline	ND		ug/l	0.495	0.111	1
n-Nitrosodiphenylamine	ND		ug/l	0.495	0.071	1
Hexachlorobenzene	ND		ug/l	0.495	0.121	1
Phenanthrene	0.434	J	ug/l	0.495	0.110	1
Anthracene	ND		ug/l	0.495	0.136	1
Carbazole	ND		ug/l	0.495	0.142	1
Di-n-butylphthalate	ND		ug/l	0.495	0.099	1
Fluoranthene	ND		ug/l	0.495	0.154	1
Pyrene	ND		ug/l	0.495	0.168	1
Butylbenzylphthalate	ND		ug/l	0.495	0.084	1
3,3'-Dichlorobenzidine	ND		ug/l	0.495	0.191	1
Benz(a)anthracene	ND		ug/l	0.495	0.182	1
Chrysene	ND		ug/l	0.495	0.140	1
bis(2-Ethylhexyl)phthalate	0.376	J	ug/l	0.495	0.080	1
Di-n-octylphthalate	ND		ug/l	0.990	0.078	1
Benzo(b)fluoranthene	ND		ug/l	0.495	0.065	1
Benzo(k)fluoranthene	ND		ug/l	0.495	0.159	1
Benzo(a)pyrene	ND		ug/l	0.495	0.060	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.495	0.089	1
Dibenz(a,h)anthracene	ND		ug/l	0.495	0.064	1
Benzo(g,h,i)perylene	ND		ug/l	0.495	0.108	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	36		15-115
Phenol-d5	26		15-115
Nitrobenzene-d5	64		30-130
2-Fluorobiphenyl	61		30-130
2,4,6-Tribromophenol	82		15-115
Terphenyl-d14	66		30-130

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL **Lab Number:** L2250575

Project Number: 03.0033579.15 **Report Date:** 10/13/22

SAMPLE RESULTS

Lab ID: L2250575-03
Client ID: MWN-03-091522
Sample Location: LACKAWANNA NY

Date Collected: 09/15/22 10:30
Date Received: 09/15/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/19/22 16:38
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
bis(2-Chloroethyl)ether	ND		ug/l	0.490	0.091	1
1,3-Dichlorobenzene	ND		ug/l	0.490	0.077	1
1,4-Dichlorobenzene	ND		ug/l	0.490	0.081	1
1,2-Dichlorobenzene	0.115	J	ug/l	0.490	0.067	1
Benzyl alcohol	ND		ug/l	0.490	0.120	1
bis(2-chloroisopropyl)ether	ND		ug/l	0.490	0.106	1
Acetophenone	0.308	J	ug/l	0.980	0.203	1
Hexachloroethane	ND		ug/l	0.490	0.100	1
Nitrobenzene	ND		ug/l	0.490	0.100	1
Isophorone	ND		ug/l	0.490	0.124	1
bis(2-Chloroethoxy)methane	ND		ug/l	0.490	0.084	1
1,2,4-Trichlorobenzene	ND		ug/l	0.490	0.094	1
Naphthalene	15.0		ug/l	0.490	0.086	1
4-Chloroaniline	ND		ug/l	0.490	0.125	1
Hexachlorobutadiene	ND		ug/l	0.490	0.084	1
2-Methylnaphthalene	3.03		ug/l	0.490	0.089	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.490	0.078	1
Hexachlorocyclopentadiene	ND		ug/l	0.490	0.150	1
Biphenyl	0.715		ug/l	0.490	0.109	1
2-Chloronaphthalene	ND		ug/l	0.490	0.088	1
2-Nitroaniline	ND		ug/l	0.490	0.135	1
Acenaphthylene	2.70		ug/l	0.490	0.110	1
Dimethylphthalate	ND		ug/l	0.490	0.115	1
2,6-Dinitrotoluene	ND		ug/l	0.490	0.165	1
Acenaphthene	1.54		ug/l	0.490	0.094	1
3-Nitroaniline	ND		ug/l	0.490	0.109	1
Dibenzofuran	2.92		ug/l	0.490	0.089	1
2,4-Dinitrotoluene	ND		ug/l	0.490	0.160	1

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL **Lab Number:** L2250575

Project Number: 03.0033579.15 **Report Date:** 10/13/22

SAMPLE RESULTS

Lab ID: L2250575-03 Date Collected: 09/15/22 10:30

Client ID: MWN-03-091522 Date Received: 09/15/22

Sample Location: LACKAWANNA NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
Fluorene	5.10		ug/l	0.490	0.102	1
Diethylphthalate	ND		ug/l	0.490	0.176	1
4-Nitroaniline	ND		ug/l	0.490	0.110	1
n-Nitrosodiphenylamine	ND		ug/l	0.490	0.071	1
Hexachlorobenzene	ND		ug/l	0.490	0.120	1
Phenanthrene	9.37		ug/l	0.490	0.109	1
Anthracene	1.38		ug/l	0.490	0.134	1
Carbazole	5.17		ug/l	0.490	0.140	1
Di-n-butylphthalate	ND		ug/l	0.490	0.098	1
Fluoranthene	3.19		ug/l	0.490	0.153	1
Pyrene	1.91		ug/l	0.490	0.167	1
Butylbenzylphthalate	ND		ug/l	0.490	0.083	1
3,3'-Dichlorobenzidine	ND		ug/l	0.490	0.189	1
Benz(a)anthracene	ND		ug/l	0.490	0.180	1
Chrysene	ND		ug/l	0.490	0.139	1
bis(2-Ethylhexyl)phthalate	ND		ug/l	0.490	0.079	1
Di-n-octylphthalate	ND		ug/l	0.980	0.077	1
Benzo(b)fluoranthene	ND		ug/l	0.490	0.064	1
Benzo(k)fluoranthene	ND		ug/l	0.490	0.158	1
Benzo(a)pyrene	ND		ug/l	0.490	0.059	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.490	0.088	1
Dibenz(a,h)anthracene	ND		ug/l	0.490	0.063	1
Benzo(g,h,i)perylene	ND		ug/l	0.490	0.107	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	34		15-115
Phenol-d5	22		15-115
Nitrobenzene-d5	67		30-130
2-Fluorobiphenyl	66		30-130
2,4,6-Tribromophenol	98		15-115
Terphenyl-d14	89		30-130

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL **Lab Number:** L2250575

Project Number: 03.0033579.15 **Report Date:** 10/13/22

SAMPLE RESULTS

Lab ID: L2250575-05
Client ID: MWN-04-091522
Sample Location: LACKAWANNA NY

Date Collected: 09/15/22 14:50
Date Received: 09/15/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/19/22 17:08
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
bis(2-Chloroethyl)ether	ND		ug/l	0.495	0.092	1
1,3-Dichlorobenzene	ND		ug/l	0.495	0.078	1
1,4-Dichlorobenzene	ND		ug/l	0.495	0.082	1
1,2-Dichlorobenzene	ND		ug/l	0.495	0.067	1
Benzyl alcohol	ND		ug/l	0.495	0.122	1
bis(2-chloroisopropyl)ether	ND		ug/l	0.495	0.107	1
Acetophenone	0.967	J	ug/l	0.990	0.205	1
Hexachloroethane	ND		ug/l	0.495	0.101	1
Nitrobenzene	ND		ug/l	0.495	0.101	1
Isophorone	ND		ug/l	0.495	0.125	1
bis(2-Chloroethoxy)methane	ND		ug/l	0.495	0.085	1
1,2,4-Trichlorobenzene	ND		ug/l	0.495	0.095	1
Naphthalene	11.2		ug/l	0.495	0.087	1
4-Chloroaniline	ND		ug/l	0.495	0.127	1
Hexachlorobutadiene	ND		ug/l	0.495	0.085	1
2-Methylnaphthalene	2.49		ug/l	0.495	0.090	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.495	0.079	1
Hexachlorocyclopentadiene	ND		ug/l	0.495	0.151	1
Biphenyl	0.394	J	ug/l	0.495	0.110	1
2-Chloronaphthalene	ND		ug/l	0.495	0.089	1
2-Nitroaniline	ND		ug/l	0.495	0.137	1
Acenaphthylene	0.167	J	ug/l	0.495	0.111	1
Dimethylphthalate	ND		ug/l	0.495	0.116	1
2,6-Dinitrotoluene	ND		ug/l	0.495	0.166	1
Acenaphthene	5.26		ug/l	0.495	0.095	1
3-Nitroaniline	ND		ug/l	0.495	0.110	1
Dibenzofuran	2.54		ug/l	0.495	0.090	1
2,4-Dinitrotoluene	ND		ug/l	0.495	0.161	1

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL **Lab Number:** L2250575

Project Number: 03.0033579.15 **Report Date:** 10/13/22

SAMPLE RESULTS

Lab ID: L2250575-05 Date Collected: 09/15/22 14:50

Client ID: MWN-04-091522 Date Received: 09/15/22

Sample Location: LACKAWANNA NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
Fluorene	4.37		ug/l	0.495	0.103	1
Diethylphthalate	ND		ug/l	0.495	0.178	1
4-Nitroaniline	ND		ug/l	0.495	0.111	1
n-Nitrosodiphenylamine	ND		ug/l	0.495	0.071	1
Hexachlorobenzene	ND		ug/l	0.495	0.121	1
Phenanthrene	7.31		ug/l	0.495	0.110	1
Anthracene	1.39		ug/l	0.495	0.136	1
Carbazole	8.59		ug/l	0.495	0.142	1
Di-n-butylphthalate	ND		ug/l	0.495	0.099	1
Fluoranthene	1.55		ug/l	0.495	0.154	1
Pyrene	1.90		ug/l	0.495	0.168	1
Butylbenzylphthalate	ND		ug/l	0.495	0.084	1
3,3'-Dichlorobenzidine	ND		ug/l	0.495	0.191	1
Benz(a)anthracene	ND		ug/l	0.495	0.182	1
Chrysene	ND		ug/l	0.495	0.140	1
bis(2-Ethylhexyl)phthalate	ND		ug/l	0.495	0.080	1
Di-n-octylphthalate	ND		ug/l	0.990	0.078	1
Benzo(b)fluoranthene	0.125	J	ug/l	0.495	0.065	1
Benzo(k)fluoranthene	ND		ug/l	0.495	0.159	1
Benzo(a)pyrene	0.076	J	ug/l	0.495	0.060	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.495	0.089	1
Dibenz(a,h)anthracene	ND		ug/l	0.495	0.064	1
Benzo(g,h,i)perylene	ND		ug/l	0.495	0.108	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		15-115
Phenol-d5	25		15-115
Nitrobenzene-d5	70		30-130
2-Fluorobiphenyl	69		30-130
2,4,6-Tribromophenol	91		15-115
Terphenyl-d14	84		30-130

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL **Lab Number:** L2250575

Project Number: 03.0033579.15 **Report Date:** 10/13/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/19/22 10:43
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Mansfield Lab for sample(s): 01,03,05 Batch: WG1688692-1					
bis(2-Chloroethyl)ether	ND		ug/l	0.500	0.093
1,3-Dichlorobenzene	ND		ug/l	0.500	0.078
1,4-Dichlorobenzene	ND		ug/l	0.500	0.083
1,2-Dichlorobenzene	ND		ug/l	0.500	0.068
Benzyl alcohol	ND		ug/l	0.500	0.123
bis(2-chloroisopropyl)ether	ND		ug/l	0.500	0.108
Acetophenone	ND		ug/l	1.00	0.207
Hexachloroethane	ND		ug/l	0.500	0.102
Nitrobenzene	ND		ug/l	0.500	0.102
Isophorone	ND		ug/l	0.500	0.126
bis(2-Chloroethoxy)methane	ND		ug/l	0.500	0.085
1,2,4-Trichlorobenzene	ND		ug/l	0.500	0.096
Naphthalene	ND		ug/l	0.500	0.088
4-Chloroaniline	ND		ug/l	0.500	0.128
Hexachlorobutadiene	ND		ug/l	0.500	0.086
2-Methylnaphthalene	ND		ug/l	0.500	0.091
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.500	0.080
Hexachlorocyclopentadiene	ND		ug/l	0.500	0.153
Biphenyl	ND		ug/l	0.500	0.111
2-Chloronaphthalene	ND		ug/l	0.500	0.090
2-Nitroaniline	ND		ug/l	0.500	0.138
Acenaphthylene	ND		ug/l	0.500	0.112
Dimethylphthalate	ND		ug/l	0.500	0.117
2,6-Dinitrotoluene	ND		ug/l	0.500	0.168
Acenaphthene	ND		ug/l	0.500	0.096
3-Nitroaniline	ND		ug/l	0.500	0.111
Dibenzofuran	ND		ug/l	0.500	0.091
2,4-Dinitrotoluene	ND		ug/l	0.500	0.163
Fluorene	ND		ug/l	0.500	0.104

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL **Lab Number:** L2250575

Project Number: 03.0033579.15 **Report Date:** 10/13/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/19/22 10:43
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Mansfield Lab for sample(s): 01,03,05 Batch: WG1688692-1					
Diethylphthalate	ND		ug/l	0.500	0.180
4-Nitroaniline	ND		ug/l	0.500	0.112
n-Nitrosodiphenylamine	ND		ug/l	0.500	0.072
Hexachlorobenzene	ND		ug/l	0.500	0.122
Phenanthrene	ND		ug/l	0.500	0.111
Anthracene	ND		ug/l	0.500	0.137
Carbazole	ND		ug/l	0.500	0.143
Di-n-butylphthalate	ND		ug/l	0.500	0.100
Fluoranthene	ND		ug/l	0.500	0.156
Pyrene	ND		ug/l	0.500	0.170
Butylbenzylphthalate	ND		ug/l	0.500	0.085
3,3'-Dichlorobenzidine	ND		ug/l	0.500	0.193
Benz(a)anthracene	ND		ug/l	0.500	0.184
Chrysene	ND		ug/l	0.500	0.142
bis(2-Ethylhexyl)phthalate	ND		ug/l	0.500	0.081
Di-n-octylphthalate	ND		ug/l	1.00	0.079
Benzo(b)fluoranthene	ND		ug/l	0.500	0.066
Benzo(k)fluoranthene	ND		ug/l	0.500	0.161
Benzo(a)pyrene	ND		ug/l	0.500	0.060
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.500	0.090
Dibenz(a,h)anthracene	ND		ug/l	0.500	0.064
Benzo(g,h,i)perylene	ND		ug/l	0.500	0.109

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL
Project Number: 03.0033579.15
Lab Number: L2250575
Report Date: 10/13/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/19/22 10:43
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 09/17/22 08:30

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Mansfield Lab for sample(s): 01,03,05 Batch: WG1688692-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		15-115
Phenol-d5	42		15-115
Nitrobenzene-d5	93		30-130
2-Fluorobiphenyl	90		30-130
2,4,6-Tribromophenol	95		15-115
Terphenyl-d14	106		30-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL

Project Number: 03.0033579.15

Lab Number: L2250575

Report Date: 10/13/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Mansfield Lab Associated sample(s): 01,03,05 Batch: WG1688692-2 WG1688692-3								
bis(2-Chloroethyl)ether	84		88		40-140	5		20
1,3-Dichlorobenzene	44		53		40-140	19		20
1,4-Dichlorobenzene	46		54		40-140	16		20
1,2-Dichlorobenzene	48		56		40-140	15		20
bis(2-chloroisopropyl)ether	75		80		40-140	6		20
Acetophenone	82		85		40-140	4		20
Hexachloroethane	40		49		10-97	20		20
Nitrobenzene	83		88		40-140	6		20
Isophorone	82		86		40-140	5		20
bis(2-Chloroethoxy)methane	89		93		40-140	4		20
1,2,4-Trichlorobenzene	50		57		40-140	13		20
Naphthalene	65		71		40-140	9		20
4-Chloroaniline	93		97		40-140	4		20
Hexachlorobutadiene	41		47		40-140	14		20
2-Methylnaphthalene	64		69		40-140	8		20
1,2,4,5-Tetrachlorobenzene	56		61		40-140	9		20
Hexachlorocyclopentadiene	40		48		10-109	18		20
Biphenyl	75		74		40-140	1		20
2-Chloronaphthalene	68		73		40-140	7		20
2-Nitroaniline	93		98		40-140	5		20
Acenaphthylene	77		81		40-140	5		20
Dimethylphthalate	84		80		40-140	5		20
2,6-Dinitrotoluene	101		106		40-140	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL

Project Number: 03.0033579.15

Lab Number: L2250575

Report Date: 10/13/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Mansfield Lab Associated sample(s): 01,03,05 Batch: WG1688692-2 WG1688692-3								
Acenaphthene	76		80		40-140	5		20
3-Nitroaniline	100		106		40-140	6		20
Dibenzofuran	84		87		40-140	4		20
2,4-Dinitrotoluene	106		110		40-140	4		20
Fluorene	86		89		40-140	3		20
Diethylphthalate	92		92		40-140	0		20
4-Nitroaniline	108		113		40-140	5		20
n-Nitrosodiphenylamine	99		103		40-140	4		20
Hexachlorobenzene	95		98		40-140	3		20
Phenanthrene	93		96		40-140	3		20
Anthracene	96		100		40-140	4		20
Carbazole	100		106		40-140	6		20
Di-n-butylphthalate	101		104		40-140	3		20
Fluoranthene	98		103		40-140	5		20
Pyrene	94		99		40-140	5		20
Butylbenzylphthalate	97		101		40-140	4		20
3,3'-Dichlorobenzidine	92		99		40-140	7		20
Benz(a)anthracene	91		97		40-140	6		20
Chrysene	99		105		40-140	6		20
bis(2-Ethylhexyl)phthalate	99		105		40-140	6		20
Di-n-octylphthalate	103		108		40-140	5		20
Benzo(b)fluoranthene	89		93		40-140	4		20
Benzo(k)fluoranthene	105		111		40-140	6		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL

Project Number: 03.0033579.15

Lab Number: L2250575

Report Date: 10/13/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Mansfield Lab Associated sample(s): 01,03,05 Batch: WG1688692-2 WG1688692-3								
Benzo(a)pyrene	97		101		40-140	4		20
Indeno(1,2,3-cd)pyrene	102		109		40-140	7		20
Dibenz(a,h)anthracene	101		105		40-140	4		20
Benzo(g,h,i)perylene	91		95		40-140	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	58		61		15-115
Phenol-d5	42		43		15-115
Nitrobenzene-d5	86		89		30-130
2-Fluorobiphenyl	80		81		30-130
2,4,6-Tribromophenol	99		102		15-115
Terphenyl-d14	95		100		30-130

METALS

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL
Lab Number: L2250575
Project Number: 03.0033579.15
Report Date: 10/13/22

SAMPLE RESULTS

Lab ID: L2250575-01
Client ID: MWN-03D-091522
Sample Location: LACKAWANNA NY
Date Collected: 09/15/22 08:30
Date Received: 09/15/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Barium, Dissolved	0.779		mg/l	0.0100	0.0021	1	09/21/22 23:00	10/13/22 07:28	EPA 3005A	1,6010D	NB
Manganese, Dissolved	0.333		mg/l	0.0100	0.0016	1	09/21/22 23:00	10/13/22 07:28	EPA 3005A	1,6010D	NB

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL
Lab Number: L2250575
Project Number: 03.0033579.15
Report Date: 10/13/22

SAMPLE RESULTS

Lab ID: L2250575-02
Client ID: MWN-03B-091522
Sample Location: LACKAWANNA NY
Date Collected: 09/15/22 09:45
Date Received: 09/15/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Arsenic, Dissolved	ND		mg/l	0.0050	0.0019	1	09/21/22 23:00	10/13/22 07:31	EPA 3005A	1,6010D	NB
Barium, Dissolved	1.32		mg/l	0.0100	0.0021	1	09/21/22 23:00	10/13/22 07:31	EPA 3005A	1,6010D	NB
Chromium, Dissolved	0.0032	J	mg/l	0.0100	0.0021	1	09/21/22 23:00	10/13/22 07:31	EPA 3005A	1,6010D	NB
Manganese, Dissolved	0.178		mg/l	0.0100	0.0016	1	09/21/22 23:00	10/13/22 07:31	EPA 3005A	1,6010D	NB

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL **Lab Number:** L2250575

Project Number: 03.0033579.15 **Report Date:** 10/13/22

SAMPLE RESULTS

Lab ID: L2250575-04 Date Collected: 09/15/22 13:45

Client ID: MWN-02D-091522 Date Received: 09/15/22

Sample Location: LACKAWANNA NY Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab											
Arsenic, Dissolved	ND		mg/l	0.0050	0.0019	1	09/21/22 23:00	10/13/22 07:35	EPA 3005A	1,6010D	NB
Barium, Dissolved	0.860		mg/l	0.0100	0.0021	1	09/21/22 23:00	10/13/22 07:35	EPA 3005A	1,6010D	NB
Chromium, Dissolved	ND		mg/l	0.0100	0.0021	1	09/21/22 23:00	10/13/22 07:35	EPA 3005A	1,6010D	NB

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL **Lab Number:** L2250575

Project Number: 03.0033579.15 **Report Date:** 10/13/22

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-02,04 Batch: WG1690348-1										
Arsenic, Dissolved	ND		mg/l	0.0050	0.0019	1	09/21/22 23:00	10/05/22 07:21	1,6010D	EW
Barium, Dissolved	ND		mg/l	0.0100	0.0021	1	09/21/22 23:00	10/05/22 07:21	1,6010D	EW
Chromium, Dissolved	ND		mg/l	0.0100	0.0021	1	09/21/22 23:00	10/05/22 07:21	1,6010D	EW
Manganese, Dissolved	ND		mg/l	0.0100	0.0016	1	09/21/22 23:00	10/05/22 07:21	1,6010D	EW

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL

Project Number: 03.0033579.15

Lab Number: L2250575

Report Date: 10/13/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04 Batch: WG1690348-2								
Arsenic, Dissolved	108		-		80-120	-		
Barium, Dissolved	100		-		80-120	-		
Chromium, Dissolved	95		-		80-120	-		
Manganese, Dissolved	98		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL
Project Number: 03.0033579.15

Lab Number: L2250575
Report Date: 10/13/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04 QC Batch ID: WG1690348-3 QC Sample: L2249555-13 Client ID: MS Sample												
Arsenic, Dissolved	ND	0.12	0.128	107		-	-		75-125	-		20
Barium, Dissolved	ND	2	1.92	96		-	-		75-125	-		20
Chromium, Dissolved	ND	0.2	0.182	91		-	-		75-125	-		20
Manganese, Dissolved	ND	0.5	0.453	91		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL

Project Number: 03.0033579.15

Lab Number: L2250575

Report Date: 10/13/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-02,04 QC Batch ID: WG1690348-4 QC Sample: L2249555-13 Client ID: DUP Sample						
Arsenic, Dissolved	ND	ND	mg/l	NC		20
Barium, Dissolved	ND	ND	mg/l	NC		20
Chromium, Dissolved	ND	ND	mg/l	NC		20
Manganese, Dissolved	ND	0.0048J	mg/l	NC		20

Project Name: STEELWINDS ANNUAL/SEMI-ANNUAL
Project Number: 03.0033579.15

Lab Number: L2250575
Report Date: 10/13/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2250575-01A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYCP51-8260(14)
L2250575-01B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYCP51-8260(14)
L2250575-01C	Vial HCl preserved	A	NA		4.3	Y	Absent		NYCP51-8260(14)
L2250575-01D	Plastic 250ml unpreserved	A	<2	<2	4.3	Y	Absent		-
L2250575-01E	Amber 1000ml unpreserved	A	7	7	4.3	Y	Absent		A2-SVOC-8270(7)
L2250575-01F	Amber 1000ml unpreserved	A	7	7	4.3	Y	Absent		A2-SVOC-8270(7)
L2250575-01X	Plastic 120ml HNO3 preserved Filtrates	A	NA		4.3	Y	Absent		BA-SI(180),MN-SI(180)
L2250575-02A	Plastic 250ml unpreserved	A	<2	<2	4.3	Y	Absent		-
L2250575-02X	Plastic 120ml HNO3 preserved Filtrates	A	NA		4.3	Y	Absent		BA-SI(180),MN-SI(180),AS-SI(180),CR-SI(180)
L2250575-03A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYCP51-8260(14)
L2250575-03B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYCP51-8260(14)
L2250575-03C	Vial HCl preserved	A	NA		4.3	Y	Absent		NYCP51-8260(14)
L2250575-03D	Amber 1000ml unpreserved	A	7	7	4.3	Y	Absent		A2-SVOC-8270(7)
L2250575-03E	Amber 1000ml unpreserved	A	7	7	4.3	Y	Absent		A2-SVOC-8270(7)
L2250575-04A	Plastic 250ml unpreserved	A	<2	<2	4.3	Y	Absent		-
L2250575-04X	Plastic 120ml HNO3 preserved Filtrates	A	NA		4.3	Y	Absent		BA-SI(180),AS-SI(180),CR-SI(180)
L2250575-05A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYCP51-8260(14)
L2250575-05B	Vial HCl preserved	A	NA		4.3	Y	Absent		NYCP51-8260(14)
L2250575-05C	Vial HCl preserved	A	NA		4.3	Y	Absent		NYCP51-8260(14)
L2250575-05D	Amber 1000ml unpreserved	A	7	7	4.3	Y	Absent		A2-SVOC-8270(7)
L2250575-05E	Amber 1000ml unpreserved	A	7	7	4.3	Y	Absent		A2-SVOC-8270(7)
L2250575-06A	Vial HCl preserved	A	NA		4.3	Y	Absent		NYCP51-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	STEELWINDS ANNUAL/SEMI-ANNUAL	**Lab Number:**	L2250575
Project Number:	03.0033579.15	**Report Date:**	10/13/22

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	STEELWINDS ANNUAL/SEMI-ANNUAL	**Lab Number:**	L2250575
Project Number:	03.0033579.15	**Report Date:**	10/13/22

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers

Project Name:	STEELWINDS ANNUAL/SEMI-ANNUAL	**Lab Number:**	L2250575
Project Number:	03.0033579.15	**Report Date:**	10/13/22

Data Qualifiers

Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name:	STEELWINDS ANNUAL/SEMI-ANNUAL	**Lab Number:**	L2250575
Project Number:	03.0033579.15	**Report Date:**	10/13/22

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 9/16/22

ALPHA Job #: L2250575

Client Information

Client: GZA
Address: 300 Pearl St. Suite 700
Buffalo, NY 14202
Phone: (716) 517-5708
Fax:
Email: DANIEL.TROY@GZA.COM

Project Information

Project Name: Steel Winds Annual/Semi-Annual
Project Location: Lackawanna NY
Project # 03.0033579.15
(Use Project name as Project #) ☐
Project Manager: DANIEL TROY
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☒ EQuIS (4 File)
☐ Other * CAT B *

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	8260 STARS	8270 PAH/STARS	6010D As, Br, CR	6010D AS	6010D BR	6010D Mn	6010D CR	Total Bottle	Sample Specific Comments
50575-01	MWN-03D-091522	9-15-22	0830	GW	PN	X	X			X	X			LAB Filter
02	MWN-03B-091522		0945						X	X	X	X		Metal Samples
03	MWN-05-091522		1030			X	X							
04	MWN-02D-091522		1345					X						- LAB Filter
05	MWN-04-091522		1450			X	X							
06	TRIP BLANK-3			W		X								

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type													
Preservative													

Relinquished By:	Date/Time	Received By:	Date/Time
	9-15-22/1530		9/15/22 1530
	9/15/22 1530		9/16/22 0030

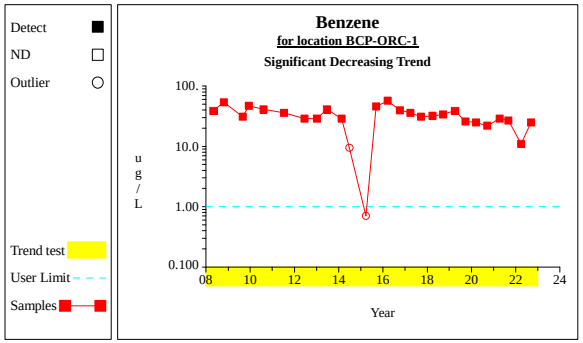
Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

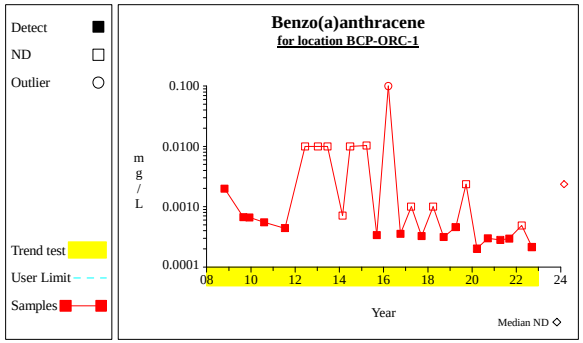
Form No: 01-25 HC (rev. 30-Sept-2013)

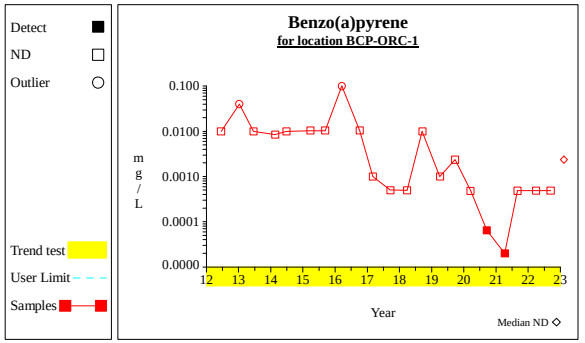
APPENDIX C

TIME SERIES PLOTS

Time Series


Detect
ND
Outlier
Trend test
User Limit
Samples
Benzene
for location BCP-ORC-1
Significant Decreasing Trend
ug/L
100.
10.0
1.00
0.100
08 10 12 14 16 18 20 22 24
Year


Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(a)anthracene
for location BCP-ORC-1
mg/L
0.100
0.0100
0.0010
0.0001
08 10 12 14 16 18 20 22 24
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(a)pyrene
for location BCP-ORC-1
mg/L
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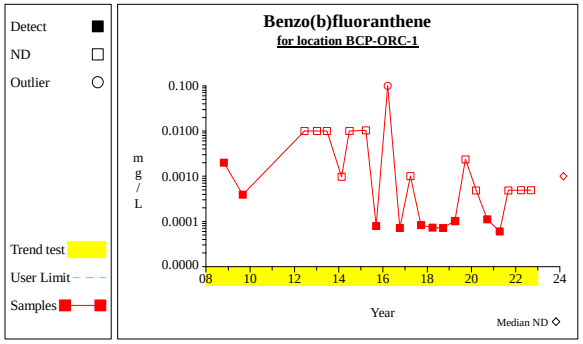
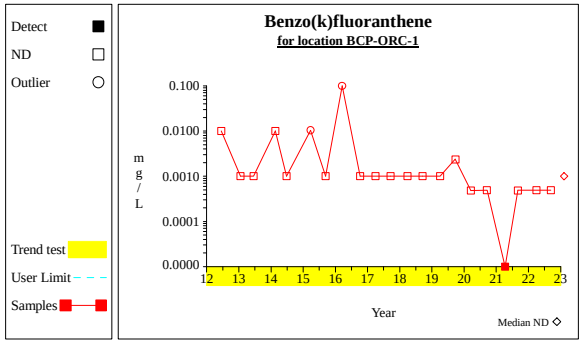
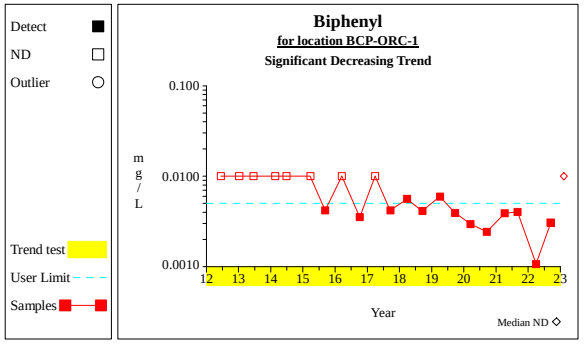
0.0100
0.0010
0.0001
0.0000
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(b)fluoranthene
for location BCP-ORC-1
mg/L
0.100
0.0100
0.0010
0.0001
0.0000
08 10 12 14 16 18 20 22 24
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(k)fluoranthene
for location BCP-ORC-1
mg/L
0.100
0.0100
0.0010
0.0001
0.0000
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Biphenyl
for location BCP-ORC-1
Significant Decreasing Trend
mg/L
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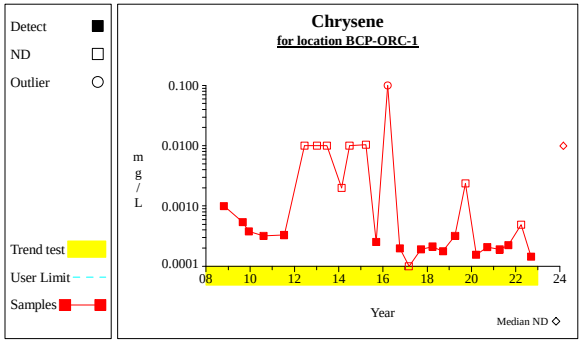
0.0010
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Chrysene
for location BCP-ORC-1
mg/L
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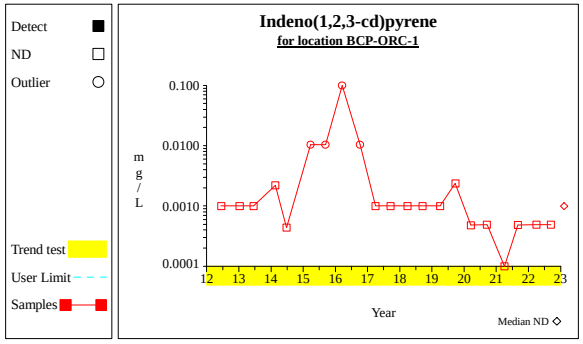
0.0100
0.0010
0.0001
08 10 12 14 16 18 20 22 24
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Indeno(1,2,3-cd)pyrene
for location BCP-ORC-1
mg/L
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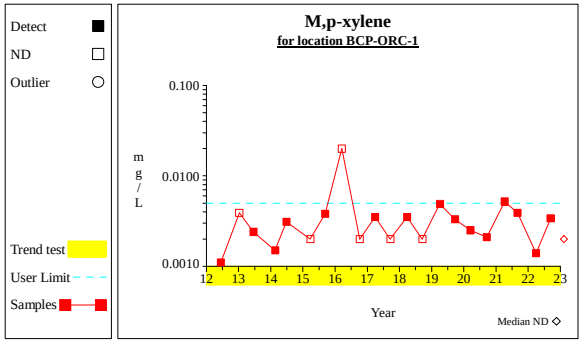
0.0100
0.0010
0.0001
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
M,p-xylene
for location BCP-ORC-1
mg/L
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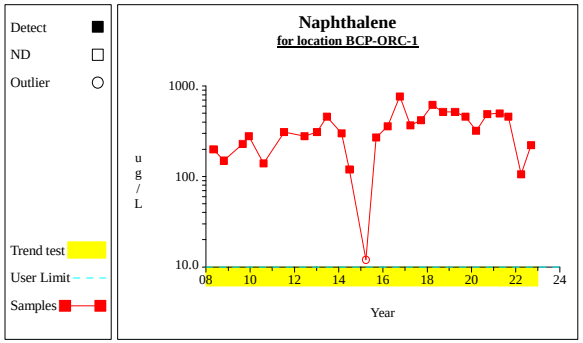
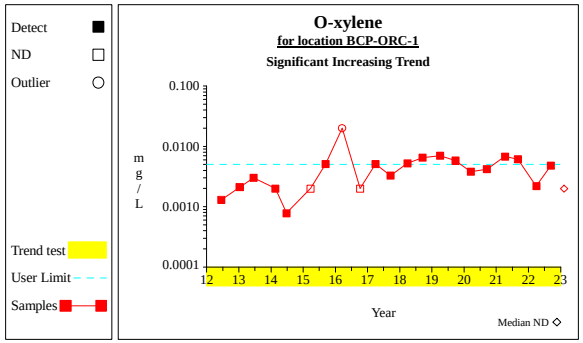
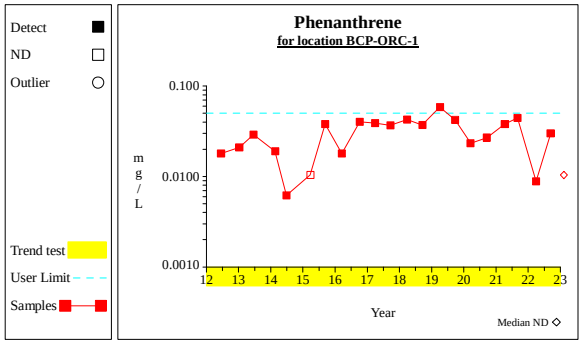
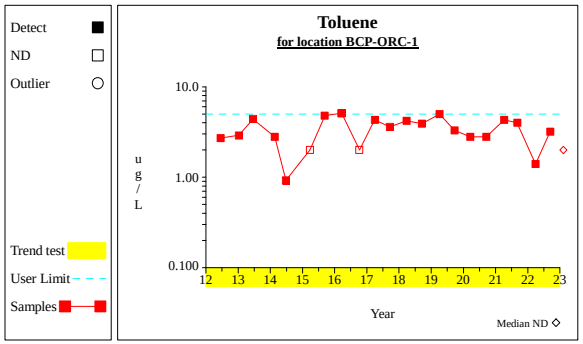
0.0100
0.0010
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND

Time Series

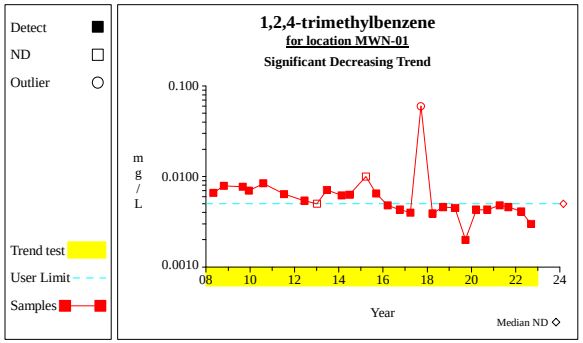

Detect
ND
Outlier
Trend test
User Limit
Samples
Naphthalene
for location BCP-ORC-1
1000.
100.
10.0
u
g
/
L
08
10
12
14
16
18
20
22
24
Year

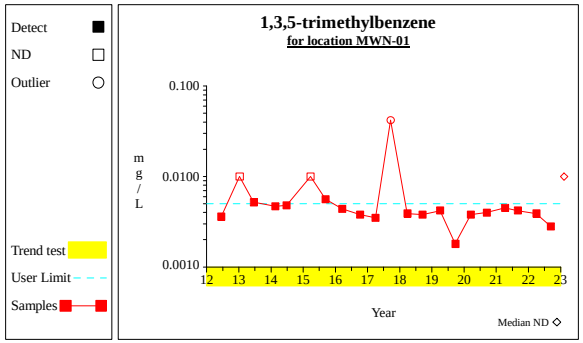

Detect
ND
Outlier
Trend test
User Limit
Samples
O-xylene
for location BCP-ORC-1
Significant Increasing Trend
0.100
0.0100
0.0010
0.0001
m
g
/
L
12
13
14
15
16
17
18
19
20
21
22
23
Year
Median ND

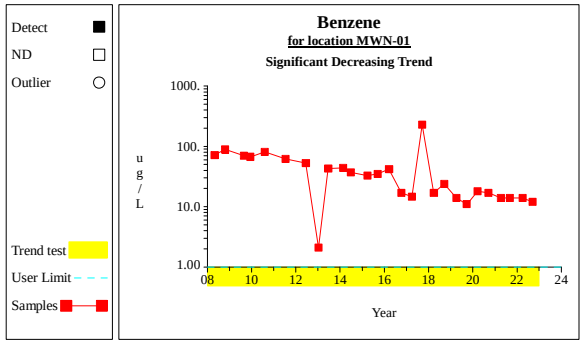

Detect
ND
Outlier
Trend test
User Limit
Samples
Phenanthrene
for location BCP-ORC-1
0.100
0.0100
0.0010
m
g
/
L
12
13
14
15
16
17
18
19
20
21
22
23
Year
Median ND

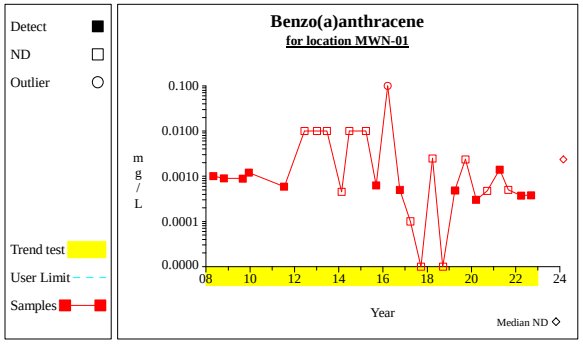

Detect
ND
Outlier
Trend test
User Limit
Samples
Toluene
for location BCP-ORC-1
10.0
1.00
0.100
u
g
/
L
12
13
14
15
16
17
18
19
20
21
22
23
Year
Median ND

Time Series


Detect
ND
Outlier
Trend test
User Limit
Samples
1,2,4-trimethylbenzene
for location MWN-01
Significant Decreasing Trend
mg/L
0.100
0.0100
0.0010
08 10 12 14 16 18 20 22 24
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
1,3,5-trimethylbenzene
for location MWN-01
mg/L
0.100
0.0100
0.0010
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Benzene
for location MWN-01
Significant Decreasing Trend
ug/L
1000.
100.
10.0
1.00
08 10 12 14 16 18 20 22 24
Year


Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(a)anthracene
for location MWN-01
mg/L
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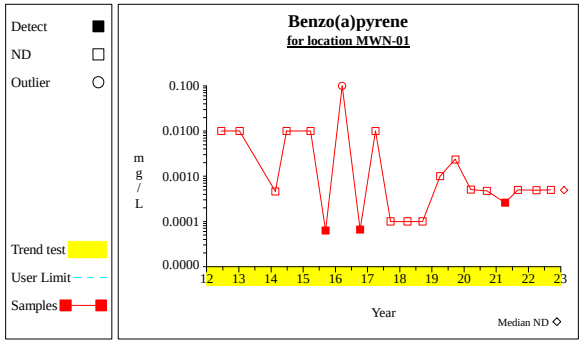
0.0010
0.0001
0.0000
08 10 12 14 16 18 20 22 24
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(a)pyrene
for location MWN-01
mg/L
0.100
0.0100
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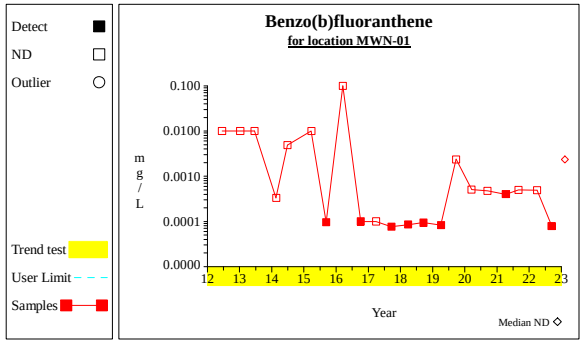
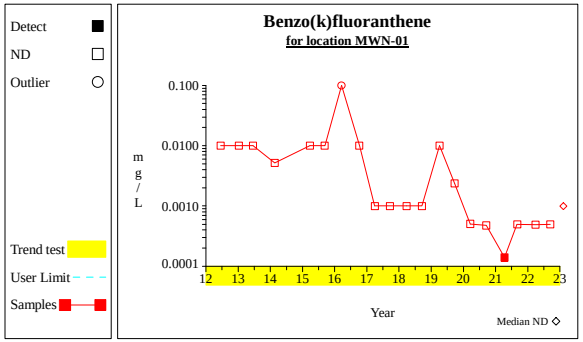
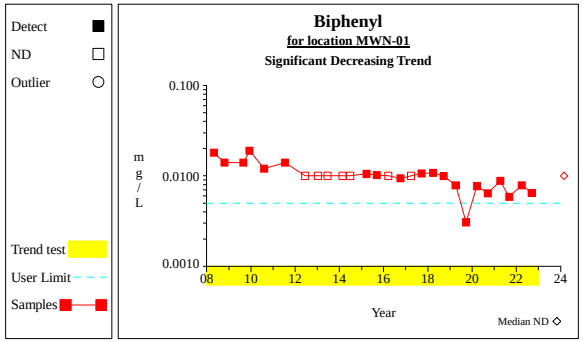
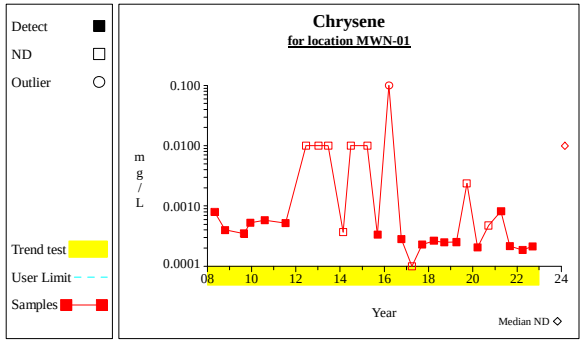
0.0001
0.0000
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(b)fluoranthene
for location MWN-01
mg/L
0.100
0.0100
0.0010
0.0001
0.0000
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(k)fluoranthene
for location MWN-01
mg/L
0.100
0.0100
0.0010
0.0001
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND

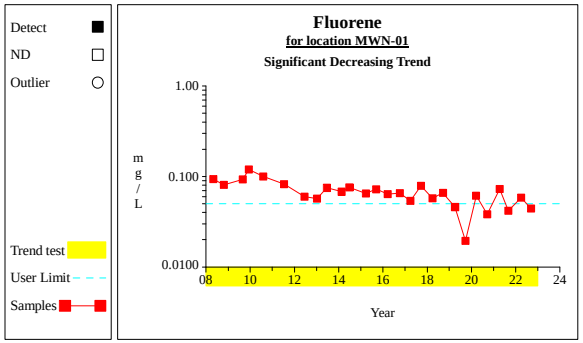

Detect
ND
Outlier
Trend test
User Limit
Samples
Biphenyl
for location MWN-01
Significant Decreasing Trend
mg/L
0.100
0.0100
0.0010
08 10 12 14 16 18 20 22 24
Year
Median ND

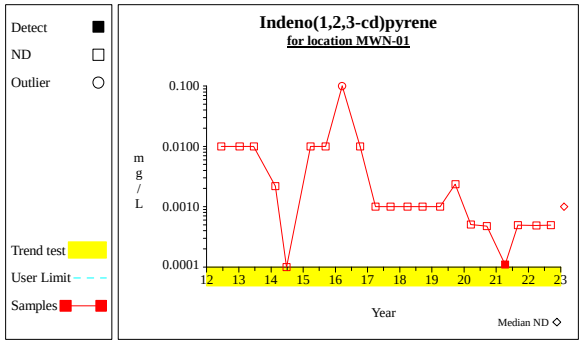

Detect
ND
Outlier
Trend test
User Limit
Samples
Chrysene
for location MWN-01
mg/L
0.100
0.0100
0.0010
0.0001
08 10 12 14 16 18 20 22 24
Year
Median ND

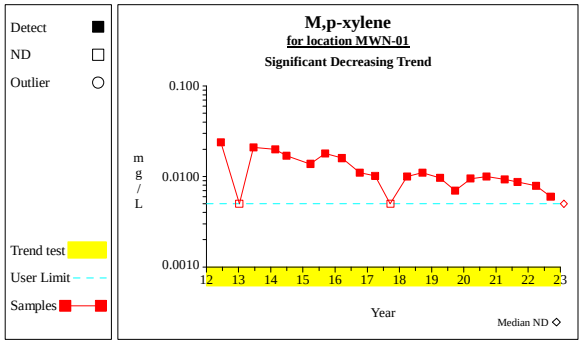
Steel Winds

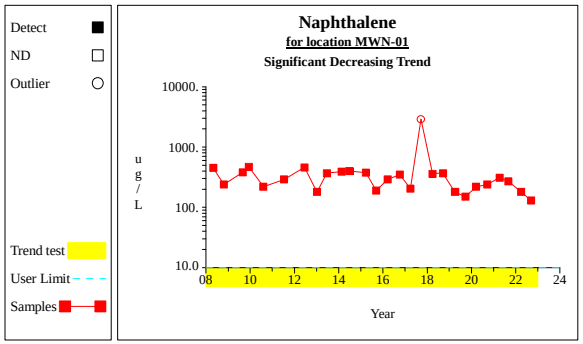
Analysis prepared on: 10/27/2022

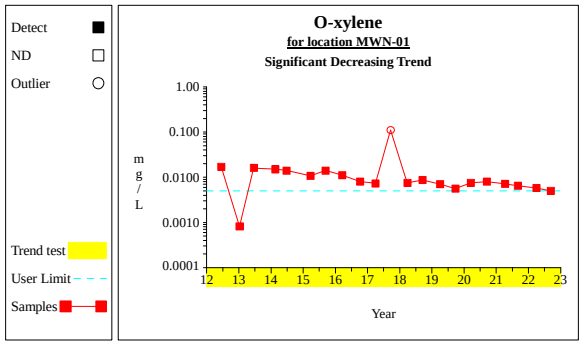
Time Series

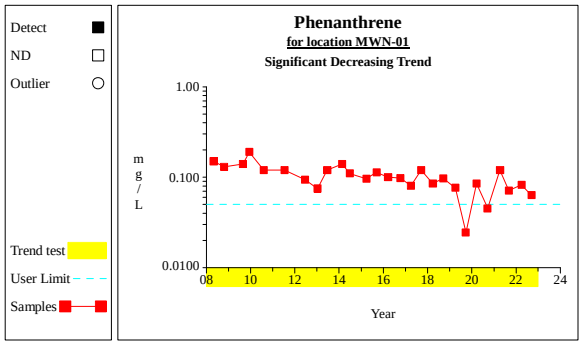


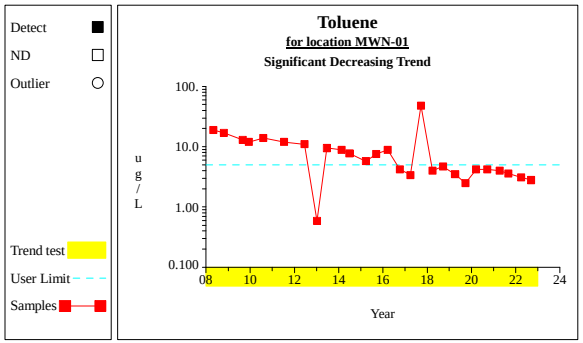


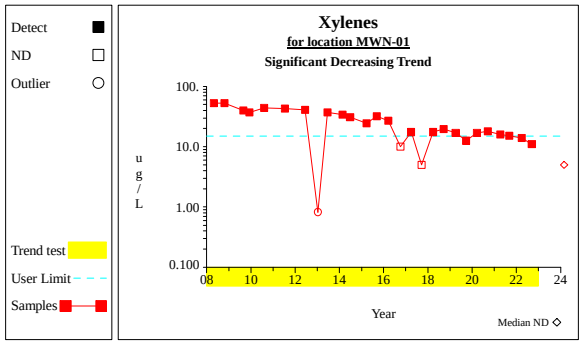






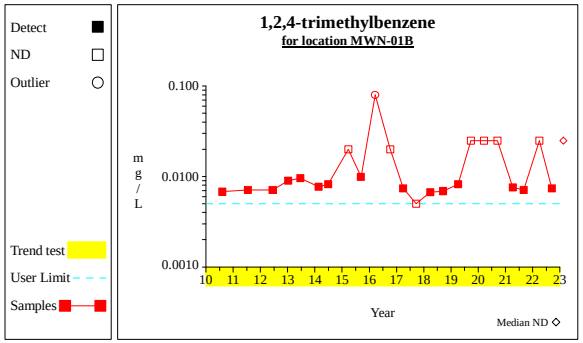


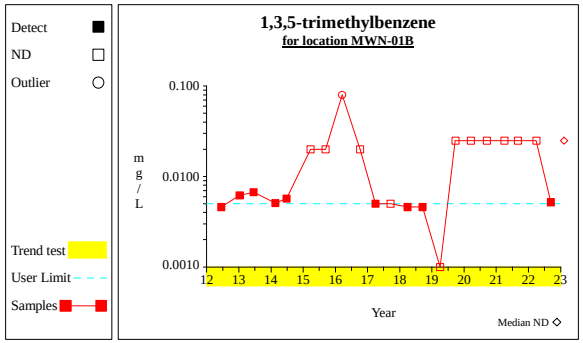


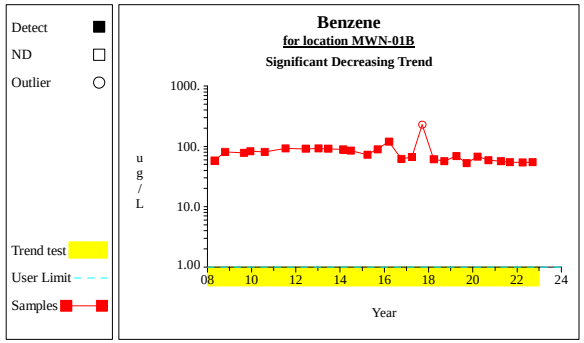


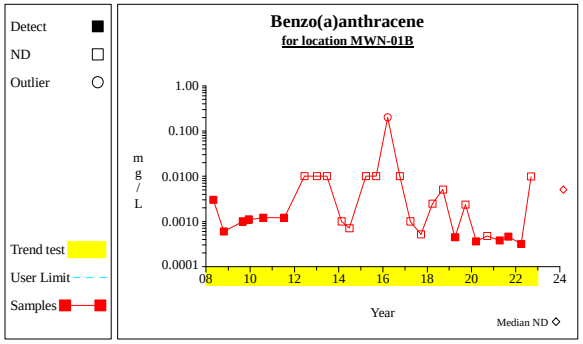
Prepared by: GZA GeoEnvironmental Inc.

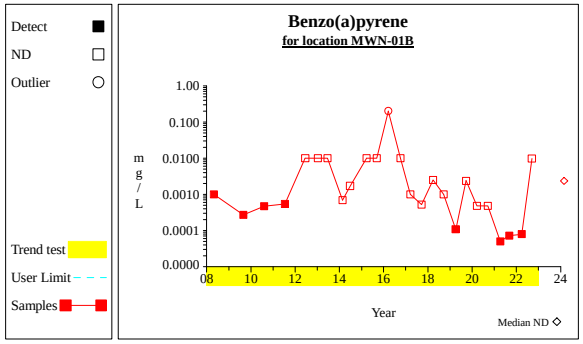
Time Series

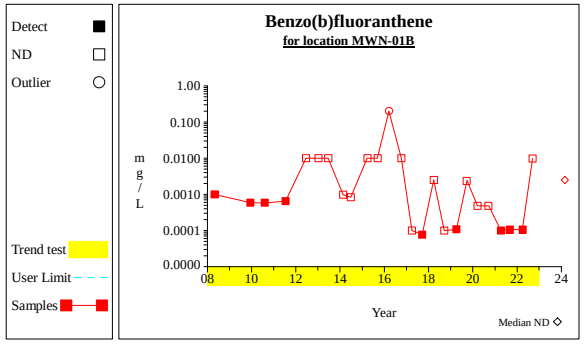

Detect
ND
Outlier
Trend test
User Limit
Samples
1,2,4-trimethylbenzene
for location MWN-01B
mg/L
0.100
0.0100
0.0010
10 11 12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND

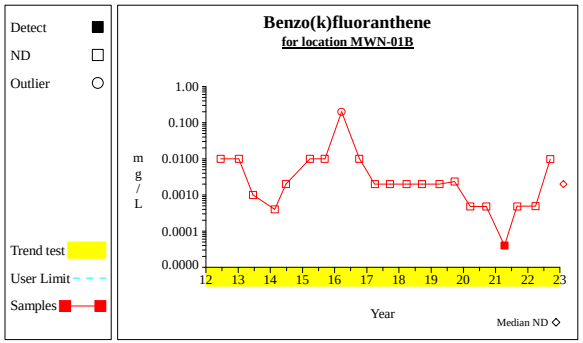

Detect
ND
Outlier
Trend test
User Limit
Samples
1,3,5-trimethylbenzene
for location MWN-01B
mg/L
0.100
0.0100
0.0010
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND

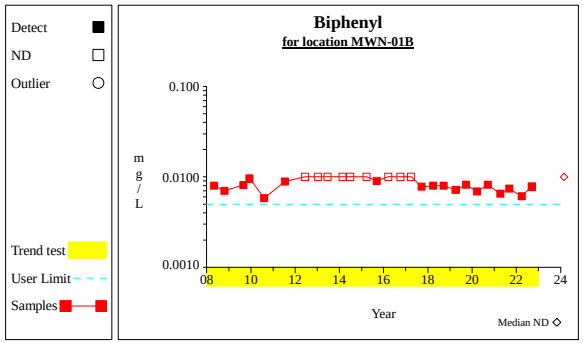

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzene
for location MWN-01B
Significant Decreasing Trend
ug/L
1000.
100.
10.0
1.00
08 10 12 14 16 18 20 22 24
Year

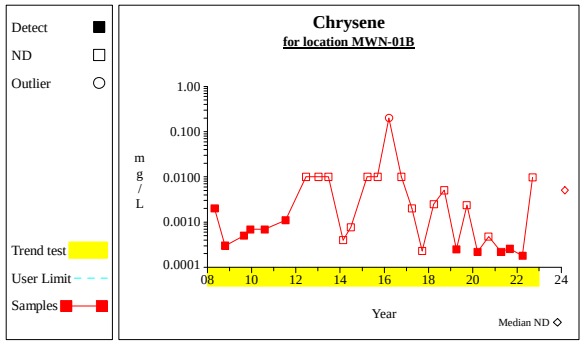

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(a)anthracene
for location MWN-01B
mg/L
1.00
0.100
0.0100
0.0010
0.0001
08 10 12 14 16 18 20 22 24
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(a)pyrene
for location MWN-01B
mg/L
1.00
0.100
0.0100
0.0010
0.0001
0.0000
08 10 12 14 16 18 20 22 24
Year
Median ND

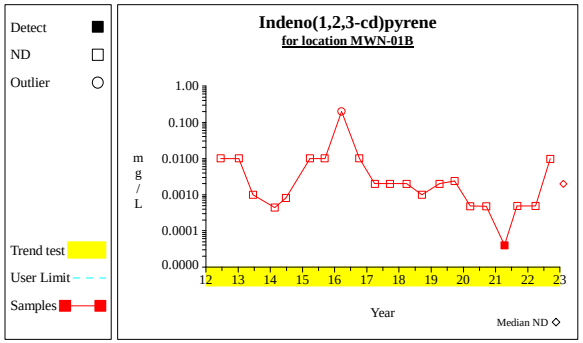

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(b)fluoranthene
for location MWN-01B
mg/L
1.00
0.100
0.0100
0.0010
0.0001
0.0000
08 10 12 14 16 18 20 22 24
Year
Median ND

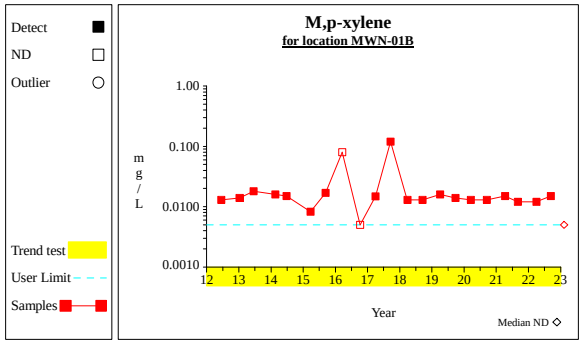

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(k)fluoranthene
for location MWN-01B
mg/L
1.00
0.100
0.0100
0.0010
0.0001
0.0000
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND

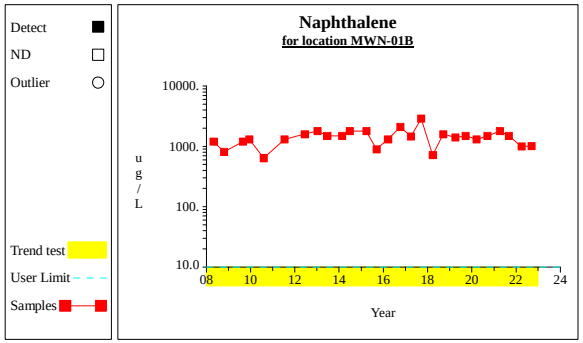

Detect
ND
Outlier
Trend test
User Limit
Samples
Biphenyl
for location MWN-01B
mg/L
0.100
0.0100
0.0010
08 10 12 14 16 18 20 22 24
Year
Median ND

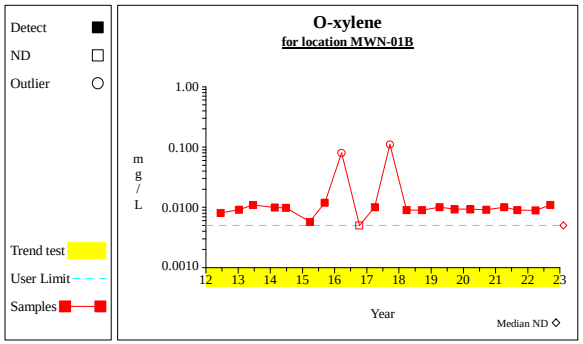

Detect
ND
Outlier
Trend test
User Limit
Samples
Chrysene
for location MWN-01B
mg/L
1.00
0.100
0.0100
0.0010
0.0001
08 10 12 14 16 18 20 22 24
Year
Median ND

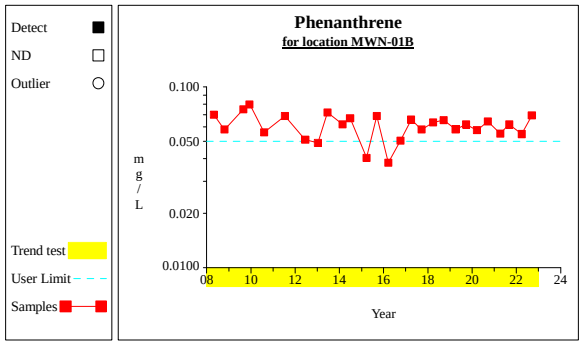
Time Series

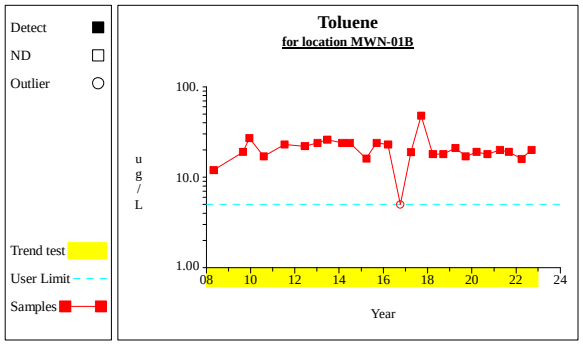

Detect
ND
Outlier
Trend test
User Limit
Samples
Indeno(1,2,3-cd)pyrene
for location MWN-01B
m g / L
1.00
0.100
0.0100
0.0010
0.0001
0.0000
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND

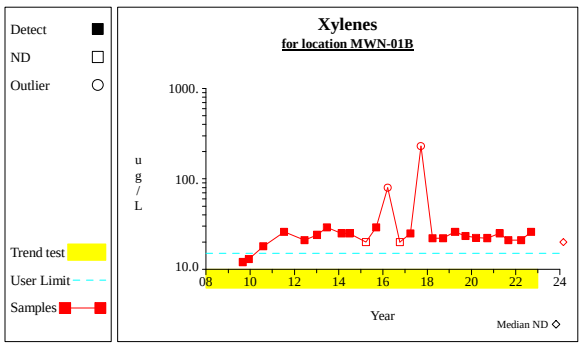

Detect
ND
Outlier
Trend test
User Limit
Samples
M,p-xylene
for location MWN-01B
m g / L
1.00
0.100
0.0100
0.0010
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Naphthalene
for location MWN-01B
u g / L
10000.
1000.
100.
10.0
08 10 12 14 16 18 20 22 24
Year


Detect
ND
Outlier
Trend test
User Limit
Samples
O-xylene
for location MWN-01B
m g / L
1.00
0.100
0.0100
0.0010
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Phenanthrene
for location MWN-01B
m g / L
0.100
0.050
0.020
0.0100
08 10 12 14 16 18 20 22 24
Year

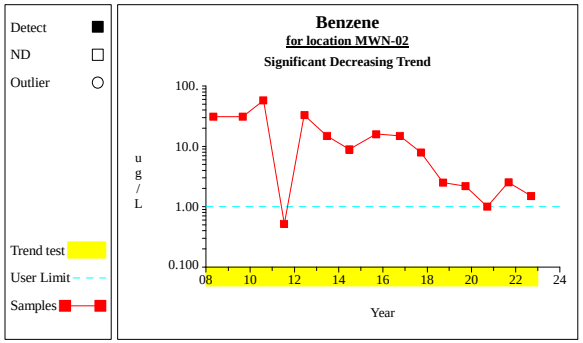

Detect
ND
Outlier
Trend test
User Limit
Samples
Toluene
for location MWN-01B
u g / L
100.
10.0
1.00
08 10 12 14 16 18 20 22 24
Year

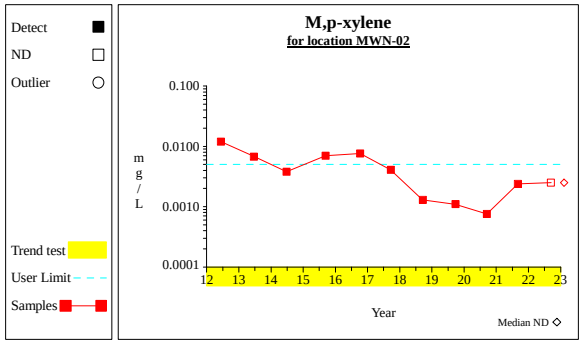

Detect
ND
Outlier
Trend test
User Limit
Samples
Xylenes
for location MWN-01B
u g / L
1000.
100.
10.0
08 10 12 14 16 18 20 22 24
Year
Median ND

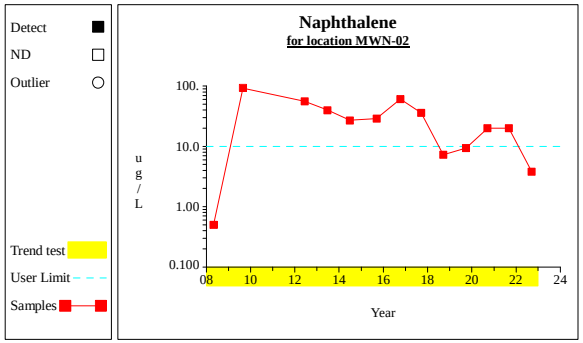
Steel Winds

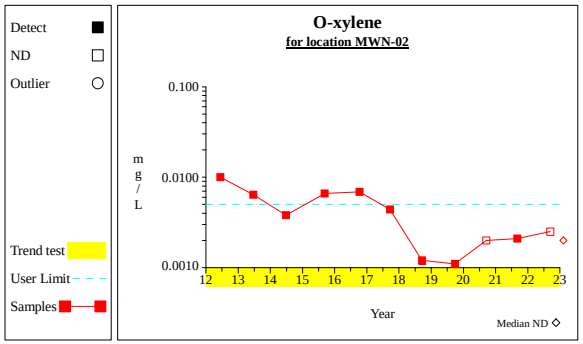
Analysis prepared on: 10/27/2022

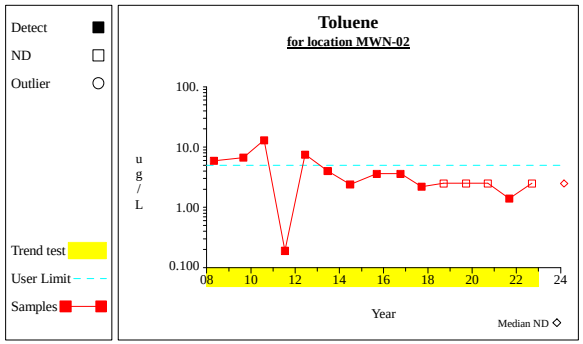
Time Series

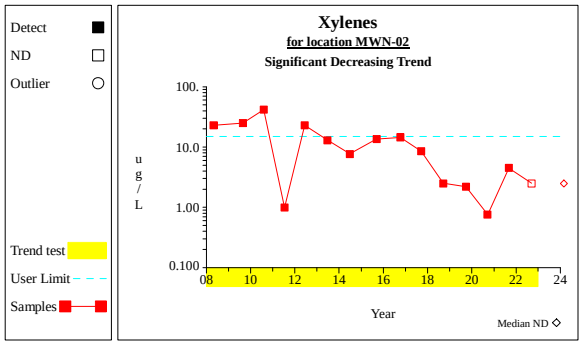










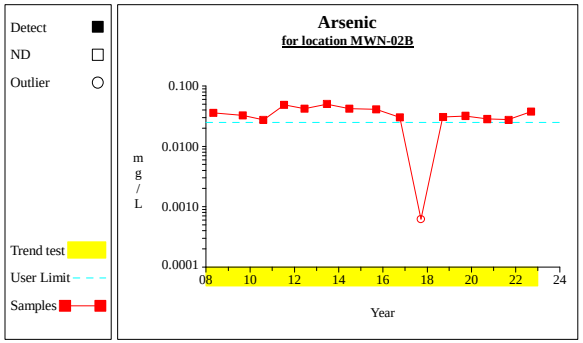


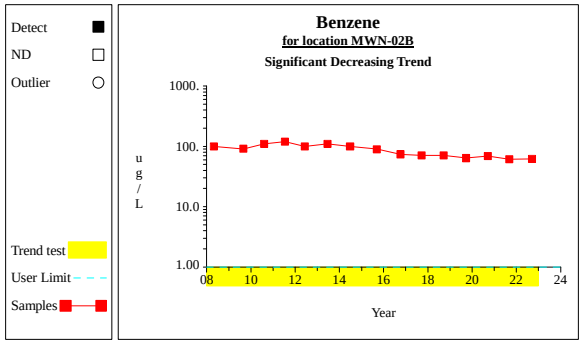
Prepared by: GZA GeoEnvironmental Inc.

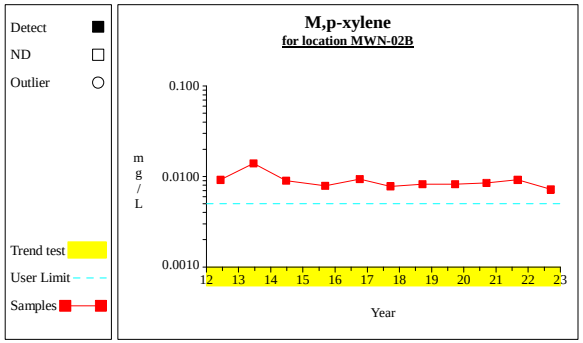
Steel Winds

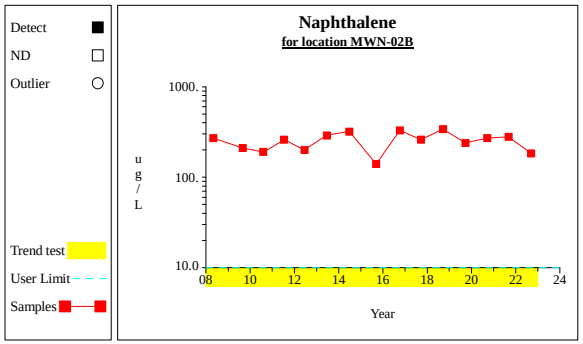
Analysis prepared on: 10/27/2022

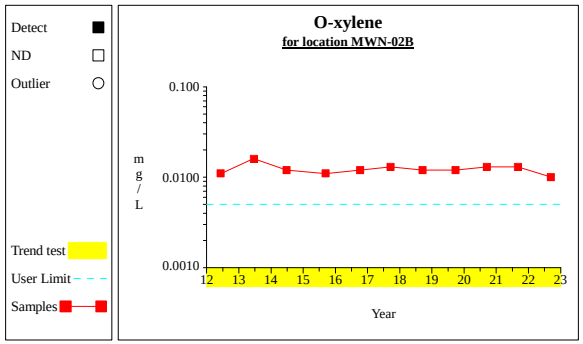
Time Series

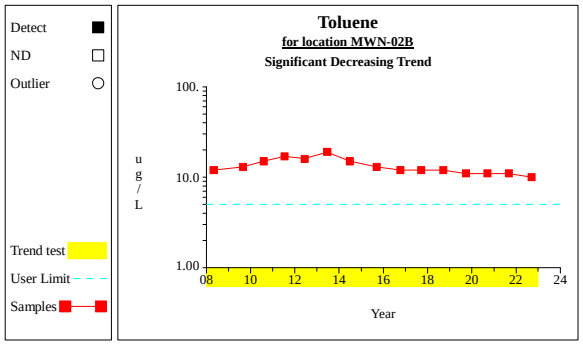


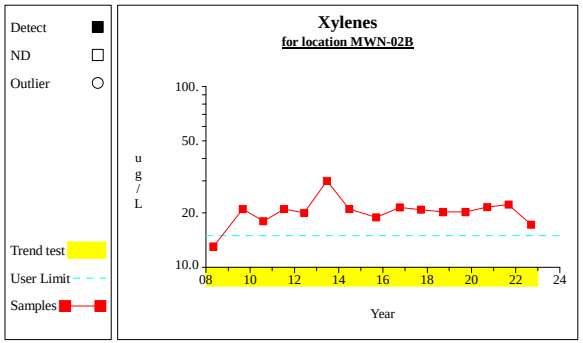






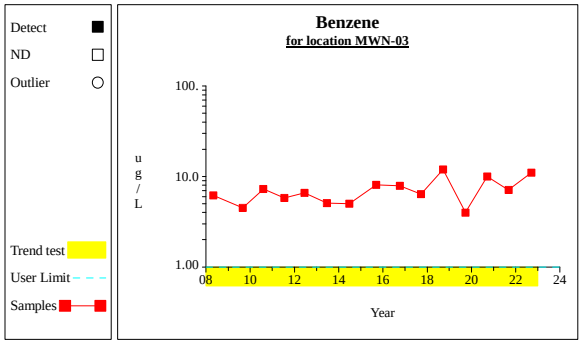


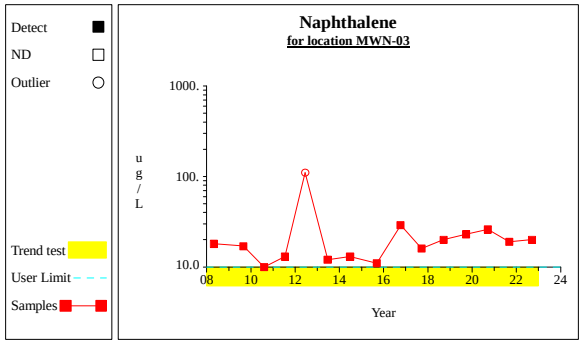




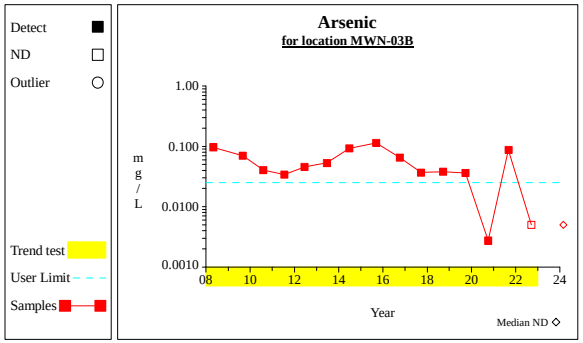
Prepared by: GZA GeoEnvironmental Inc.

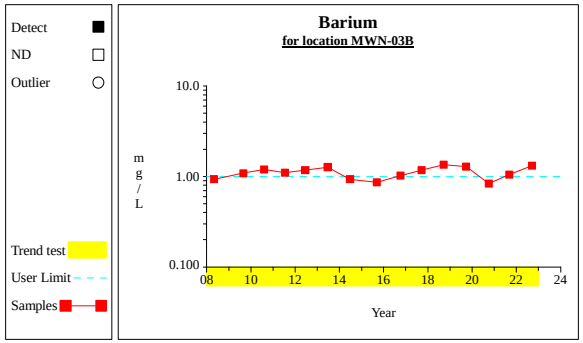
Time Series

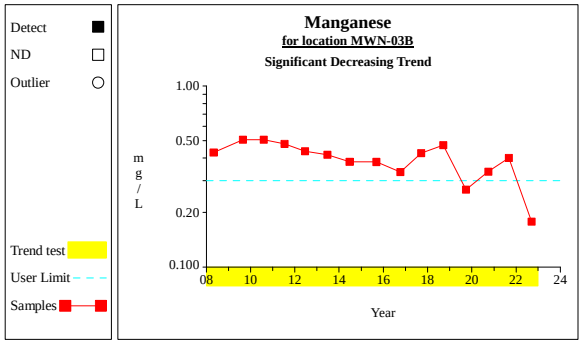

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzene
for location MWN-03
100.
10.0
1.00
u
g
/
L
08
10
12
14
16
18
20
22
24
Year


Detect
ND
Outlier
Trend test
User Limit
Samples
Naphthalene
for location MWN-03
1000.
100.
10.0
u
g
/
L
08
10
12
14
16
18
20
22
24
Year

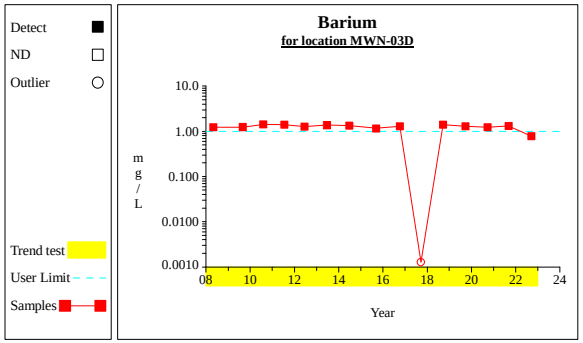
Time Series

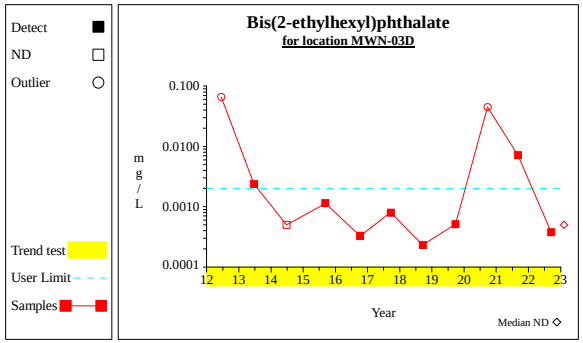

Detect
ND
Outlier
Trend test
User Limit
Samples
Arsenic
for location MWN-03B
mg/L
1.00
0.100
0.0100
0.0010
08
10
12
14
16
18
20
22
24
Year
Median ND

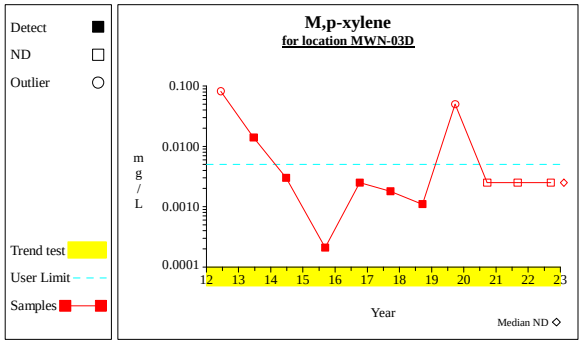

Detect
ND
Outlier
Trend test
User Limit
Samples
Barium
for location MWN-03B
mg/L
10.0
1.00
0.100
08
10
12
14
16
18
20
22
24
Year

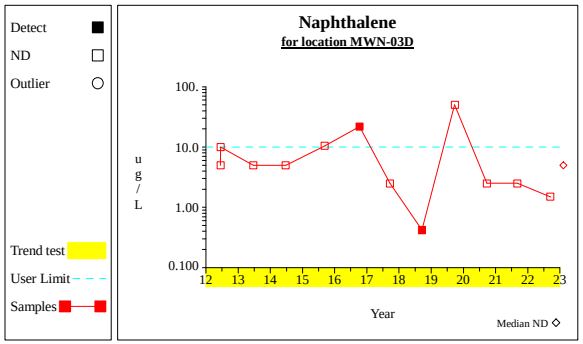

Detect
ND
Outlier
Trend test
User Limit
Samples
Manganese
for location MWN-03B
Significant Decreasing Trend
mg/L
1.00
0.50
0.20
0.100
08
10
12
14
16
18
20
22
24
Year

Time Series

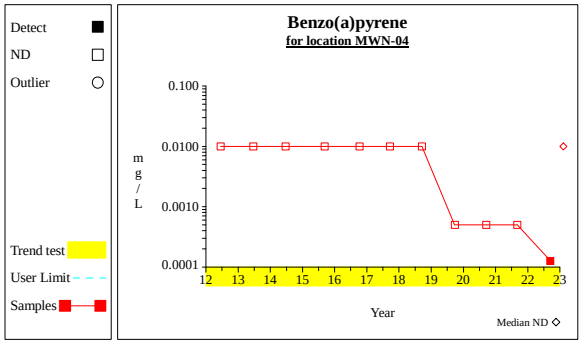

Detect
ND
Outlier
Trend test
User Limit
Samples
Barium
for location MWN-03D
10.0
1.00
0.100
0.0100
0.0010
m
g
/
L
08 10 12 14 16 18 20 22 24
Year

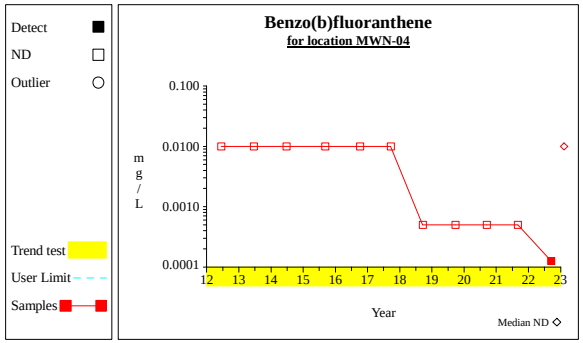

Detect
ND
Outlier
Trend test
User Limit
Samples
Bis(2-ethylhexyl)phthalate
for location MWN-03D
0.100
0.0100
0.0010
0.0001
m
g
/
L
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND

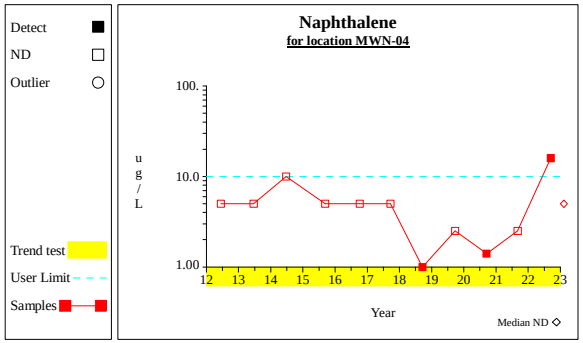

Detect
ND
Outlier
Trend test
User Limit
Samples
M,p-xylene
for location MWN-03D
0.100
0.0100
0.0010
0.0001
m
g
/
L
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Naphthalene
for location MWN-03D
100.
10.0
1.00
0.100
u
g
/
L
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND

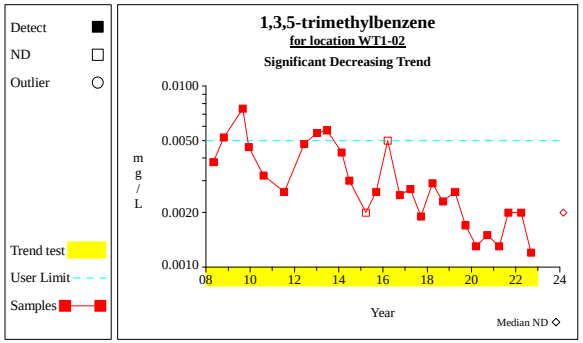
Time Series

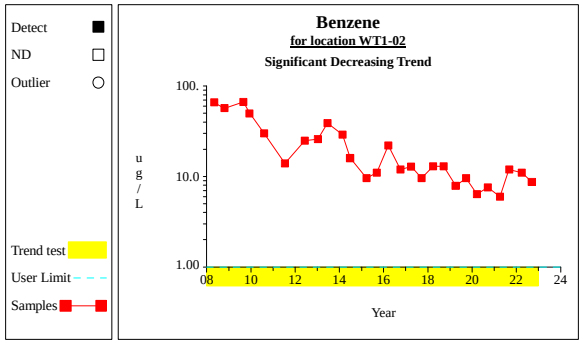

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(a)pyrene
for location MWN-04
0.100
0.0100
0.0010
0.0001
m
g
/
L
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND

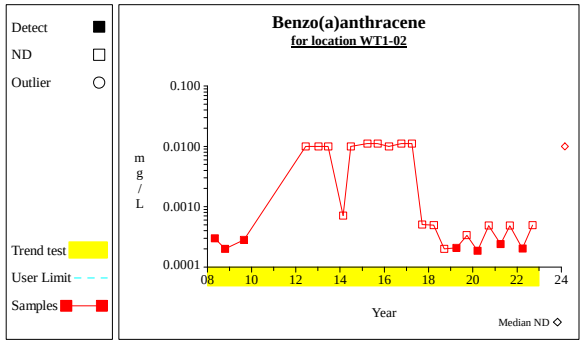

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(b)fluoranthene
for location MWN-04
0.100
0.0100
0.0010
0.0001
m
g
/
L
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND

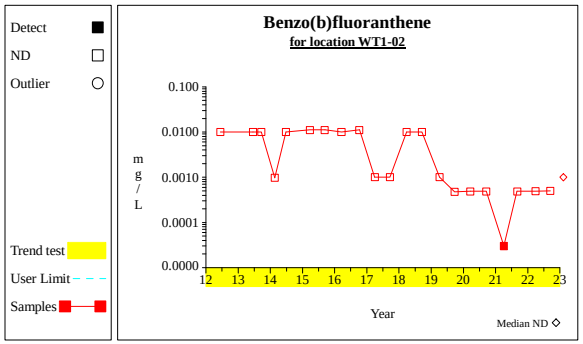

Detect
ND
Outlier
Trend test
User Limit
Samples
Naphthalene
for location MWN-04
100.
10.0
1.00
u
g
/
L
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND

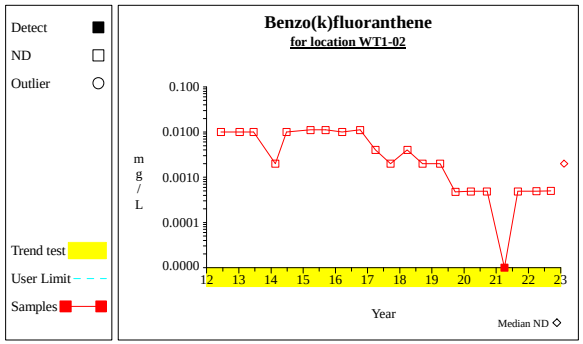
Time Series

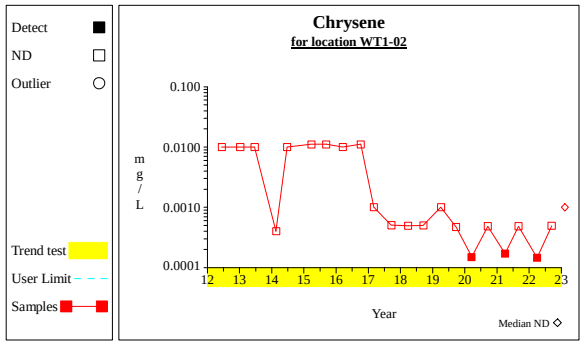

Detect
ND
Outlier
Trend test
User Limit
Samples
1,3,5-trimethylbenzene
for location WT1-02
Significant Decreasing Trend
mg/L
0.0100
0.0050
0.0020
0.0010
08 10 12 14 16 18 20 22 24
Year
Median ND

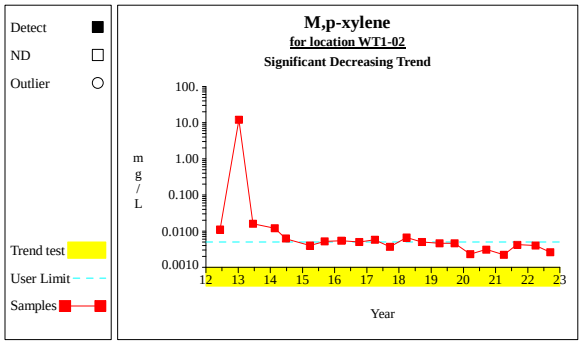

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzene
for location WT1-02
Significant Decreasing Trend
ug/L
100.
10.0
1.00
08 10 12 14 16 18 20 22 24
Year

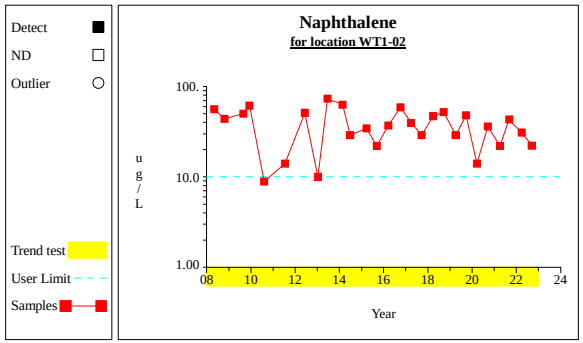

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(a)anthracene
for location WT1-02
mg/L
0.100
0.0100
0.0010
0.0001
08 10 12 14 16 18 20 22 24
Year
Median ND

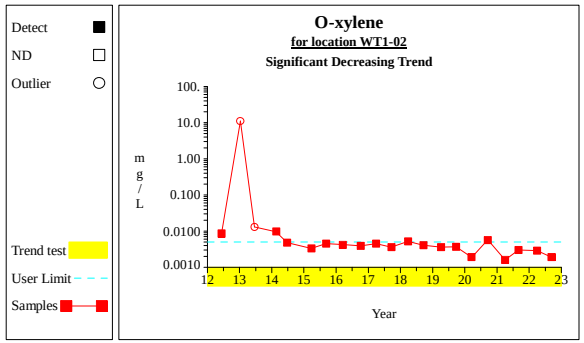

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(b)fluoranthene
for location WT1-02
mg/L
0.100
0.0100
0.0010
0.0001
0.0000
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(k)fluoranthene
for location WT1-02
mg/L
0.100
0.0100
0.0010
0.0001
0.0000
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND

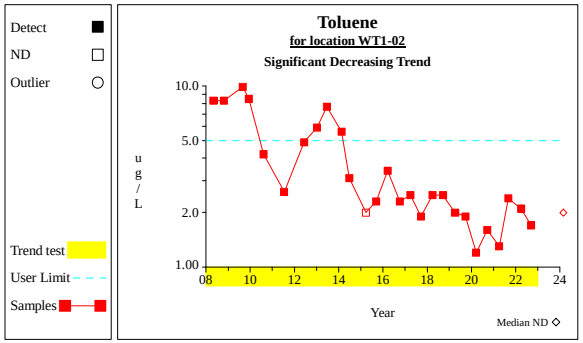

Detect
ND
Outlier
Trend test
User Limit
Samples
Chrysene
for location WT1-02
mg/L
0.100
0.0100
0.0010
0.0001
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND

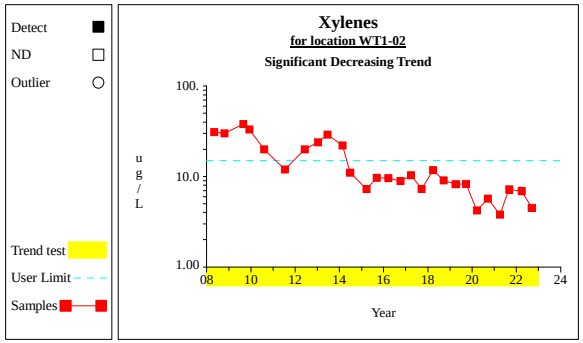

Detect
ND
Outlier
Trend test
User Limit
Samples
M,p-xylene
for location WT1-02
Significant Decreasing Trend
mg/L
100.
10.0
1.00
0.100
0.0100
0.0010
12 13 14 15 16 17 18 19 20 21 22 23
Year


Detect
ND
Outlier
Trend test
User Limit
Samples
Naphthalene
for location WT1-02
ug/L
100.
10.0
1.00
08 10 12 14 16 18 20 22 24
Year

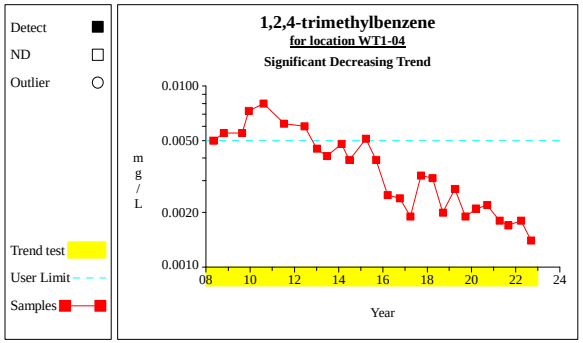

Detect
ND
Outlier
Trend test
User Limit
Samples
O-xylene
for location WT1-02
Significant Decreasing Trend
mg/L
100.
10.0
1.00
0.100
0.0100
0.0010
12 13 14 15 16 17 18 19 20 21 22 23
Year

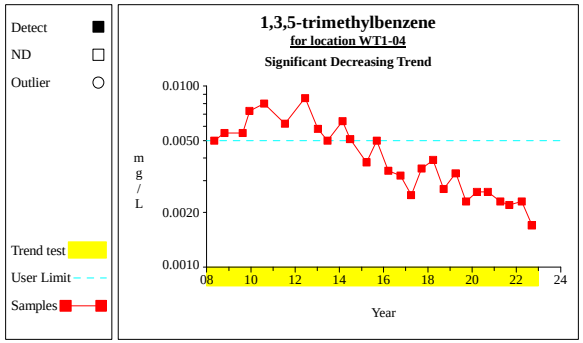
Time Series

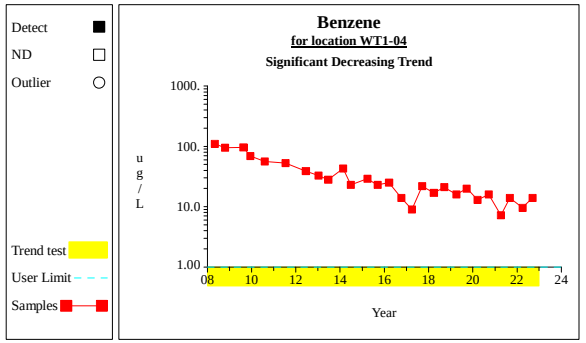

Detect
ND
Outlier
Trend test
User Limit
Samples
Toluene
for location WT1-02
Significant Decreasing Trend
u
g
/
L
10.0
5.0
2.0
1.00
08
10
12
14
16
18
20
22
24
Year
Median ND

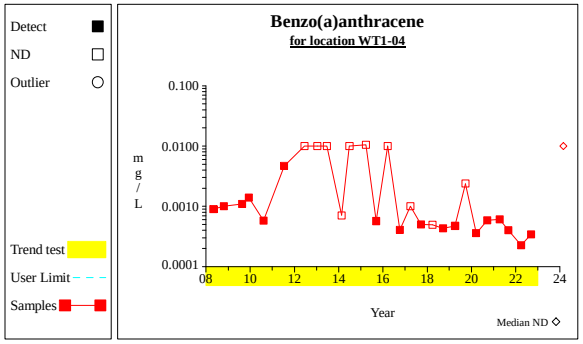

Detect
ND
Outlier
Trend test
User Limit
Samples
Xylenes
for location WT1-02
Significant Decreasing Trend
u
g
/
L
100.
10.0
1.00
08
10
12
14
16
18
20
22
24
Year

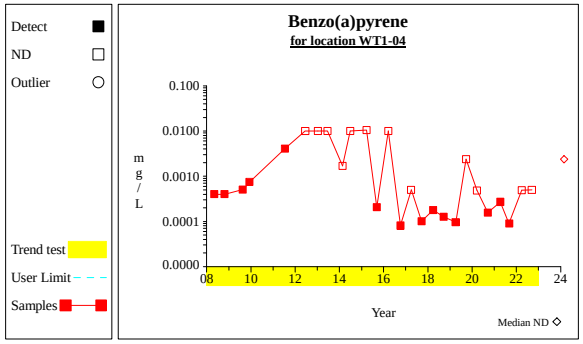
Time Series

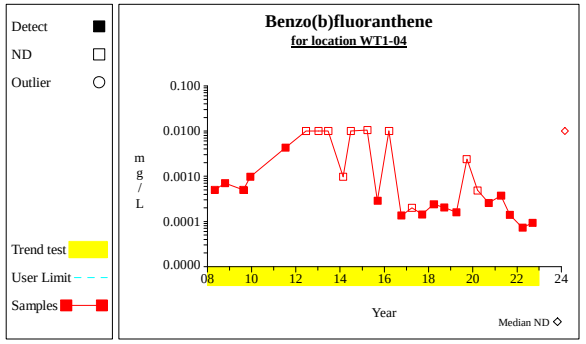

Detect
ND
Outlier
Trend test
User Limit
Samples
1,2,4-trimethylbenzene
for location WT1-04
Significant Decreasing Trend
mg/L
0.0100
0.0050
0.0020
0.0010
08 10 12 14 16 18 20 22 24
Year

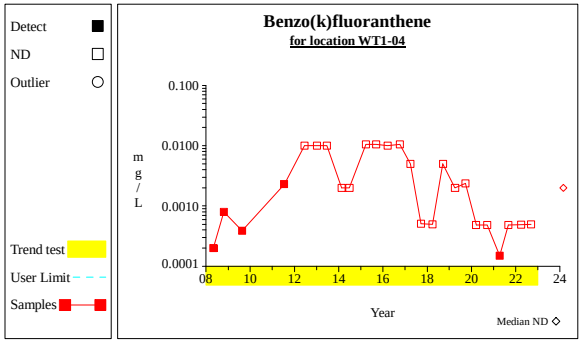

Detect
ND
Outlier
Trend test
User Limit
Samples
1,3,5-trimethylbenzene
for location WT1-04
Significant Decreasing Trend
mg/L
0.0100
0.0050
0.0020
0.0010
08 10 12 14 16 18 20 22 24
Year

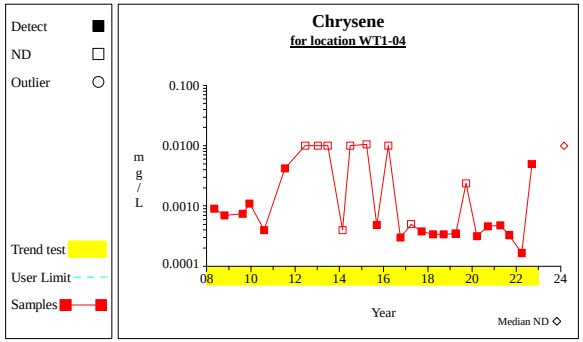

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzene
for location WT1-04
Significant Decreasing Trend
ug/L
1000.
100.
10.0
1.00
08 10 12 14 16 18 20 22 24
Year

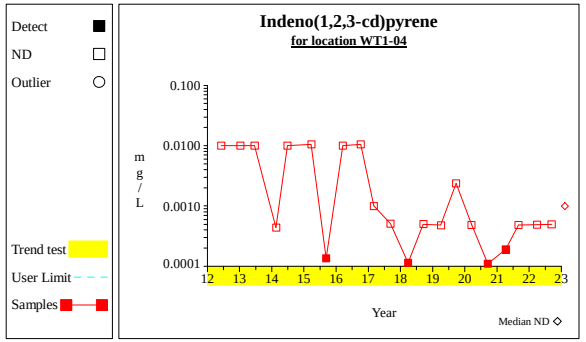

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(a)anthracene
for location WT1-04
mg/L
0.100
0.0100
0.0010
0.0001
08 10 12 14 16 18 20 22 24
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(a)pyrene
for location WT1-04
mg/L
0.100
0.0100
0.0010
0.0001
0.0000
08 10 12 14 16 18 20 22 24
Year
Median ND

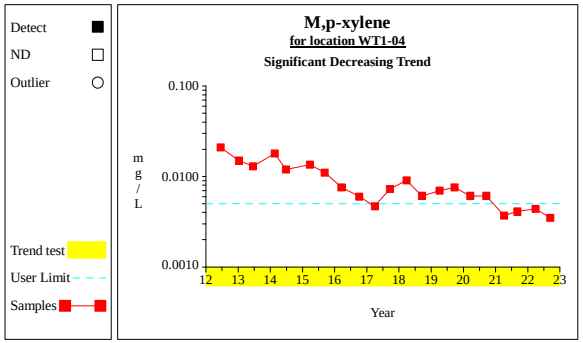

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(b)fluoranthene
for location WT1-04
mg/L
0.100
0.0100
0.0010
0.0001
0.0000
08 10 12 14 16 18 20 22 24
Year
Median ND

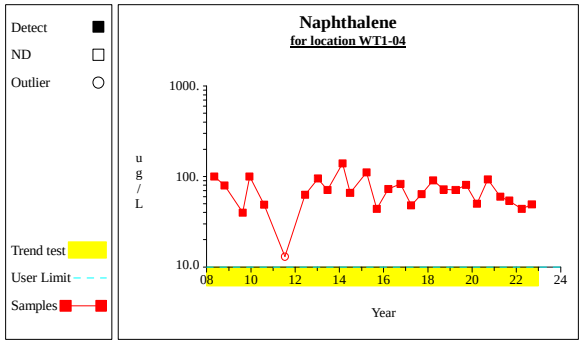

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(k)fluoranthene
for location WT1-04
mg/L
0.100
0.0100
0.0010
0.0001
08 10 12 14 16 18 20 22 24
Year
Median ND

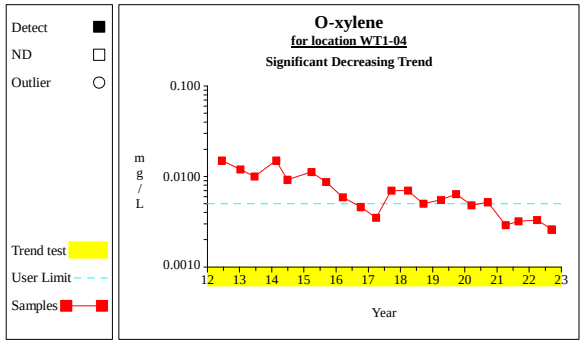

Detect
ND
Outlier
Trend test
User Limit
Samples
Chrysene
for location WT1-04
mg/L
0.100
0.0100
0.0010
0.0001
08 10 12 14 16 18 20 22 24
Year
Median ND

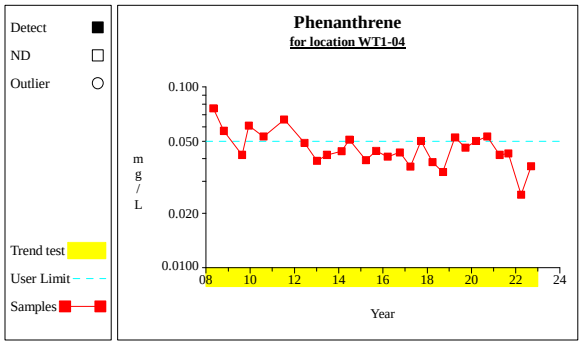

Detect
ND
Outlier
Trend test
User Limit
Samples
Indeno(1,2,3-cd)pyrene
for location WT1-04
mg/L
0.100
0.0100
0.0010
0.0001
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND

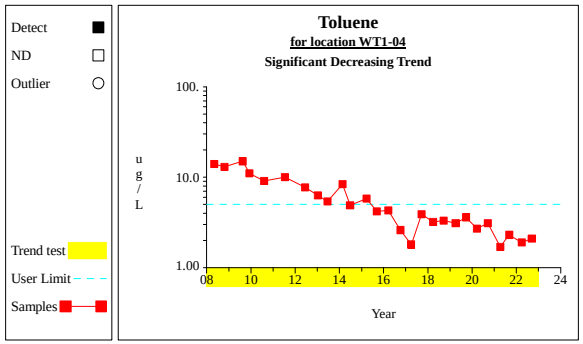
Time Series

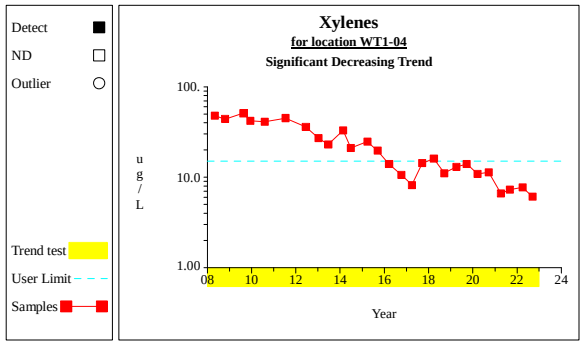

Detect
ND
Outlier
Trend test
User Limit
Samples
M,p-xylene
for location WT1-04
Significant Decreasing Trend
mg/L
0.100
0.0100
0.0010
12 13 14 15 16 17 18 19 20 21 22 23
Year


Detect
ND
Outlier
Trend test
User Limit
Samples
Naphthalene
for location WT1-04
ug/L
1000.
100.
10.0
08 10 12 14 16 18 20 22 24
Year

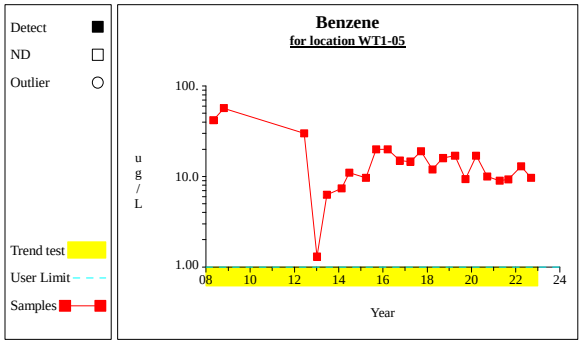

Detect
ND
Outlier
Trend test
User Limit
Samples
O-xylene
for location WT1-04
Significant Decreasing Trend
mg/L
0.100
0.0100
0.0010
12 13 14 15 16 17 18 19 20 21 22 23
Year

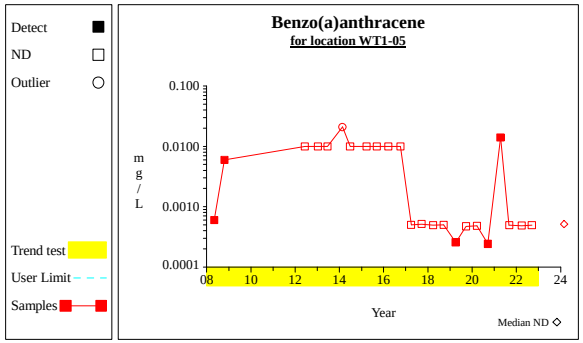

Detect
ND
Outlier
Trend test
User Limit
Samples
Phenanthrene
for location WT1-04
mg/L
0.100
0.050
0.020
0.0100
08 10 12 14 16 18 20 22 24
Year

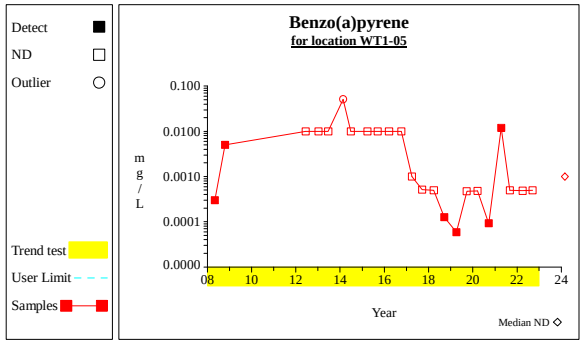

Detect
ND
Outlier
Trend test
User Limit
Samples
Toluene
for location WT1-04
Significant Decreasing Trend
ug/L
100.
10.0
1.00
08 10 12 14 16 18 20 22 24
Year

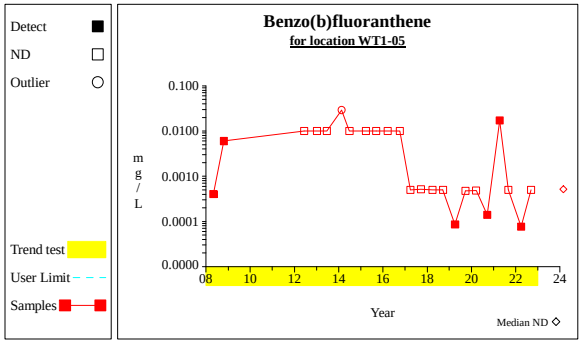

Detect
ND
Outlier
Trend test
User Limit
Samples
Xylenes
for location WT1-04
Significant Decreasing Trend
ug/L
100.
10.0
1.00
08 10 12 14 16 18 20 22 24
Year

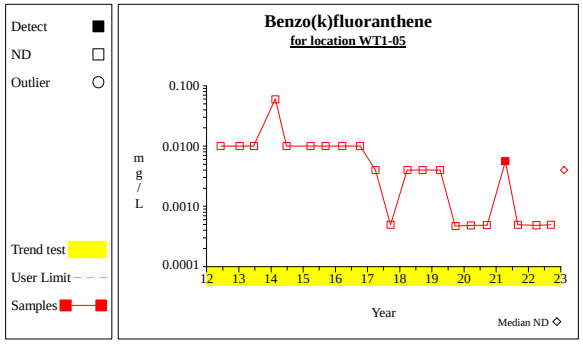
Time Series

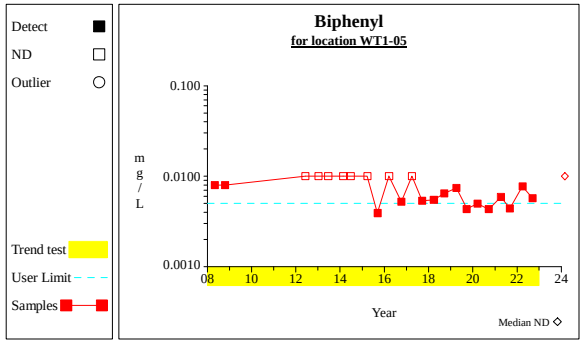

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzene
for location WT1-05
100.
10.0
1.00
u g / L
08 10 12 14 16 18 20 22 24
Year

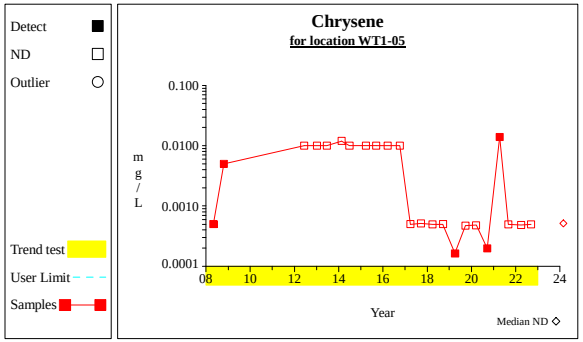

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(a)anthracene
for location WT1-05
0.100
0.0100
0.0010
0.0001
m g / L
08 10 12 14 16 18 20 22 24
Year
Median ND

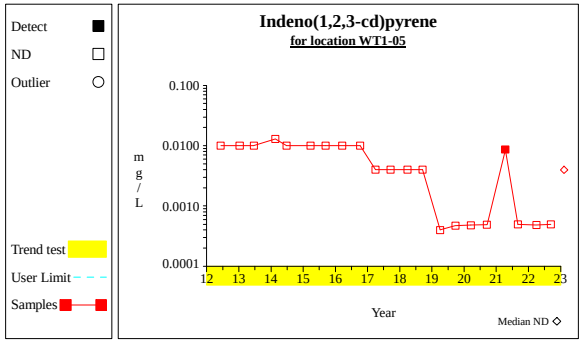

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(a)pyrene
for location WT1-05
0.100
0.0100
0.0010
0.0001
0.0000
m g / L
08 10 12 14 16 18 20 22 24
Year
Median ND

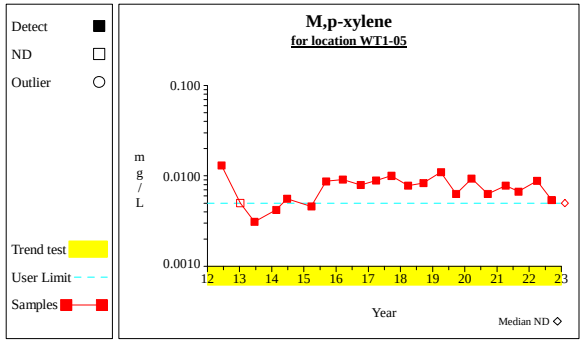

Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(b)fluoranthene
for location WT1-05
0.100
0.0100
0.0010
0.0001
0.0000
m g / L
08 10 12 14 16 18 20 22 24
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Benzo(k)fluoranthene
for location WT1-05
0.100
0.0100
0.0010
0.0001
m g / L
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND

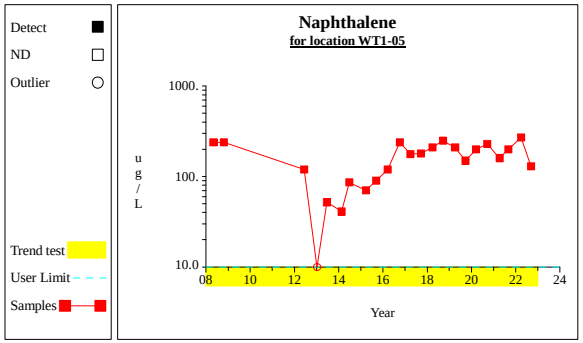

Detect
ND
Outlier
Trend test
User Limit
Samples
Biphenyl
for location WT1-05
0.100
0.0100
0.0010
m g / L
08 10 12 14 16 18 20 22 24
Year
Median ND

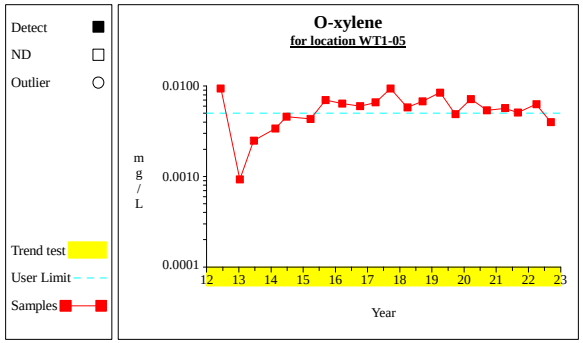

Detect
ND
Outlier
Trend test
User Limit
Samples
Chrysene
for location WT1-05
0.100
0.0100
0.0010
0.0001
m g / L
08 10 12 14 16 18 20 22 24
Year
Median ND

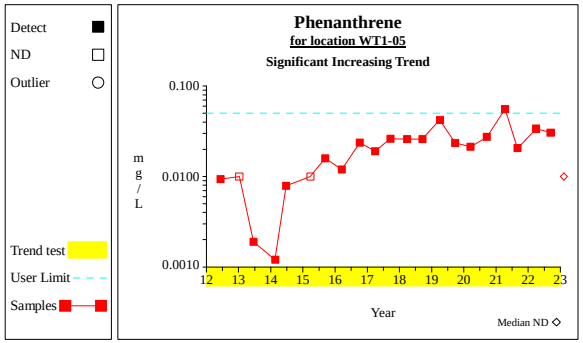

Detect
ND
Outlier
Trend test
User Limit
Samples
Indeno(1,2,3-cd)pyrene
for location WT1-05
0.100
0.0100
0.0010
0.0001
m g / L
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND

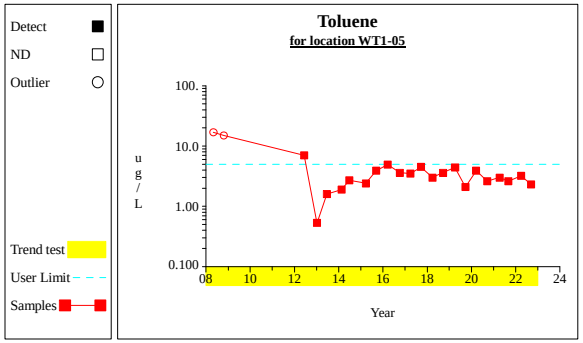

Detect
ND
Outlier
Trend test
User Limit
Samples
M,p-xylene
for location WT1-05
0.100
0.0100
0.0010
m g / L
12 13 14 15 16 17 18 19 20 21 22 23
Year
Median ND

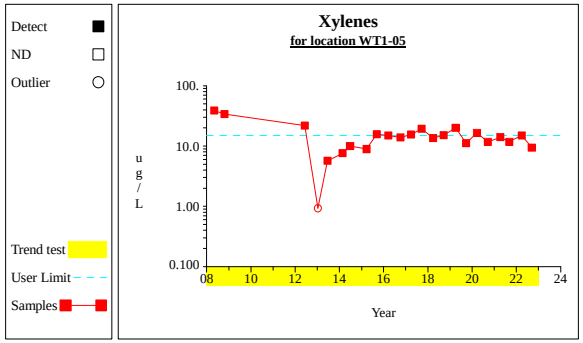
Time Series


Detect
ND
Outlier
Trend test
User Limit
Samples
Naphthalene
for location WT1-05
1000.
100.
10.0
u
g
/
L
08
10
12
14
16
18
20
22
24
Year


Detect
ND
Outlier
Trend test
User Limit
Samples
O-xylene
for location WT1-05
0.0100
0.0010
0.0001
m
g
/
L
12
13
14
15
16
17
18
19
20
21
22
23
Year


Detect
ND
Outlier
Trend test
User Limit
Samples
Phenanthrene
for location WT1-05
Significant Increasing Trend
0.100
0.0100
0.0010
m
g
/
L
12
13
14
15
16
17
18
19
20
21
22
23
Year
Median ND


Detect
ND
Outlier
Trend test
User Limit
Samples
Toluene
for location WT1-05
100.
10.0
1.00
0.100
u
g
/
L
08
10
12
14
16
18
20
22
24
Year


Detect
ND
Outlier
Trend test
User Limit
Samples
Xylenes
for location WT1-05
100.
10.0
1.00
0.100
u
g
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L
08
10
12
14
16
18
20
22
24
Year

APPENDIX D

WELL DEVELOPMENT FORMS

File: 03.0033579.15

STEEL WINDS ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING EVENT
WELL DEVELOPMENT FORM
LACKAWANNA, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MWN-01**	Ground Surface Elevation:	582.99	Riser/Screen Material:	PVC
Installation Date:	8/30/90	Groundwater Elevation:	569.92	Top of Screen Depth:	9.15
Installed By:	Turnkey	Monitoring Point Elevation:	585.14	Bottom of Screen Depth:	19.15
		Elevation Datum:			

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
11.59	11.53 - 11.67	1.051 -1.450	10.4 -14.4	1.23 - 2.9	Clear

Notes:

Field Observations		Parameters +/-		Sampling Information
Exterior Observations:	OK	pH	+/- 0.1	Sample ID: **MWN-01**-091322
		Conductivity	+/- 3%	Sample Time: 09:05
Interior Observations	OK	Temperature	+/- 10%	# of Sample Containers: Five
		Turbidity	+/- 10%	Duplicate Sample ID: NA
		ORP	+/- 10mV	Sample Analysis:
Signs of Damage/Tampering:	None	DO	+/- 10%	VOC STARS List via EPA 8260C
Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: ND	Odors:	SVOC B/N Via EPA 8270D

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/13/2022	8:40	15.49	0	11.71	1.244	11.5	3.48	Clear	9.8	22.7	Depth of Water: 15.22
	8:50	15.52	10	11.8	1.25	11.9	2.64	Clear	6.5	-61.5	Length of Water Column: 3.93
	8:55	15.52	15	11.8	1.252	12.0	2.84	Clear	6.2	-90.1	Depth of Well: 19.15
	9:00	15.52	20	11.81	1.255	12.0	2.83	Clear	6.0	-98.7	Sheen Observed: Y **N**
	9:05	15.52	25	11.81	1.258	12.0	2.80	Clear	5.9	-104.5	DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other:
											1 Well Volume = 2.5 gal

File: 03.0033579.15

STEEL WINDS ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING EVENT
WELL DEVELOPMENT FORM
LACKAWANNA, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MWN-01B**	Ground Surface Elevation:	583.79	Riser/Screen Material:	PVC
Installation Date:	11/2/92	Groundwater Elevation:	571.81	Top of Screen Depth:	22.24
Installed By:	Turnkey	Monitoring Point Elevation:	587.03	Bottom of Screen Depth:	32.24
		Elevation Datum:			

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
15.5	11.1 -11.40	0.831 - 1.01	9.8 - 11.3	1.20 - 7.67	Clear

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	OK	pH +/- 0.1	Sample ID: **MWN-01B**-091322
		Conductivity +/- 3%	Sample Time: 10:15
Interior Observations	OK	Temperature +/- 10%	# of Sample Containers: Five
		Turbidity +/- 10%	Duplicate Sample ID: NA
		ORP +/- 10mV	Sample Analysis:
Signs of Damage/Tampering:	None	DO +/- 10%	VOC STARS List via EPA 8260C

Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: ND	Odors:	SVOC B/N Via EPA 8270D

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/13/2022	9:50	15.29	0	11.21	0.776	10.8	78.2	Clear	7.2	-28.5	Depth of Water: 15.22
	10:00	15.29	4	11.42	0.865	10.7	35.88	Clear	10.4	-98.7	Length of Water Column: 17.02
	10:05	15.29	6	11.44	0.872	10.6	27.12	Clear	10.8	-107.2	Depth of Well: 32.24
	10:10	15.29	8	11.46	0.888	10.6	26.32	Clear	11.2	-114.2	Sheen Observed: Y **N**
	10:15	15.29	10	11.46	0.891	10.6	22.18	Clear	11.3	-118.8	DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other:
											1 Well Volume = 2.7 gal

File: 03.0033579.15

STEEL WINDS ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING EVENT
WELL DEVELOPMENT FORM
LACKAWANNA, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**WT1-02**	Ground Surface Elevation:	598.5	Riser/Screen Material:	PVC
Installation Date:	6/11/07	Groundwater Elevation:	572.96	Top of Screen Depth:	27.78
Installed By:	Turnkey	Monitoring Point Elevation:	600.78	Bottom of Screen Depth:	37.78
		Elevation Datum:			

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
26.91	11.85 - 12.19	1.77 - 2.116	11.5 - 13.08	1.67 - 16	Clear

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	OK	pH +/- 0.1	Sample ID: **WT1-02**-091322
		Conductivity +/- 3%	Sample Time: 14:15
Interior Observations	OK	Temperature +/- 10%	# of Sample Containers: Five
		Turbidity +/- 10%	Duplicate Sample ID: NA
		ORP +/- 10mV	Sample Analysis:
Signs of Damage/Tampering:	None	DO +/- 10%	VOC STARS List via EPA 8260C
Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: ND	Odors:	SVOC B/N Via EPA 8270D

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/13/2022	13:55	28.45	0	11.93	1.605	13	1.75	Clear	24.1	28.3	Depth of Water: 27.82
	14:05	28.67	2	11.98	1.588	13.1	1.46	Clear	8.0	-30.7	Length of Water Column: 9.96
	14:10	28.67	3	11.97	1.589	13.1	1.40	Clear	7.7	-36.4	Depth of Well: 37.78
	14:15	28.67	4	11.98	1.592	13.1	1.43	Clear	7.6	-41.2	Sheen Observed: Y **N**
											DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other:
											1 Well Volume = 6.5 gal.

File: 03.0033579.15

STEEL WINDS ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING EVENT
WELL DEVELOPMENT FORM
LACKAWANNA, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**WT1-04**	Ground Surface Elevation:	584.43	Riser/Screen Material:	PVC
Installation Date:	5/21/07	Groundwater Elevation:	572.69	Top of Screen Depth:	15.52
Installed By:	Turnkey	Monitoring Point Elevation	586.45	Bottom of Screen Depth:	25.52
		Elevation Datum:			

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
12.91	11.51 - 11.99	1.326 - 1.550	10.2 -13.27	1.31 - 8.3	Clear

Notes:

Field Observations		Parameters +/-		Sampling Information
Exterior Observations:	OK	pH	+/- 0.1	Sample ID: **WT1-04**-091322
		Conductivity	+/- 3%	Sample Time: 10:55
Interior Observations	OK	Temperature	+/- 10%	# of Sample Containers: Five
		Turbidity	+/- 10%	Duplicate Sample ID: NA
		ORP	+/- 10mV	Sample Analysis:
Signs of Damage/Tampering:	None	DO	+/- 10%	VOC STARS List via EPA 8260C
Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: ND	Odors:	SVOC B/N Via EPA 8270D

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/13/2022	10:35	14.22	0	11.73	1.682	13.1	4.50	Clear	7.6	-18	Depth of Water: 13.76
	10:40	14.30	1	11.78	1.400	13.0	2.62	Clear	6.1	-62.1	Length of Water Column: 11.76
	10:45	14.30	1.5	11.77	1.343	13.1	3.67	Clear	5.7	-112.2	Depth of Well: 25.52
	10:50	14.30	2	11.75	1.336	13.2	3.57	Clear	5.6	-116.2	Sheen Observed: Y **N**
	10:55	14.30	2.5	11.75	1.326	13.3	3.80	Clear	5.5	-118.5	DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other:
											1 Well Volume = 1.9 gal

File: 03.0033579.15

STEEL WINDS ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING EVENT
WELL DEVELOPMENT FORM
LACKAWANNA, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**WT1-05**	Ground Surface Elevation:	581.66	Riser/Screen Material:	PVC
Installation Date:	5/29/07	Groundwater Elevation:	571.93	Top of Screen Depth:	13.30
Installed By:	Turnkey	Monitoring Point Elevation	584.41	Bottom of Screen Depth:	23.30
		Elevation Datum:			

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
11.85	11.35 - 11.93	1.20 - 1.490	10.4 - 12.57	1.74 - 5.3	Clear

Notes:

Field Observations		Parameters +/-		Sampling Information
Exterior Observations:	OK	pH	+/- 0.1	Sample ID: **WT1-05**-091322
		Conductivity	+/- 3%	Sample Time: 7:55
Interior Observations	OK	Temperature	+/- 10%	# of Sample Containers: Five
		Turbidity	+/- 10%	Duplicate Sample ID: NA
		ORP	+/- 10mV	Sample Analysis:
Signs of Damage/Tampering:	None	DO	+/- 10%	VOC STARS List via EPA 8260C

Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: ND	Odors:	SVOC B/N Via EPA 8270D

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/13/2022	7:36	12.50	0	11.51	1.347	12.8	1.52	Clear	8.8	194.6	Depth of Water: 12.48
	7:45	12.50	9	11.53	1.306	13.0	1.00	Clear	6.2	-58.6	Length of Water Column: 10.82
	7:50	12.50	14	11.56	1.299	13.0	1.11	Clear	5.9	-60.5	Depth of Well: 23.3
	7:55	12.50	19	11.61	1.292	13.0	0.98	Clear	5.7	-68.7	Sheen Observed: Y **N**
											DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other:
											1 Well Volume = 1.7 gal

File: 03.0033579.15

STEEL WINDS ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING EVENT
WELL DEVELOPMENT FORM
LACKAWANNA, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**BCP-ORC-1**	Ground Surface Elevation:	589.47	Riser/Screen Material:	PVC
Installation Date:	10/3/07	Groundwater Elevation:	572.74	Top of Screen Depth:	24.68
Installed By:	Turnkey	Monitoring Point Elevation	591.97	Bottom of Screen Depth:	34.68
		Elevation Datum:			

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
18.30	11.21 - 11.57	0.957 - 1.360	10.0 - 12.02	2.1 - 11.4	Clear

Notes:

Field Observations		Parameters +/-		Sampling Information
Exterior Observations:	OK	pH	+/- 0.1	Sample ID: **BCP-ORC**-091322
		Conductivity	+/- 3%	Sample Time: 13:25
Interior Observations	OK	Temperature	+/- 10%	# of Sample Containers: Five
		Turbidity	+/- 10%	Duplicate Sample ID: NA
		ORP	+/- 10mV	Sample Analysis:
Signs of Damage/Tampering:	None	DO	+/- 10%	VOC STARS List via EPA 8260C
Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: ND	Odors:	SVOC B/N Via EPA 8270D

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/13/2022	13:05	20.55	0	11.78	1.105	11.7	1.12	Clear	15.4	21.7	Depth of Water: 19.23
	13:15	20.60	1	11.61	1.041	11.5	1.74	Clear	10.9	34.0	Length of Water Column: 15.45
	13:20	20.60	1.5	11.61	1.052	11.5	1.52	Clear	11.3	28.2	Depth of Well: 34.68
	13:25	20.60	2	11.60	1.060	11.5	1.56	Clear	11.0	20.7	Sheen Observed: Y **N**
											DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other: Sulfur odor.
											1 Well Volume = 2.5 gal.

File: 03.0033579.15

STEEL WINDS ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING EVENT
WELL DEVELOPMENT FORM
LACKAWANNA, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MWN-02**	Ground Surface Elevation:	598.89	Riser/Screen Material:	PVC
Installation Date:	9/10/90	Groundwater Elevation:	572.52	Top of Screen Depth:	23.62
Installed By:	Turnkey	Monitoring Point Elevation	601.01	Bottom of Screen Depth:	33.62
		Elevation Datum:			

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
27.70	11.70 - 12.31	1.763 - 2.06	11.3 - 13.0	1.89 - 38.6	Clear

Notes:

Field Observations		Parameters +/-		Sampling Information
Exterior Observations:	OK	pH	+/- 0.1	Sample ID: **MWN-02**-091422
		Conductivity	+/- 3%	Sample Time: 08:00
Interior Observations	OK	Temperature	+/- 10%	# of Sample Containers: Five
		Turbidity	+/- 10%	Duplicate Sample ID: NA
		ORP	+/- 10mV	Sample Analysis:
Signs of Damage/Tampering:	None	DO	+/- 10%	VOC STARS List via EPA 8260C

Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: ND	Odors:	SVOC B/N Via EPA 8270D

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/14/2022	7:40	28.58	0	11.71	1.853	12.7	2.16	Clear	28.9	182.6	Depth of Water: 28.49
	7:50	28.58	5	11.79	1.934	12.5	2.50	Clear	14.2	154.9	Length of Water Column: 5.13
	7:55	28.58	1.5	11.81	1.954	12.6	2.62	Clear	13.8	146.7	Depth of Well: 33.62
	8:00	28.58	10	11.85	1.965	12.6	2.54	Clear	13.6	137.8	Sheen Observed: Y **N**
											DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other:
											1 Well Volume = 3.3 gal.

File: 03.0033579.15

STEEL WINDS ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING EVENT
WELL DEVELOPMENT FORM
LACKAWANNA, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MWN-02B**	Ground Surface Elevation:	599.00	Riser/Screen Material:	PVC
Installation Date:	11/2/92	Groundwater Elevation:	572.55	Top of Screen Depth:	46.28
Installed By:	Turnkey	Monitoring Point Elevation	601.28	Bottom of Screen Depth:	56.28
		Elevation Datum:			

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
28.05	11.30 - 11.75	0.910 - 1.13	12.1 - 13.4	1.76 - 6.9	Clear

Notes:

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	OK	pH +/- 0.1	Sample ID: **MWN-02B**-091422
		Conductivity +/- 3%	Sample Time: 8:45
Interior Observations	OK	Temperature +/- 10%	# of Sample Containers:
		Turbidity +/- 10%	Duplicate Sample ID: NA
		ORP +/- 10mV	Sample Analysis: Arsenic
Signs of Damage/Tampering:	None	DO +/- 10%	VOC STARS List via EPA 8260C

Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: ND	Odors:	SVOC B/N Via EPA 8270D, arsenic

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/14/2022	8:24	29.65	0	11.07	0.833	13.2	1.48	Clear	11.0	114.0	Depth of Water: 28.73
	8:35	29.33	5	11.18	0.902	13.7	2.88	Clear	7.0	-42.6	Length of Water Column: 27.55
	8:40	29.33	7.5	11.17	0.897	13.9	2.61	Clear	6.8	-48.9	Depth of Well: 56.28
	8:45	29.33	10	11.17	0.902	13.9	2.57	Clear	6.5	-56.1	Sheen Observed: Y **N**
											DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other: Sulfur odor.
											1 Well Volume = 4.4 gal.

File: 03.0033579.15

STEEL WINDS ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING EVENT
WELL DEVELOPMENT FORM
LACKAWANNA, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MWN-02D**	Ground Surface Elevation:	600.61	Riser/Screen Material:	PVC
Installation Date:	8/4/95	Groundwater Elevation:	573.65	Top of Screen Depth:	74.34
Installed By:	Turnkey	Monitoring Point Elevation	602.95	Bottom of Screen Depth:	79.34
		Elevation Datum:			

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
28.83	6.61 - 7.42	1.354 - 2.08	12.6 - 13.7	1.61 - 15.1	Clear

Notes: ****Monsoon pump unable to purge water. 3 well volumes purged with dedicated bailer.**

Field Observations		Parameters +/-		Sampling Information
Exterior Observations:	OK	pH	+/- 0.1	Sample ID: **MWN-02D**-091422
		Conductivity	+/- 3%	Sample Time: 13:45
Interior Observations	OK	Temperature	+/- 10%	# of Sample Containers: One
		Turbidity	+/- 10%	Duplicate Sample ID: NA
		ORP	+/- 10mV	Sample Analysis: Barium, Arsenic
Signs of Damage/Tampering:	None	DO	+/- 10%	Chromium

Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: ND	Odors: Sulfur

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/14/2022	13:45	32.62	24**	7.86	2.027	13.8	189.3	Gray	29.9	49.8	Depth of Water: 29.30
											Length of Water Column: 50.04
											Depth of Well: 79.34
											Sheen Observed: Y **N**
											DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other: Sulfur odor.
											1 Well Volume = 8.0 gal.

File: 03.0033579.15

STEEL WINDS ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING EVENT
WELL DEVELOPMENT FORM
LACKAWANNA, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MWN-03**	Ground Surface Elevation:	609.79	Riser/Screen Material:	PVC
Installation Date:	9/6/90	Groundwater Elevation:	572.47	Top of Screen Depth:	39.17
Installed By:	Turnkey	Monitoring Point Elevation	611.96	Bottom of Screen Depth:	49.17
		Elevation Datum:			

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
38.89	12.00 - 12.51	2.724 - 3.04	12.8 - 15.2	3.1 - 8.41	Clear

Notes: ****Monsoon pump unable to purge water. 3 well volumes purged with dedicated bailer.**

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	OK	pH +/- 0.1	Sample ID: **MWN-03**-091522
		Conductivity +/- 3%	Sample Time: 10:30
Interior Observations	OK	Temperature +/- 10%	# of Sample Containers:
		Turbidity +/- 10%	Duplicate Sample ID: NA
		ORP +/- 10mV	Sample Analysis:
Signs of Damage/Tampering:	None	DO +/- 10%	VOC STARS List via EPA 8260C

Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: ND	Odors:	SVOC B/N Via EPA 8270D

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/15/2022	10:30	40.63	19**	12.49	3.058	14.3	4.06	Clear	43.0	-39.3	Depth of Water: 39.49
											Length of Water Column: 9.68
											Depth of Well: 49.17
											Sheen Observed: Y **N**
											DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other:
											1 Well Volume = 6.3 gal.

File: 03.0033579.15

STEEL WINDS ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING EVENT
WELL DEVELOPMENT FORM
LACKAWANNA, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MWN-03B**	Ground Surface Elevation:	609.57	Riser/Screen Material:	PVC
Installation Date:	11/5/92	Groundwater Elevation:	572.65	Top of Screen Depth:	60.72
Installed By:	Turnkey	Monitoring Point Elevation	612.29	Bottom of Screen Depth:	70.72
		Elevation Datum:			

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
39.45	7.21 - 7.80	2.413 - 3.139	13.2 - 14.7	3.85 - 38.04	Clear

Notes: ****Monsoon pump unable to purge water. 3 well volumes purged with dedicated bailer.**

Field Observations		Parameters +/-		Sampling Information
Exterior Observations:	OK	pH	+/- 0.1	Sample ID: **MWN-03B**-091522
		Conductivity	+/- 3%	Sample Time: 9:45
Interior Observations	OK	Temperature	+/- 10%	# of Sample Containers: One
		Turbidity	+/- 10%	Duplicate Sample ID: NA
		ORP	+/- 10mV	Sample Analysis: Arsenic, Barium
Signs of Damage/Tampering:	None	DO	+/- 10%	Chromium, Manganese

Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: ND	Odors:

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/15/2022	9:45	41.92	15	6.62	27.71	14.2	40.12	Brown	25.3	97.7	Depth of Water: 39.64
											Length of Water Column: 31.08
											Depth of Well: 70.72
											Sheen Observed: Y **N**
											DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other:
											1 Well Volume = 4.9 gal.

File: 03.0033579.15

STEEL WINDS ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING EVENT
WELL DEVELOPMENT FORM
LACKAWANNA, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MWN-03D**	Ground Surface Elevation:	610.75	Riser/Screen Material:	PVC
Installation Date:	7/29/94	Groundwater Elevation:	574.02	Top of Screen Depth:	111.26
Installed By:	Turnkey	Monitoring Point Elevation	613.51	Bottom of Screen Depth:	121.26
		Elevation Datum:			

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
41.7	6.17 - 7.31	24.41 - 26.69	12.9 - 14.4	1.97 - 35.83	Clear

Notes: **** At approximately 65' monsoon pump unable to advance down well. 3 well volumes purged with pump and dedicated bailer. Well recharged for 1 hour then sampled with dedicated bailer.**

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	OK	pH +/- 0.1	Sample ID: **MWN-03D**-091522
		Conductivity +/- 3%	Sample Time: 8:30
Interior Observations	OK	Temperature +/- 10%	# of Sample Containers: Six
		Turbidity +/- 10%	Duplicate Sample ID: NA
		ORP +/- 10mV	Sample Analysis: Barium, Manganese
Signs of Damage/Tampering:	** See note above	DO +/- 10%	VOC STARS List via EPA 8260C

Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement:	ND	Odors:	SVOC B/N Via EPA 8270D, Barium. Manganese

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/15/2022	8:30	41.60	39**	7.26	26.11	13.5	165.2	Brown	16.2	50.8	Depth of Water: 39.49
											Length of Water Column: 81.77
											Depth of Well: 121.26
											Sheen Observed: Y **N**
											DNAPL Observed: Y **N**
											Did Well Go Dry: Y **N**
											Other:
											1 Well Volume = 13.0 gal.

File: 03.0033579.15

STEEL WINDS ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING EVENT
WELL DEVELOPMENT FORM
LACKAWANNA, NEW YORK

Historic Information

Boring Log Available (**yes**/no/attached):
Installation Log Available (**yes**/no/attached)

Summary

Monitoring Well :	**MWN-04**	Ground Surface Elevation:	621.02	Riser/Screen Material:	PVC
Installation Date:	9/12/90	Groundwater Elevation:	572.09	Top of Screen Depth:	48.53
Installed By:	Turnkey	Monitoring Point Elevation	623.45	Bottom of Screen Depth:	58.53
		Elevation Datum:			

Previous Field measurement Information Available (yes/**no**/attached)

Ranges of Previous Field Measurements

Depth to Water (ft)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color
50.61	11.57 - 12.05	2.311 - 2.72	15.7 - 16.7	1.98 - 2.6	Clear

Notes: **** Monsoon pump unable to purge water. 6 gallons purged to dry.**

Field Observations		Parameters +/-		Sampling Information
Exterior Observations:	OK	pH	+/- 0.1	Sample ID: **MWN-04**-091522
		Conductivity	+/- 3%	Sample Time: 14:50
Interior Observations	OK	Temperature	+/- 10%	# of Sample Containers: Five
		Turbidity	+/- 10%	Duplicate Sample ID: NA
		ORP	+/- 10mV	Sample Analysis:
Signs of Damage/Tampering:		DO	+/- 10%	VOC STARS List via EPA 8260C

Locked (yes/**no**)	Well Cap (**yes**/no)	Surface Seal Intact (**yes**/no)	PID Measurement: N/D	Odors:	SVOC B/N Via EPA 8270D

Well Quality Data

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (^{o}C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/15/2022	14:50	56.12	6**	11.35	3.54	17.3	33.47	Brown	69.6	35.4	Depth of Water: 51.36
											Length of Water Column: 7.17
											Depth of Well: 58.53
											Sheen Observed: Y **N**
											DNAPL Observed: Y **N**
											Did Well Go Dry: **Y** N
											Other:
											1 Well Volume = 4.7 gal.

GZA GeoEnvironmental, Inc.