



Known for excellence. Built on trust.



# September 2023 ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING REPORT NIAGARA WIND POWER, LLC STEEL WINDS I FACILITY (Site No. C915205) LACKAWANNA, NEW YORK

November 2023  
File No. 03.0033579.16



**PREPARED FOR:**  
Niagara Wind Power, LLC  
200 Liberty Street, 14<sup>th</sup> Fl. NY, NY 10281

**GZA GeoEnvironmental of New York**  
300 Pearl Street Suite 700 | Buffalo, NY 14202  
716-685-2300

31 Offices Nationwide  
[www.gza.com](http://www.gza.com)  
Copyright© 2023 GZA GeoEnvironmental, Inc.



November 27, 2023  
File No. 03.0033579.16

Niagara Wind Power, LLC  
200 Liberty Street, 14th Floor  
New York, NY 10281  
Via: [steelwinds@brookfieldrenewable.com](mailto:steelwinds@brookfieldrenewable.com)  
Attn: Mr. Jonathan Kirby and Mr. Scott Rotman

Re: 2023 Annual/Semi-Annual Groundwater Monitoring Report  
Steel Winds I Site (Site No. C915205)  
Lackawanna, NY

Dear Mr. Kirby and Mr. Rotman:

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 2023 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

A handwritten signature in blue ink that reads 'Dan Troy'.

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

A handwritten signature in blue ink that reads 'Richard A. Carlone'.

Richard A. Carlone, P.E.  
Consultant Reviewer

A handwritten signature in blue ink that reads 'Ed Summerly'.

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

cc: Megan Kuczka (NYSDEC)

Attachments: Report



## TABLE OF CONTENTS

<b>1.00 INTRODUCTION .....</b>	<b>2</b>
1.10 BACKGROUND AND SITE HISTORY .....	2
<b>2.00 PURPOSE AND SCOPE OF WORK.....</b>	<b>4</b>
<b>3.00 FIELD STUDIES .....</b>	<b>4</b>
3.10 GROUNDWATER COLLECTION .....	4
<b>4.00 ANALYTICAL LABORATORY TESTING .....</b>	<b>6</b>
<b>5.00 ANALYTICAL TEST RESULTS.....</b>	<b>6</b>
5.10 ANNUAL SITE-WIDE MONITORING WELLS.....	7
5.20 SEMI-ANNUAL WT-1 VICINITY MONITORING WELLS.....	9
<b>6.00 MOVING AVERAGE TREND ANALYSIS .....</b>	<b>11</b>
<b>7.00 SUMMARY .....</b>	<b>12</b>

### TABLES

TABLE 1	SEPTEMBER 2023 ANALYTICAL TESTING PROGRAM SUMMARY
TABLE 2	SEPTEMBER 2023 ANNUAL GROUNDWATER ANALYTICAL DATA SUMMARY
TABLE 3	SEPTEMBER 2023 SEMI-ANNUAL GROUNDWATER ANALYTICAL DATA SUMMARY

### FIGURES

FIGURE 1	LOCUS PLAN
FIGURE 2	SITE PLAN

### APPENDICES

APPENDIX A	LIMITATIONS
APPENDIX B	ANALYTICAL TEST RESULTS
APPENDIX C	TIME SERIES PLOTS
APPENDIX D	WELL DEVELOPMENT FORMS



## 1.00 INTRODUCTION

In accordance with our March 20, 2023 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<sup>®</sup>) 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<sup>1</sup>, 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.

---

<sup>1</sup>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 2023 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 8260D;
  - Base-Neutral semi-volatile organic compounds (SVOCs) via EPA Method 8270E; and
  - Arsenic, barium, chromium, and/or manganese via EPA Method 6020B (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 5<sup>th</sup> and September 6<sup>th</sup>, 2023. 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 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	8	2.9
MWN-01B	8	3.1
MWN-02	4	1.1
MWN-02B	8	1.8
MWN-02D	2	0.2
MWN-03	2	0.3
MWN-03B	15*	3.1
MWN-03D	39*	3.0
MWN-04	6**	1.2

WT-1 Vicinity Semi-Annual Monitoring Well ID	Cumulative Volume Purged (gallons)	Well Volumes (#)
MWN-01	8	2.9
MWN-01B	8	3.1
WT1-02	4	0.6
WT1-04	2.5	1.3
WT1-05	16	8.9
BCP-ORC-1	2.0	0.2

Note: wells highlighted in yellow are included in both programs.

\*Well was unable to be purged via low flow methods and 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 prior to purging, as listed in the below table. 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	14.77	570.37
MWN-01B	587.03	15.72	571.31
MWN-02	601.01	28.08	572.93
MWN-02B	601.28	28.39	572.89
MWN-02D	602.95	29.00	573.95
MWN-03	611.96	39.25	572.71
MWN-03B	612.29	40.12	572.17
MWN-03D	613.51	39.37	574.14
MWN-04	623.45	50.99	572.46
WT1-02	600.78	27.38	573.4
WT1-04	586.45	13.21	573.24
WT1-05	584.41	12.04	572.37
BCP-ORC-1	591.97	18.73	573.24

#### 4.00 ANALYTICAL LABORATORY TESTING

Thirteen (13) annual/semi-annual groundwater samples were submitted for analytical testing as part of the September 2023 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-3B, MWN-03D and MWN-04 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 November 15, 2023.





## 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 15 parts per billion (ppb);
  - m,p-Xylene at 6.4 ppb;
  - Total Xylene at 10.9 ppb; and

Naphthalene was detected as a VOC at a concentration of 230 ppb, which exceeds its guidance value of 10 ppb.

Twelve (12) SVOCs were detected above their method reporting limits of which four (4) exceeded their respective NYSDEC Class GA criteria and guidance values, as follows.

- Naphthalene at 108 ppb;
  - Fluorene at 52.4 ppb;
  - Phenanthrene at 86.6 ppb; and
  - Biphenyl at 6.49 ppb.
- MWN-01B (screen depth: 22.2' - 32.2'): Five (5) VOCs were detected above method reporting limits, of which five (5) exceeded their respective NYSDEC Class GA criteria and guidance values, as follows.
    - Benzene at 55 ppb;
    - Toluene at 16 ppb (estimated value, i.e., J detect);
    - m,p-Xylene at 9.9 ppb (estimated value, i.e., J detect); and
    - Total Xylene at 9.9 ppb (estimated value, i.e., J detect).

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

Nine (9) SVOCs were detected above their method reporting limits of which two (2) exceeded their respective NYSDEC Class GA criteria and guidance values, as follows.

- Naphthalene at 876 ppb; and
  - Phenanthrene at 51.3 ppb.
- MWN-02 (screen depth: 23.6' - 33.6'): Eight (8) VOCs were detected above method reporting limits of which three (3) exceeded its respective NYSDEC Class GA criteria and guidance values, as follows.
    - Benzene at 10 ppb; and
    - Total Xylene at 6.1 ppb.

Naphthalene was detected at a concentration of 43 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 23.3 ppb, which exceeds its guidance value of 10 ppb.

- 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 67 ppb;
  - Toluene at 12 ppb;
  - m,p-Xylene at 9.2 ppb;
  - o-Xylene at 13 ppb; and
  - Total Xylene at 22.2 ppb.

Naphthalene was detected at a concentration of 400 ppb, which exceeds its guidance value of 10 ppb.

Thirteen (13) 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 194 ppb, which exceeds its guidance value of 10 ppb.

One (1) metal, arsenic, was detected at a concentration of 26.74 ppb, which exceeds its Class GA criteria of 25 ppb.

- MWN-02D (screen depth: 74.3' - 79.3'): Three (3) metals were detected above their respective method reporting limits, but below their respective NYSDEC Class GA criteria.
- 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 8.3 ppb.

Naphthalene was detected at a concentration of 27 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 13.8 ppb, which exceeds its guidance value of 10 ppb.

- 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 1,388 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. Eight (8) 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 351.2 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 12.0 ppb which exceeds its guidance value of 10 ppb.

Fourteen (14) SVOCs were detected above method reporting limits all of which were below their respective NYSDEC Class GA criteria.

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. Due to potentially elevated turbidity resulting from the sampling technique, metal samples were filtered using a 0.45-micron filter by the laboratory.

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 below 0.50 ug/L for both 2022 and 2023.

## 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 7.3 ppb.



Naphthalene was detected at a concentration of 34 ppb, which exceeds its guidance value of 10 ppb.

Fourteen (14) 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 13.2 ppb;
  - Benzo [a] Anthracene at 0.209 ppb (estimated value, i.e., J detect); and
  - Chrysene at 0.168 ppb (estimated value, i.e., J detect).
- 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 13 ppb; and
  - Total Xylene at 6.0 ppb.

Naphthalene was detected at a concentration of 57 ppb, which exceeds its respective guidance value of 10 ppb.

Fourteen (14) SVOCs were detected above their method reporting limits and three (3) exceeded their respective NYSDEC Class GA guidance values, as follows.

- Naphthalene at 28.3 ppb;
  - Benzo [a] Anthracene at 0.367 ppb (estimated value, i.e., J detect); and
  - Chrysene at 0.339 ppb (estimated value, i.e., J detect).
- WT1-05 (screen depth: 13.3' - 23.3'): Nine (9) VOCs were detected above method reporting limits of which five (5) exceeded their respective NYSDEC Class GA criteria and guidance values, as follows.
- Benzene at 16 ppb;
  - m,p-Xylene at 8.2 ppb;
  - o-Xylene at 5.6 ppb; and
  - Total Xylene at 13.8 ppb.

Naphthalene was detected at a concentration of 260 ppb which exceeds its guidance value of 10 ppb.

Twelve (12) SVOCs were detected above method reporting limits, of which two (2) exceeded their respective NYSDEC Class GA guidance values as follows.

- Naphthalene at 138 ppb; and
  - Biphenyl at 6.70 ppb.
- BCP-ORC-1 (screen depth: 24.7' - 34.7'): Five (5) 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 28 ppb;
- O-Xylene at 5.3 ppb (estimated value, i.e., J detect); and
- Total Xylene at 5.3 ppb (estimated value, i.e., J detect).

Naphthalene was detected at a concentration of 430 ppb, which exceeds its guidance value of 10 ppb.

Twelve (12) SVOCs were detected above method reporting limits, of which only naphthalene was detected at 216 ppb which exceeded its respective NYSDEC Class GA guidance values of 10 ppb.

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 15 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 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, 1,3,5-trimethylbenzene, benzene, biphenyl, fluorene, m, p-xylene, o-xylene, phenanthrene, toluene and xylenes;
- MWN-01B: benzene;
- MWN-02: benzene and xylenes;
- MWN-02B: benzene;
- 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, xylenes and phenanthrene.



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

- BCP-ORC-1: o-xylene and Naphthalene; 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.
- 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, MNW-02, MWN-02B, and MWN-03.
- 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 2023 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 2023 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
<b>Annual Monitoring Well Sample Locations (LTGWM Network)</b>									
MWN-01	MWN-01-090523	9/5/2023	9.2 - 19.2	X	X				
MWN-01B	MWN-01B-090523	9/5/2023	22.2 - 32.2	X	X				
MWN-02	MWN-02-090523	9/5/2023	23.6 - 33.6	X	X				
MWN-02B	MWN-02B-090623	9/6/2023	46.3 - 56.3	X	X	X			
MWN-02D	MWN-02D-090623	9/6/2023	74.3 - 79.3			X	X	X	
MWN-03	MWN-03-090623	9/6/2023	39.2 - 49.2	X	X				
MWN-03B	MWN-03B-090623	9/6/2023	60.7 - 70.7			X	X	X	X
MWN-03D	MWN-03D-090623	9/6/2023	111.3 - 121.3	X	X		X		X
MWN-04	MWN-04-090623	9/6/2023	48.5 - 58.5	X	X				
<b>Semi-Annual Monitoring Well Sample Locations (WT-1 Vicinity Network)</b>									
MWN-01	MWN-01-090523	9/5/2023	9.2 - 19.2	X	X				
MWN-01B	MWN-01B-090523	9/5/2023	22.2 - 32.2	X	X				
WT1-02	WT1-02-090523	9/5/2023	27.8 - 37.8	X	X				
WT1-04	WT1-04-090523	9/5/2023	15.5 - 25.5	X	X				
WT1-05	WT1-05-090523	9/5/2023	13.3 - 23.3	X	X				
BCP-ORC-1	BCP-ORC-1-090523	9/5/2023	24.7 - 34.7	X	X				

Notes:

1. VOCs = Volatile Organic Compounds STARS list via EPA Method 8260D.
2. SVOCs = Semi-Volatile Organic Compounds Base-Neutrals list via EPA Method 8270E.
3. Arsenic, Barium, Chromium, and Manganese via EPA Method 6020B.
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 2023 Annual Groundwater Analytical Data Summary  
Steel Winds I Facility  
Lackawanna, New York

Parameter	NYSDEC Class GA Criteria	MWN-01					MWN-01B					MWN-02				
		9/2/2021 Result	3/30/2022 Result	9/13/2022 Result	4/26/2022 Result	9/5/2023 Result	9/2/2021 Result	3/30/2022 Result	9/13/2022 Result	4/26/2022 Result	9/5/2023 Result	9/25/2019 Result	9/17/2020 Result	9/3/2021 Result	9/14/2022 Result	9/5/2023 Result
<b>Water Quality Field Measurements</b>																
pH (units)	6.5 - 8.5	11.53	13.19	11.81	11.93	11.92	11.1	13.03	11.46	11.50	11.55	11.94	8.31	11.7	11.85	12.35
Temperature (°C)	NV	10.8	9.6	12.0	10.2	12.2	9.8	9.4	10.6	10.7	12.2	11.3	12.35	12.6	12.6	12.7
Specific Conductance (mS/cm)	NV	1.212	1.170	1.258	1.229	1.217	0.831	0.808	0.891	0.834	0.799	1.763	2.04	1.776	1.965	1.89
Turbidity (NTU)	5	2.61	1.08	2.80	9.84	4.40	7.67	22.3	22.18	42.1	24.36	38.6	6.8	2.51	2.54	4.5
Dissolved Oxygen (mg/L)	NV	1.2	2.2	5.9	5.4	0.4	0.8	20.7	11.3	22.4	5	0.060	97.2	2.8	13.6	8.2
Oxygen Reduction Potential (mV)	NV	-159.2	-347.1	-104.5	-265.1	-285.6	-214.2	-244.3	-118.8	-217.3	-249.6	-121.0	-281	-115.1	137.8	-80.9
<b>Volatile Organic Compounds - EPA Method 8260C (ug/L)</b>																
Benzene	1	14	14	12	15	15	55	54	55	50	55	2.2	1	5.1	1.5	10
Toluene	5	3.6 J	3.1 J	2.8 J	3.1 J	3.2 J	19 J	16 J	20	15 J	16 J	<	<	1.4 J	<	2.3 J
Ethylbenzene	5	<	<	<	<	<	<	<	0.95 J	<	<	<	<	<	<	<
m,p-Xylene	5	8.7	7.9	6.0	7.0	6.4	12 J	12 J	15	11 J	9.9 J	1.1 J	0.76 J	2.4 J	<	3.4
o-Xylene	5	6.5	5.8	5.0	5.1	4.3 J	9.0 J	8.9 J	11	7.7 J	<	1.1 J	<	2.1 J	<	2.7
Xylene (Total)	5	15.2	14	11.0	12.1	10.9	21 J	21 J	26	18.7	9.9 J	2.2	0.76 J	4.5 J	<	6.1
Isopropylbenzene	5	<	<	<	<	<	<	<	1.4 J	<	<	<	<	<	<	<
1,3,5-Trimethylbenzene	5	4.2 J	3.9 J	2.8 J	3.1 J	2.8 J	<	<	5.2	<	<	1.4 J	0.91 J	1.8 J	<	1.3 J
1,2,4-Trimethylbenzene	5	4.6 J	4.1 J	3.0 J	3.0 J	2.8 J	7.1 J	<	7.4	<	<	<	<	1.2 J	<	0.80 J
Naphthalene*	10	270	290	240	220	230	1,500	1,700	1,500	1,400	1,500	9.4	20	20	4.2	43
<b>Semi-Volatile Organic Compounds - EPA Method 8270D (ug/L)</b>																
Acetophenone	NV	<	<	0.570 J	<	<	<	<	<	<	<	<	<	<	0.246 J	0.265 J
Acenaphthylene	NV	22.3	30.3	23.5	22.4	20.1	44.0	33.8	54.3	24.1	23.4 J	1.36	0.727	1.98	1.03	3.14
Naphthalene*	10	96.2	141	91.9	96.7	108	962	970	742	715	876	2.87	2.38	5.23	3.44	23.3
2-Methylnaphthalene	NV	21.9	40.0	27.8	25.0	26.6	35.8	46.2	52.4	25.0	33.7	1.02	0.552	1.78	1.01	3.90
Acenaphthene*	20	8.66	11.9	10.1	9.08	9.51	12.0	10.5	11.8	7.86 J	8.97 J	0.758	0.431 J	1.20	0.603	1.46
Dibenzofuran	NV	28.9	39.6	29.7	30.3	34.7	30.3	24.8	30.6	19.5	22.6 J	0.922	0.584	2.35	0.967	3.85
Fluorene*	50	41.9	58.8	44.4	48.7	52.4	43.7	35.7	42.3	29.7	32.4	2.98	1.52	4.76	2.26	5.84
Phenanthrene*	50	71.0	81.5	69.9	76.5	86.6	61.9	53.6	69.5	48.0	51.3	2.55	1.46	4.14	1.76	5.72
Carbazole	NV	19.6	24.1	19.7	21.8	19.6	60.0	55.4	61.3	49.4	46.1	1.34	0.702	3.67	1.28	4.37
Anthracene*	50	7.74	11.9	12.2	8.16	13.3	8.19	6.46	11.8	5.05 J	<	0.635	0.467 J	0.983	0.588	0.986
Fluoranthene*	50	9.44	10.6	12.3	9.11	12.3	8.97	8.33	10.8	7.98 J	8.28 J	1.4	1.14	1.56	0.971	0.857
Biphenyl	5	5.85	7.86	6.48	6.03	6.49	7.45	6.09	7.84 J	4.78 J	<	0.412 J	0.198 J	0.732	0.332 J	1.00
Pyrene*	50	6.16	6.38	6.81	5.33	7.22	6.44	4.95	5.57 J	6.8 J	<	1.26	1.41	1.56	1.70	1.86
Butyl benzyl phthalate*	50	0.104 J	<	<	<	<	<	<	<	<	<	<	<	0.093 J	<	0.113 J
Benzo [a] Anthracene	0.002	<	0.372 J	0.380 J	<	<	0.461 J	0.316 J	<	<	<	<	<	<	<	<
Benzo [b] Fluoranthene*	0.002	<	<	0.079 J	<	<	0.105 J	0.105 J	<	1.32 J	<	<	<	<	<	<
Benzo [a] Pyrene	ND	<	<	<	<	<	0.072 J	0.079 J	<	<	<	<	<	<	<	<
Chrysene	0.002	0.216 J	0.187 J	0.214 J	<	<	0.256 J	0.180 J	<	<	<	<	<	<	<	<
bis(2-Ethylhexyl)Phthalate	5	<	<	<	<	<	<	<	<	<	<	0.098 J	0.602	<	<	<
<b>Metals - EPA Method 6010D (ug/L)</b>																
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.

**Table 2**

September 2023 Annual Groundwater Analytical Data Summary  
Steel Winds I Facility  
Lackawanna, New York

Parameter	NYSDEC Class GA Criteria	MW-02B					MW-02D					MW-03				
		9/25/2019 Result	9/17/2020 Result	9/3/2021 Result	9/14/2022 Result	9/6/2023 Result	9/24/2019 Result	9/18/2020 Result	9/3/2021 Result	9/15/2022 Result	9/6/2023 Result	9/25/2019 Result	9/17/2020 Result	9/2/2021 Result	9/15/2022 Result	9/6/2023 Result
<b>Water Quality Field Measurements</b>																
pH (units)	6.5 - 8.5	<b>11.34</b>	8.21	<b>11.30</b>	<b>11.17</b>	<b>11.45</b>	7.00	6.99	6.61	7.86	7.01	<b>12.32</b>	<b>8.53</b>	<b>12.00</b>	<b>12.49</b>	<b>12.42</b>
Temperature (°C)	NV	12.1	12.92	12.6	13.9	13.2	12.6	13.61	12.9	13.8	14	12.8	13.57	13.3	14.3	14.2
Specific Conductance (mS/cm)	NV	0.958	1.13	0.910	0.902	0.89	1.890	1.970	1.354	2.027	1.971	2.724	2.89	2.729	3.058	2.87
Turbidity (NTU)	5	1.9	<b>6.9</b>	2.52	2.57	<b>38.32</b>	<b>15.1</b>	<b>7.2</b>	<b>5.15</b>	<b>189.3</b>	<b>26.22</b>	3.9	3.9	4.82	4.06	<b>16.27</b>
Dissolved Oxygen (mg/L)	NV	0.15	95.5	1.2	6.5	1.9	0.09	6.1	1.5	29.9	0.8	0.11	115.2	2.1	43.0	0.3
Oxygen Reduction Potential (mV)	NV	-220.6	-256	-202.6	-56.1	-269.4	-96.3	-72	-51.6	49.8	-63.8	-412.1	-361	-267.3	-39.3	-411.1
<b>Volatile Organic Compounds - EPA Method 8260C (ug/L)</b>																
Benzene	1	<b>64</b>	<b>69</b>	<b>61</b>	<b>62</b>	<b>67</b>	NT	NT	NT	NT	NT	<b>8.0</b>	<b>10</b>	<b>7.1</b>	<b>11</b>	<b>8.3</b>
Toluene	5	<b>11</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>12</b>	NT	NT	NT	NT	NT	2.0 J	2.2 J	1.8 J	2.4 J	2.0 J
Ethylbenzene	5	0.76 J	<	<	<	<	NT	NT	NT	NT	NT	<	<	<	<	<
m,p-Xylene	5	<b>8.2</b>	<b>8.5</b>	<b>9.2</b>	<b>7.2</b>	<b>9.2</b>	NT	NT	NT	NT	NT	1.4 J	1.5 J	1.3 J	1.6 J	1.2 J
o-Xylene	5	<b>12</b>	<b>13.0</b>	<b>13</b>	<b>10</b>	<b>13</b>	NT	NT	NT	NT	NT	1.5 J	1.8 J	1.4 J	1.7 J	1.2 J
Xylene (Total)	5	<b>20.2</b>	<b>21.5</b>	<b>22.2</b>	<b>17.2</b>	<b>22.2</b>	NT	NT	NT	NT	NT	2.9	3.3	2.7 J	3.3 J	2.4 J
1,3,5-Trimethylbenzene	5	1.5 J	1.5 J	2.0 J	<	<	NT	NT	NT	NT	NT	0.90 J	0.97 J	0.93 J	0.97 J	0.84 J
1,2,4-Trimethylbenzene	5	2.5	2.6 J	3.5 J	1.9 J	2.5 J	NT	NT	NT	NT	NT	<	<	<	<	<
Naphthalene*	10	<b>240</b>	<b>270</b>	<b>280</b>	<b>320</b>	<b>400</b>	NT	NT	NT	NT	NT	<b>23</b>	<b>26</b>	<b>19</b>	<b>25</b>	<b>27</b>
<b>Semi-Volatile Organic Compounds - EPA Method 8270D (ug/L)</b>																
Acetophenone	NV	<	<	<	0.770 J	<	NT	NT	NT	NT	NT	<	<	<	0.308 J	<
Acenaphthylene	NV	4.58	3.90	3.18	2.83	4.03	NT	NT	NT	NT	NT	1.73	0.980	1.23	2.70	1.29
1,2-Dichlorobenzene	3	0.171 J	0.168 J	0.162 J	0.200 J	<	NT	NT	NT	NT	NT	0.099 J	0.121 J	0.102 J	0.115 J	0.122 J
Naphthalene*	10	<b>217</b>	<b>205</b>	<b>183</b>	<b>146</b>	<b>194</b>	NT	NT	NT	NT	NT	<b>17.1</b>	<b>18.1</b>	<b>11.2</b>	<b>15.0</b>	<b>13.8</b>
2-Methylnaphthalene	NV	8.05	8.83	6.89	8.48	7.70	NT	NT	NT	NT	NT	2.7	3.10	1.93	3.03	2.55
Acenaphthene*	20	7.09	7.47	7.46	6.20	7.02	NT	NT	NT	NT	NT	1.3	1.45	1.11	1.54	1.33
Dibenzofuran	NV	5.76	6.24	6.32	4.50	5.42	NT	NT	NT	NT	NT	2.34	2.81	1.99	2.92	2.37
Fluorene*	50	10.7	11.40	10.2	7.72	9.24	NT	NT	NT	NT	NT	4.5	4.82	3.48	5.10	4.28
Phenanthrene*	50	17.5	18.30	18.0	13.7	14.9	NT	NT	NT	NT	NT	8.23	8.29	7.54	9.37	7.86
Carbazole	NV	23.2	24.40	23.1	21.2	20.0	NT	NT	NT	NT	NT	4.30	4.58	3.26	5.17	3.40
Anthracene*	50	2.32	2.35	1.67	1.88	2.41	NT	NT	NT	NT	NT	1.00	0.612	0.884	1.38	0.848
Fluoranthene*	50	3.32	4.13	3.34	3.51	3.62	NT	NT	NT	NT	NT	2.7	2.53	2.18	3.19	2.56
Biphenyl	5	1.64	1.62	1.52	1.11	1.31 J	NT	NT	NT	NT	NT	0.707	0.792	0.512	0.715	0.617
Pyrene*	50	2.22	2.82	2.49	2.00	2.35	NT	NT	NT	NT	NT	1.66	1.63	1.78	1.91	1.69
Butylbenzylphthalate*	50	<	<	0.124 J	<	<	NT	NT	NT	NT	NT	<	<	<	<	<
bis(2-Ethylhexyl)Phthalate	5	<	<	<	<	<	NT	NT	NT	NT	NT	<	0.336 J	<	<	<
n-Nitrosodiphenylamine	50	<	<	<	<	0.477 J	NT	NT	NT	NT	NT	<	<	<	<	0.097 J
<b>Metals - EPA Method 6010D (ug/L)</b>																
Arsenic	25	<b>32</b>	<b>28.44</b>	<b>27.68</b>	<b>37.9</b>	<b>26.74</b>	0.60	0.63	0.62	<	0.75	NT	NT	NT	NT	NT
Barium	1,000	NT	NT	NT	NT	NT	931.9	912.8	922.5	860	958.3	NT	NT	NT	NT	NT
Chromium	50	NT	NT	NT	NT	NT	<	0.30 J	0.60 J	<	0.37 J	NT	NT	NT	NT	NT
Manganese	300	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

- Notes:
- Compounds detected in one or more sample are presented on this table. Refer to Appendix B for list of all compounds included in analysis.
  - Analytical testing completed by Alpha Analytical, Westborough, Massachusetts.
  - 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).
  - ug/L = part per billion (ppb).
  - < indicates compound was not detected above method detection limits.
  - "J" qualifier = Analyte detected below quantitation limits.
  - Value shown in **bold** indicate exceedance of respective Class GA Criteria or guidance value.
  - NV = no value, NT = not tested, ND = Not detected above method detection limit
  - \* = value shown is a guidance value rather than a groundwater standard.
  - The equipment used to collect water quality data was calibrated prior to and during use in accordance with the manufacturer's recommendations.

Table 2

September 2023 Annual Groundwater Analytical Data Summary  
Steel Winds I Facility  
Lackawanna, New York

Parameter	NYSDEC Class GA Criteria	MW-3B					MW-03D					MW-04				
		9/25/2019 Result	10/1/2020 Result	9/3/2021 Result	9/15/2022 Result	9/6/2023 Result	9/25/2019 Result	9/24/2020 Result	9/3/2021 Result <sup>11</sup>	9/15/2022 Result	9/6/2023 Result	9/25/2019 Result	9/17/2020 Result	9/2/2021 Result	9/15/2022 Result	9/6/2023 Result
<b>Water Quality Field Measurements</b>																
pH (units)	6.5 - 8.5	7.80	7.2	7.29	6.62	7.3	6.17	6.25	7.31	7.26	7.64	12.05	7.98	11.57	11.35	11.52
Temperature (°C)	NV	13.7	13.9	14.7	14.2	16	12.9	14.4	13.5	16.7	16.0	15.97	15.7	17.3	17.2	
Specific Conductance (mS/cm)	NV	3,139	2,413	2,586	27,710	27,35	24,662	25,881	24,410	26,110	3,129	2,311	2,35	2,313	3,540	3,525
Turbidity (NTU)	5	25.6	38.04	16.44	40.12	131.28	29.4	14.31	35.83	165.2	53.3	2.6	2.4	1.98	33.47	12.95
Dissolved Oxygen (mg/L)	NV	0.15	49.7	2.9	25.3	27	0.56	36.5	5.5	16.2	25.1	5.56	107.4	3.0	69.6	48.9
Oxygen Reduction Potential (mV)	NV	-188.8	-63.7	-146.7	97.7	-19.2	-32.4	-45.3	41.6	50.8	-105.1	-99.7	-65	-81.2	35.4	-25.3
<b>Volatile Organic Compounds - EPA Method 8260C (ug/L)</b>																
Benzene	1	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	0.51	0.48 J
Toluene	5	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	<
Ethylbenzene	5	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	<
m,p-Xylene	5	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	<
o-Xylene	5	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	<
Xylene (Total)	5	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	<
1,3,5-Trimethylbenzene	5	NT	NT	NT	NT	NT	<	0.73 J	<	<	<	<	<	<	<	<
1,2,4-Trimethylbenzene	5	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	<
Naphthalene*	10	NT	NT	NT	NT	NT	<	<	<	<	<	<	1.4 J	<	16	12
<b>Semi-Volatile Organic Compounds - EPA Method 8270D (ug/L)</b>																
Acetophenone	NV	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	0.967 J	0.674 J
Acenaphthylene	NV	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	0.167 J	<
2,6 Dinitrotoluene	5	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	<	1.13
Naphthalene*	10	NT	NT	NT	NT	NT	0.196 J	<	0.121 J	<	<	<	0.163 J	<	11.2	6.09
2-Methylnaphthalene	NV	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	2.49	0.900
Acenaphthene*	20	NT	NT	NT	NT	NT	<	<	<	0.536	2.00	<	0.377 J	<	5.26	2.06
Dibenzofuran	NV	NT	NT	NT	NT	NT	<	<	<	<	<	<	0.107 J	<	2.54	0.780
Fluorene*	50	NT	NT	NT	NT	NT	<	<	<	0.187 J	0.686	<	0.304 J	<	4.37	1.33
Phenanthrene*	50	NT	NT	NT	NT	NT	<	<	<	0.434 J	1.77	<	0.302 J	<	7.31	1.63
Carbazole	NV	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	8.59	2.58
Anthracene*	50	NT	NT	NT	NT	NT	<	<	<	<	0.347 J	<	<	<	1.39	0.334 J
Fluoranthene*	50	NT	NT	NT	NT	NT	<	<	<	<	0.313 J	<	0.168 J	<	1.55	0.405 J
Biphenyl	5	NT	NT	NT	NT	NT	<	<	<	<	<	<	<	<	0.394 J	0.167 J
Pyrene*	50	NT	NT	NT	NT	NT	<	<	<	<	0.208 J	0.640	0.447 J	0.459 J	1.90	1.16
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	0.514	44.9	7.15	0.376 J	0.450 J	0.123 J	0.342 J	<	<	0.264 J
n-Nitrosodiphenylamine	5	NT	NT	NT	NT	NT	<	<	<	<	0.358 J	<	<	<	<	<
<b>Metals - EPA Method 6010D (ug/L)</b>																
Arsenic	25	36.12	2.73	86.97	<	3.78 J	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Barium	1,000	1,291	837.3	1,049	1,320	1,388	1,286	1,234	1,318	779	967.2	NT	NT	NT	NT	NT
Chromium	50	1.74	0.28 J	5.10	3.2 J	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Manganese	300	267.4	336.7	400.2	178	50.38	38.19	41.49	24.52	333	351.2	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.
- 11.0 Wells MW-03B, MW-03D and MW-04 were unable to be low flow sampled. Hand bailing techniques were required. Metals analysis required laboratory filtration.

**Table 3**

September 2023 Semi-Annual Groundwater Analytical Data Summary  
Steel Winds I Facility  
Lackawanna, New York

Parameter	NYSDEC Class GA Criteria	MW-01					MW-01B					WT1-02				
		9/2/2021 Result	3/30/2022 Result	9/13/2022 Result	4/26/2022 Result	9/5/2023 Result	9/2/2021 Result	3/30/2022 Result	9/13/2022 Result	4/26/2022 Result	9/5/2023 Result	9/2/2021 Result	3/30/2022 Result	9/14/2022 Result	4/26/2022 Result	9/5/2023 Result
<b>Water Quality Field Measurements</b>																
pH (units)	6.5 - 8.5	11.53	13.19	11.81	11.93	11.92	11.1	13.03	11.46	11.50	11.55	11.85	13.45	11.98	12.2	12.32
Temperature (°C)	NV	10.8	9.6	12.0	10.2	12.2	9.8	9.4	10.6	10.7	12.2	12.3	11.6	13.1	12.4	12.9
Specific Conductance (mS/cm)	NV	1.212	1.170	1.258	1.229	1.217	0.831	0.808	0.891	0.834	0.799	1.770	1.746	1.592	1.753	1.833
Turbidity (NTU)	5	2.61	1.08	2.80	9.84	4.40	7.67	22.3	22.18	42.12	24.36	2.7	1.37	1.43	2.44	7.11
Dissolved Oxygen (mg/L)	NV	1.2	2.2	5.9	5.4	0.4	0.8	20.7	11.3	22.4	5	4.7	3.9	7.6	7.2	14.6
Oxygen Reduction Potential (mV)	NV	-159.2	-347.1	-104.5	-265.1	-285.6	-214.2	-244.3	-118.8	-217.3	-249.6	-160.7	-271.7	-41.2	-225.4	-101.3
<b>Volatile Organic Compounds - EPA Method 8260C (ug/L)</b>																
Benzene	1	14	14	12	15	15	55	54	55	50	55	12	11.0	8.7	9.2	7.3
Toluene	5	3.6 J	3.1 J	2.8 J	3.1 J	3.2 J	19 J	16 J	20	15 J	16 J	2.4 J	2.1 J	1.7 J	1.8 J	1.5 J
Ethylbenzene	5	<	<	<	<	<	<	<	0.95 J	<	<	<	<	<	<	<
m,p-Xylene	5	8.7	7.9	6.0	7.0	6.4	12 J	12 J	15	11 J	9.9 J	4.2	4	2.6	3.6	2.4 J
o-Xylene	5	6.5	5.8	5.0	5.1	4.5 J	9.0 J	8.9 J	11	7.7 J	<	3.0	2.9	1.9 J	2.6	1.6 J
Xylene (Total)	5	15.2	14	11.0	12.1	10.9	21 J	21 J	26	18.7	9.9	7.2	6.9	4.5 J	6.2	4.0
Isopropylbenzene	5	<	<	<	<	<	<	<	1.4 J	<	<	<	<	<	<	<
1,3,5-Trimethylbenzene	5	4.2 J	3.9 J	2.8 J	3.1 J	2.8 J	<	<	5.2	<	<	2.0 J	2.0 J	1.2 J	1.5 J	1.1 J
1,2,4-Trimethylbenzene	5	4.6 J	4.1 J	3.0 J	3.0 J	2.8 J	7.1 J	<	7.4	<	<	1.5 J	1.5 J	0.84 J	1.0 J	0.84 J
Naphthalene*	10	270	290	240	220	230	1,500	1,700	1,500	1,400	1,500	43	45	27	34	34
<b>Semi-Volatile Organic Compounds - EPA Method 8270D (ug/L)</b>																
Acetophenone	NV	<	<	0.570 J	<	<	<	<	<	<	<	<	<	0.317 J	<	<
Acenaphthylene	NV	22.3	30.3	23.5	22.4	20.1	44.0	33.8	54.3	24.1	23.4 J	0.651	1.30	1.16	1.02 J	1.04
Naphthalene*	10	96.2	141	91.9	96.7	108	962	970	742	715	876	9.38	16.8	17.2	15.8	13.2
2-Methylnaphthalene	NV	21.9	40.0	27.8	25.0	26.6	35.8	46.2	52.4	25.0	33.7	2.11	4.05	4.62	3.71	3.68
Acenaphthene*	20	8.66	11.9	10.1	9.1	9.51	12.0	10.5	11.8	7.86 J	8.97 J	0.710	1.51	1.47	1.26 J	1.17
Dibenzofuran	NV	28.9	39.6	29.7	30.3	34.7	30.3	24.8	30.6	19.5	22.6 J	2.47	4.92	4.92	4.49	3.35
Fluorene*	50	41.9	58.8	44.4	48.7	52.4	43.7	35.7	42.3	29.7	32.4	3.50	7.51	7.48	6.76	6.79
Phenanthrene*	50	71.0	81.5	69.9	76.5	86.6	61.9	53.6	69.5	48.0	51.3	8.10	14.1	13.7	12.4	11.4
Dibenzo (a,h)Anthracene	NV	<	<	<	<	<	<	<	<	<	<	<	<	<	<	<
Carbazole	NV	19.6	24.1	19.7	21.8	19.6	60.0	55.4	61.3	49.4	46.1	2.88	4.80	6.02	4.59	3.88
Anthracene*	50	7.74	11.9	12.2	8.2	13.3	8.19	6.46	11.8	5.05 J	<	1.44	2.52	2.74	1.91	2.35
Fluoranthene*	50	9.44	10.6	12.3	9.1	12.3	8.97	8.33	10.8	7.98 J	8.28 J	3.18	5.42	4.61	3.88	4.63
Biphenyl	5	5.85	7.86	6.48	6.03	6.49	7.45	6.09	7.84 J	4.78 J	<	0.548	1.02	1.13	1.01 J	0.86
Pyrene*	50	6.16	6.38	6.81	5.33	7.22	6.44	4.95	5.57 J	6.8 J	<	2.39	3.57	2.93	2.83	4.56
Butyl benzyl phthalate*	50	0.104 J	<	<	<	<	<	<	<	<	<	<	<	<	<	<
Benz [a] Anthracene*	0.002	<	0.372 J	0.380 J	<	<	0.461 J	0.316 J	<	<	<	<	0.202 J	<	<	0.209 J
Benzo [b] Fluoranthene*	0.002	<	<	0.079 J	<	<	0.105 J	0.105 J	<	1.32 J	<	<	<	<	<	<
Benzo [a] Pyrene	ND	<	<	<	<	<	0.072 J	0.079 J	<	<	<	<	<	<	<	<
Chrysene*	0.002	0.216 J	0.187 J	0.214 J	<	<	0.256 J	0.180 J	<	<	<	<	0.146 J	<	<	0.168 J

Notes:

- 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.
- Analytical testing completed by Alpha Analytical in Westborough, MA.
- 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).
- ug/L = part per billion (ppb).
- < indicates compound was not detected above method detection limits.
- "J" qualifier = Analyte detected below quantitation limits.
- "B" qualifier = indicates compound was detected in the method blank sample.
- "D" qualifier = indicates the compound concentration was obtained from a secondary dilution analysis.
- Value shown in bold indicates exceedance of respective Class GA Criteria or guidance value.
- NV = no value, NT = not tested, ND = Not detected above method detection limit
- \* = value shown is a guidance value rather than a groundwater standard.
- The equipment used to collect water quality data was calibrated prior to and during use in accordance with the manufacturer's recommendations.

Table 3

September 2023 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				
		9/2/2021 Result	3/30/2022 Result	9/13/2022 Result	4/26/2022 Result	9/5/2023 Result	9/2/2021 Result	3/30/2022 Result	9/13/2022 Result	4/26/2022 Result	9/5/2023 Result	9/2/2021 Result	3/30/2022 Result	9/13/2022 Result	4/26/2022 Result	9/5/2023 Result
<b>Water Quality Field Measurements</b>																
pH (units)	6.5 - 8.5	11.51	13.81	11.75	12.05	11.97	11.46	12.99	11.61	11.83	11.78	11.21	13.47	11.6	11.64	11.74
Temperature (°C)	NV	11.1	8.4	13.3	10.0	15.1	11.2	9.2	13.0	9.6	12.9	10.0	9.0	11.5	10.8	12.7
Specific Conductance (mS/cm)	NV	1.326	1.294	1.326	1.302	1.218	1.200	1.182	1.292	1.195	1.254	0.957	1.00	1.060	0.961	0.995
Turbidity (NTU)	5	3.76	0.41	3.8	4.34	44.32	1.74	2.48	0.98	2.09	68.32	2.17	0.11	1.56	2.66	5.12
Dissolved Oxygen (mg/L)	NV	1.0	1.5	5.5	5.4	0.3	1.2	10.3	5.7	5.3	1.6	4.7	36.2	11.0	20.6	2.2
Oxygen Reduction Potential (mV)	NV	-172.4	-327.3	-118.5	-271.4	-280.2	-157.2	-261.8	-68.7	-282.8	-241.6	-188.1	-181.1	20.7	-203.6	-210.4
<b>Volatile Organic Compounds - EPA Method 8260C (ug/L)</b>																
Benzene	1	14	9.6	14	9.8	13	9.3	13	9.7	13	16	27	11	25	21	28
Toluene	5	2.3 J	1.9 J	2.1 J	1.7 J	2.4 J	2.6 J	3.2 J	2.3 J	2.7	3.6	4.0 J	1.4 J	3.2 J	2.6 J	3.5 J
Ethylbenzene	5	<	<	<	<	<	<	<	<	<	0.74 J	<	<	<	<	<
m,p-Xylene	5	4.1	4.4	3.5	3.5	3.6	6.7	8.8	5.4	6.6	8.2	3.9 J	1.4 J	3.4 J	2.9 J	<
o-Xylene	5	3.2	3.3	2.6	2.5	2.4 J	5.1	6.3	4.0 J	4.8	5.6	6.1 J	2.2 J	4.8 J	4.7 J	5.3 J
Xylene (Total)	5	7.3	7.7	6.1	6	6.0	11.8	15	9.4 J	11.4	13.8	10.0 J	3.6 J	8.2 J	7.6	5.3 J
1,3,5-Trimethylbenzene	5	2.2 J	2.3 J	1.7 J	1.6 J	1.4 J	3.1 J	3.8 J	2.7 J	2.8	3.0	<	1.1 J	<	1.5 J	<
1,2,4-Trimethylbenzene	5	1.7 J	1.8 J	1.4 J	1.2 J	1.1 J	3.5 J	4.3 J	2.7 J	2.8	3.2	3.0 J	1.2 J	<	1.8 J	<
Naphthalene*	10	54	66	66	45	57	200	270	220	180	260	460	190	460	320	430
<b>Semi-Volatile Organic Compounds - EPA Method 8270D (ug/L)</b>																
Acetophenone	NV	<	<	0.413 J	<	<	<	<	0.561 J	<	<	<	<	0.492 J	<	<
Acenaphthylene	NV	2.66	1.95	3.24	2.24	2.64	19.8	28.4	22.1	16.0	26.0	19.3	7.61	17.0	14.0	16.1
Naphthalene*	10	31.1	21.8	32.6	25.4	28.3	111	141	106	79	138	246	63.3	198	136	216
2-Methylnaphthalene	NV	6.14	6.77	8.39	5.38	5.88	18.2	30.8	27.0	17.0	29.3	22.7	6.86	23.2	12.9	22.7
Acenaphthene*	20	3.24	2.39	3.42	2.39	2.73	6.44	10.2	8.69	6.0	8.92	7.06	2.21	5.68	3.50	6.20
Dibenzofuran	NV	9.20	6.80	10.1	7.6	8.61	19.7	32.0	24.5	18.5	31.5	18.2	4.24	13.8	8.03	13.4
Fluorene*	50	14.3	10.4	15.2	12.2	14.0	27.0	46.7	34.7	28.5	42.3	29.0	7.45	21.4	13.8	22.5
Phenanthrene*	50	42.8	25.3	36.3	33.2	39.4	20.6	33.8	30.7	26.7	43.4	44.5	8.84	30.0	18.5	29.5
Carbazole	NV	6.64	4.44	8.48	6.15	7.05	15.9	18.8	19.8	13.0	20.2	37.6	9.37	26.2	20.7	31.3
Anthracene*	50	5.10	4.04	7.70	4.65	5.85	2.44	4.46	4.93	2.89	4.52	3.59	1.56	3.76	1.87	2.63
Fluoranthene*	50	9.41	5.78	10.9	7.6	10.1	2.03	2.78	3.38	2.14	3.70	5.95	2.44	6.32	3.67	5.66
Biphenyl	5	1.67	1.17	1.96	1.44 J	1.54	4.39	7.74	5.70	4.05	6.70	4.03	1.07	3.06	1.96	3.24
Pyrene*	50	6.28	3.51	6.39	4.72	6.54	1.90	2.64	2.59	1.96	2.87	4.90	1.84	4.06	2.67	4.25
Butyl benzyl phthalate*	50	0.083 J	<	<	<	<	<	<	<	<	<	<	<	<	<	<
Benzo [a] Anthracene*	0.002	0.402 J	0.226 J	0.342 J	<	0.367 J	<	<	<	<	<	0.295 J	<	0.214 J	<	<
Benzo [b] Fluoranthene*	0.002	0.136 J	0.073 J	0.093 J	<	<	<	0.076 J	<	<	<	<	<	<	<	<
Benzo [a] Pyrene	ND	0.091 J	<	<	<	<	<	<	<	<	<	<	<	<	<	<
Chrysene*	0.002	0.331 J	0.166 J	0.250 J	<	0.339 J	<	<	<	<	<	0.225 J	<	0.145 J	<	<

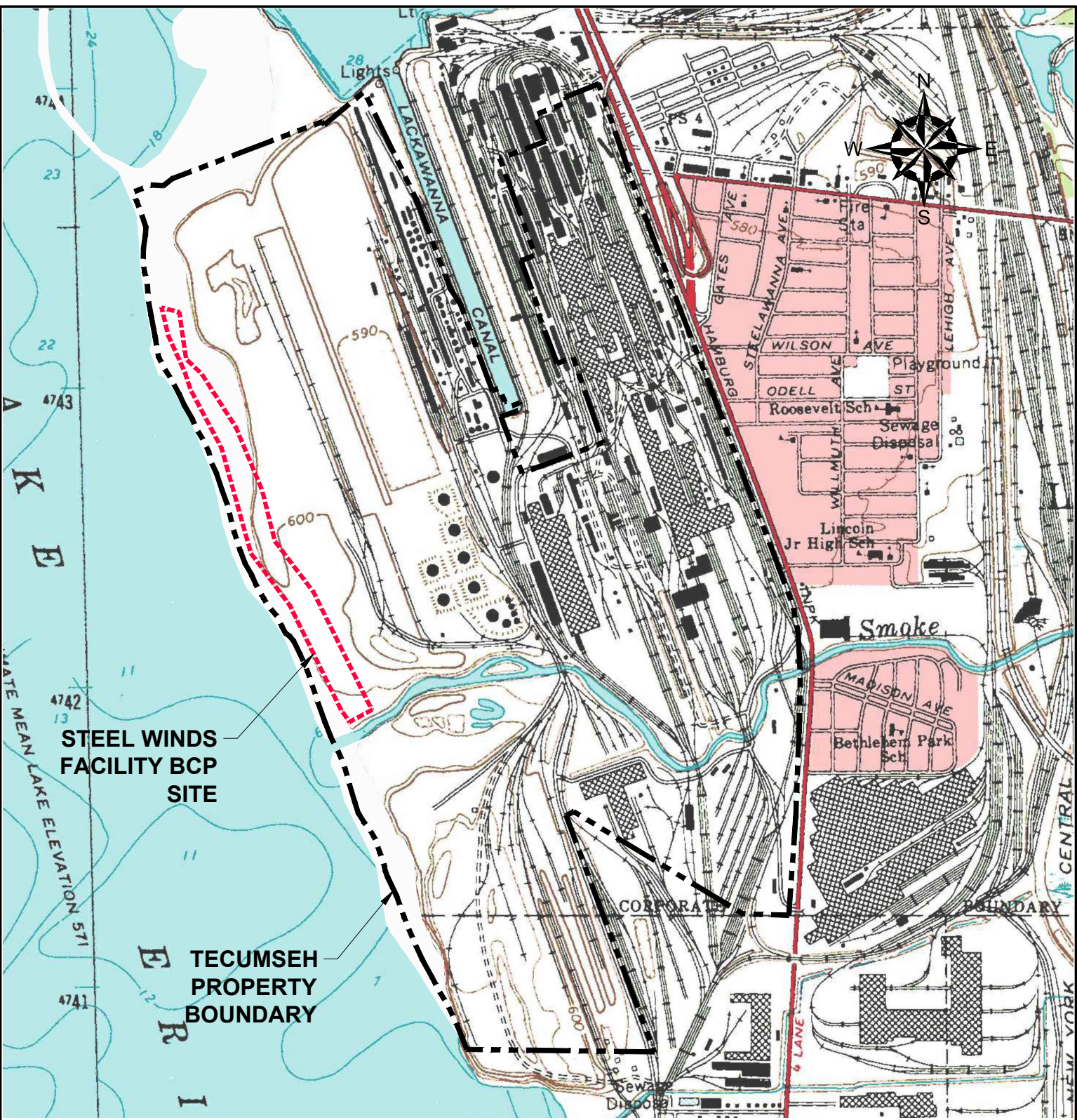
Notes:

- 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.
- Analytical testing completed by Alpha Analytical in Westborough, MA.
- 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).
- ug/L = part per billion (ppb).
- < indicates compound was not detected above method detection limits.
- "J" qualifier = Analyte detected below quantitation limits.
- "B" qualifier = indicates compound was detected in the method blank sample.
- "D" qualifier = indicates the compound concentration was obtained from a secondary dilution analysis.
- Value shown in bold indicates exceedance of respective Class GA Criteria or guidance value.
- NV = no value, NT = not tested, ND = Not detected above method detection limit
- \* = value shown is a guidance value rather than a groundwater standard.
- The equipment used to collect water quality data was calibrated prior to and during use in accordance with the manufacturer's recommendations.



## FIGURES



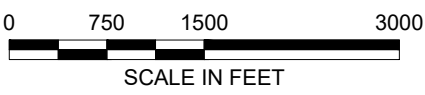


**STEEL WINDS FACILITY BCP SITE**

**TECUMSEH PROPERTY BOUNDARY**

**CORPORATE BOUNDARY**

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



UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

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  
 DESIGNED BY:

REVIEWED BY: EAS  
 DRAWN BY: TAK

CHECKED BY:  
 SCALE: AS SHOWN

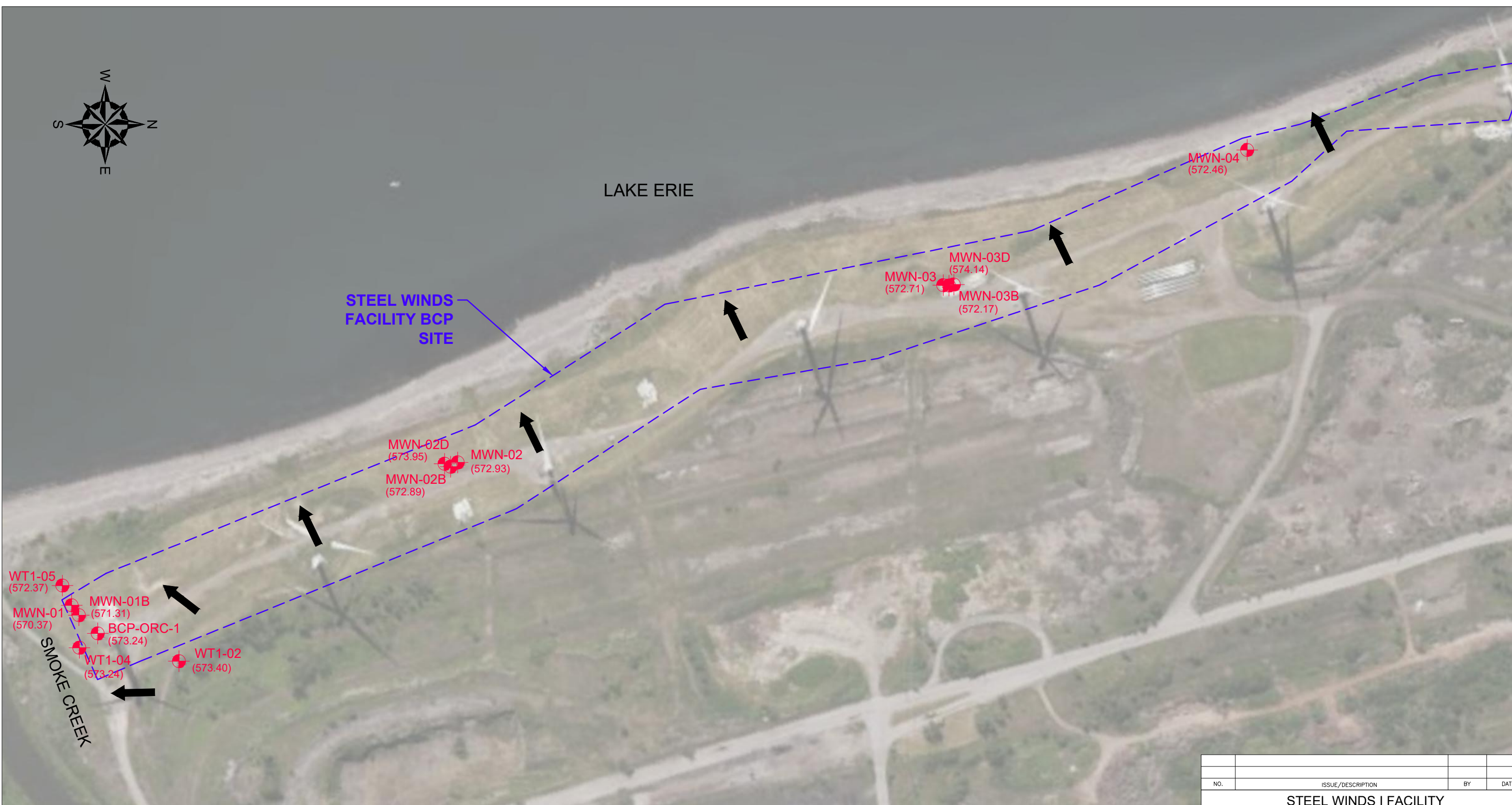
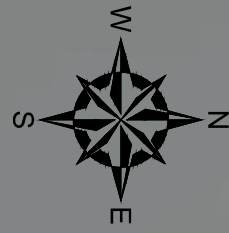
DATE  
 SEPTEMBER 2023

PROJECT NO.  
 03.0033579.16

REVISION NO.

NO.	ISSUE/DESCRIPTION	BY	DATE
	<b>STEEL WINDS I FACILITY ROUTE 5 LACKAWANNA, NEW YORK</b>		
	<b>2023 ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING REPORT LOCUS PLAN</b>		
		<b>FIGURE</b>	<b>1</b>





**LEGEND:**



**MWN-01**  
(570.37)

APPROXIMATE LOCATION AND DESIGNATION OF EXISTING MONITORING WELLS SHOWN WITH GROUNDWATER ELEVATIONS MEASURED BY GZA IN SEPTEMBER 2023




PRESUMED GROUNDWATER FLOW DIRECTION

**NOTES:**

1. BASE MAP ADAPTED FROM AN AERIAL PHOTO DOWNLOADED FROM [www.bing.com/maps](http://www.bing.com/maps) AND FIELD OBSERVATIONS.
2. THE SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.



UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOTECHNICAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

NO.	ISSUE/DESCRIPTION	BY	DATE
<b>STEEL WINDS I FACILITY ROUTE 5 LACKAWANNA, NEW YORK</b>			
<b>2023 ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING REPORT SITE PLAN</b>			
PREPARED BY:  <b>GZA GeoEnvironmental of N.Y. Engineers and Scientists</b> 300 PEARL STREET, SUITE 700 BUFFALO, NEW YORK 14202 (716) 685-2300		PREPARED FOR: <b>NIAGARA WIND POWER, LLC.</b>	
PROJ MGR:	DJT	REVIEWED BY:	EAS
DESIGNED BY:		DRAWN BY:	TAK
DATE:	SEPTEMBER 2023	PROJECT NO.:	03.0033579.16
		CHECKED BY:	
		SCALE:	AS SHOWN
		REVISION NO.:	
			<b>FIGURE 2</b>



**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:	L2351364
Client:	GZA GeoEnvironmental of New York 300 Pearl Street Suite 700 Buffalo, NY 14202
ATTN:	Dan Troy
Phone:	(716) 844-7050
Project Name:	STEEL WINDS
Project Number:	03.0033579.16
Report Date:	10/13/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

---

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



**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2351364-01	WT1-05-090523	WATER	LACKAWANNA, NY	09/05/23 07:50	09/05/23
L2351364-02	MWN-01-090523	WATER	LACKAWANNA, NY	09/05/23 08:45	09/05/23
L2351364-03	WT1-04-090523	WATER	LACKAWANNA, NY	09/05/23 09:35	09/05/23
L2351364-04	BCP-ORC-1-090523	WATER	LACKAWANNA, NY	09/05/23 10:25	09/05/23
L2351364-05	WT1-02-090523	WATER	LACKAWANNA, NY	09/05/23 11:25	09/05/23
L2351364-06	MWN-02-090523	WATER	LACKAWANNA, NY	09/05/23 13:05	09/05/23
L2351364-07	MWN-01B-090523	WATER	LACKAWANNA, NY	09/05/23 14:05	09/05/23
L2351364-08	TRIP BLANK-1	WATER	LACKAWANNA, NY	09/05/23 00:00	09/05/23



**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

### 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:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

### Case Narrative (continued)

#### Report Submission

October 13, 2023: This final report includes the results of all requested analyses.

September 18, 2023: This is a preliminary report.

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

#### Semivolatile Organics

L2351364-01D, -02D, -04D, and -07D: The sample has elevated detection limits due to the dilution required by the sample matrix.

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

Title: Technical Director/Representative

Date: 10/13/23

# ORGANICS

# VOLATILES

**Project Name:** STEEL WINDS**Lab Number:** L2351364**Project Number:** 03.0033579.16**Report Date:** 10/13/23**SAMPLE RESULTS**

Lab ID: L2351364-01  
 Client ID: WT1-05-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 07:50  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 09/13/23 15:54  
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Benzene	16		ug/l	0.50	0.16	1
Toluene	3.6		ug/l	2.5	0.70	1
Ethylbenzene	0.74	J	ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	8.2		ug/l	2.5	0.70	1
o-Xylene	5.6		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	260	E	ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	3.0		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	3.2		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	81		70-130
Dibromofluoromethane	114		70-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351364-01 D  
 Client ID: WT1-05-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 07:50  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 09/14/23 11:14  
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Naphthalene	260		ug/l	12	3.5	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	111		70-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351364-02 D  
 Client ID: MWN-01-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 08:45  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 09/13/23 16:19  
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Benzene	15		ug/l	1.0	0.32	2
Toluene	3.2	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	6.4		ug/l	5.0	1.4	2
o-Xylene	4.5	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	230		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	2.8	J	ug/l	5.0	1.4	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	83		70-130
Dibromofluoromethane	110		70-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351364-03  
 Client ID: WT1-04-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 09:35  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 09/13/23 14:40  
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Benzene	13		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	3.6		ug/l	2.5	0.70	1
o-Xylene	2.4	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	57		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	1.4	J	ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	1.1	J	ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	80		70-130
Dibromofluoromethane	116		70-130



**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351364-04 D  
 Client ID: BCP-ORC-1-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 10:25  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 09/13/23 16:43  
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Benzene	28		ug/l	2.5	0.80	5
Toluene	3.5	J	ug/l	12	3.5	5
Ethylbenzene	ND		ug/l	12	3.5	5
Methyl tert butyl ether	ND		ug/l	12	3.5	5
p/m-Xylene	ND		ug/l	12	3.5	5
o-Xylene	5.3	J	ug/l	12	3.5	5
n-Butylbenzene	ND		ug/l	12	3.5	5
sec-Butylbenzene	ND		ug/l	12	3.5	5
tert-Butylbenzene	ND		ug/l	12	3.5	5
Isopropylbenzene	ND		ug/l	12	3.5	5
p-Isopropyltoluene	ND		ug/l	12	3.5	5
Naphthalene	430		ug/l	12	3.5	5
n-Propylbenzene	ND		ug/l	12	3.5	5
1,3,5-Trimethylbenzene	ND		ug/l	12	3.5	5
1,2,4-Trimethylbenzene	ND		ug/l	12	3.5	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	84		70-130
Dibromofluoromethane	111		70-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351364-05  
 Client ID: WT1-02-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 11:25  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 09/13/23 15:05  
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Benzene	7.3		ug/l	0.50	0.16	1
Toluene	1.5	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	2.4	J	ug/l	2.5	0.70	1
o-Xylene	1.6	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	34		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	1.1	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	94		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	81		70-130
Dibromofluoromethane	113		70-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351364-06  
 Client ID: MWN-02-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 13:05  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 09/13/23 15:29  
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Benzene	10		ug/l	0.50	0.16	1
Toluene	2.3	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	3.4		ug/l	2.5	0.70	1
o-Xylene	2.7		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	43		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	1.3	J	ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	0.80	J	ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	81		70-130
Dibromofluoromethane	116		70-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351364-07 D  
 Client ID: MWN-01B-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 14:05  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 09/13/23 17:08  
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Benzene	55		ug/l	5.0	1.6	10
Toluene	16	J	ug/l	25	7.0	10
Ethylbenzene	ND		ug/l	25	7.0	10
Methyl tert butyl ether	ND		ug/l	25	7.0	10
p/m-Xylene	9.9	J	ug/l	25	7.0	10
o-Xylene	ND		ug/l	25	7.0	10
n-Butylbenzene	ND		ug/l	25	7.0	10
sec-Butylbenzene	ND		ug/l	25	7.0	10
tert-Butylbenzene	ND		ug/l	25	7.0	10
Isopropylbenzene	ND		ug/l	25	7.0	10
p-Isopropyltoluene	ND		ug/l	25	7.0	10
Naphthalene	1500		ug/l	25	7.0	10
n-Propylbenzene	ND		ug/l	25	7.0	10
1,3,5-Trimethylbenzene	ND		ug/l	25	7.0	10
1,2,4-Trimethylbenzene	ND		ug/l	25	7.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	82		70-130
Dibromofluoromethane	109		70-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351364-08  
 Client ID: TRIP BLANK-1  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 00:00  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 09/13/23 14:15  
 Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	98		70-130
4-Bromofluorobenzene	83		70-130
Dibromofluoromethane	124		70-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**Method Blank Analysis  
 Batch Quality Control**

Analytical Method: 1,8260D  
 Analytical Date: 09/13/23 08:31  
 Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-08 Batch: WG1826961-5					
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	90		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	113		70-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 09/14/23 09:07  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1827692-5					
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	117		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	113		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: STEEL WINDS

Project Number: 03.0033579.16

Lab Number: L2351364

Report Date: 10/13/23

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-08 Batch: WG1826961-3 WG1826961-4									
Benzene	100		100		70-130		0		20
Toluene	110		100		70-130		10		20
Ethylbenzene	99		100		70-130		1		20
Methyl tert butyl ether	77		78		63-130		1		20
p/m-Xylene	105		105		70-130		0		20
o-Xylene	100		100		70-130		0		20
n-Butylbenzene	89		90		53-136		1		20
sec-Butylbenzene	88		89		70-130		1		20
tert-Butylbenzene	86		89		70-130		3		20
Isopropylbenzene	86		87		70-130		1		20
p-Isopropyltoluene	86		89		70-130		3		20
Naphthalene	67	Q	72		70-130		7		20
n-Propylbenzene	89		90		69-130		1		20
1,3,5-Trimethylbenzene	90		90		64-130		0		20
1,2,4-Trimethylbenzene	89		90		70-130		1		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	84		85		70-130
Toluene-d8	106		104		70-130
4-Bromofluorobenzene	81		83		70-130
Dibromofluoromethane	106		108		70-130



### Lab Control Sample Analysis Batch Quality Control

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1827692-3 WG1827692-4								
Benzene	110		100		70-130	10		20
Toluene	110		100		70-130	10		20
Ethylbenzene	110		110		70-130	0		20
Methyl tert butyl ether	89		80		63-130	11		20
p/m-Xylene	110		110		70-130	0		20
o-Xylene	105		105		70-130	0		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	110		110		70-130	0		20
tert-Butylbenzene	110		110		70-130	0		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	110		110		70-130	0		20
Naphthalene	89		87		70-130	2		20
n-Propylbenzene	110		110		69-130	0		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	115		114		70-130
Toluene-d8	101		103		70-130
4-Bromofluorobenzene	98		99		70-130
Dibromofluoromethane	106		103		70-130



# SEMIVOLATILES

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351364-01 D  
 Client ID: WT1-05-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 07:50  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270E  
 Analytical Date: 09/20/23 19:01  
 Analyst: DB

Extraction Method: EPA 3510C  
 Extraction Date: 09/12/23 13:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
bis(2-Chloroethyl)ether	ND		ug/l	2.45	0.455	5
1,3-Dichlorobenzene	ND		ug/l	2.45	0.384	5
1,4-Dichlorobenzene	ND		ug/l	2.45	0.406	5
1,2-Dichlorobenzene	ND		ug/l	2.45	0.333	5
Benzyl alcohol	ND		ug/l	2.45	0.603	5
bis(2-chloroisopropyl)ether	ND		ug/l	2.45	0.529	5
Acetophenone	ND		ug/l	4.90	1.01	5
Hexachloroethane	ND		ug/l	2.45	0.500	5
Nitrobenzene	ND		ug/l	2.45	0.500	5
Isophorone	ND		ug/l	2.45	0.618	5
bis(2-Chloroethoxy)methane	ND		ug/l	2.45	0.419	5
1,2,4-Trichlorobenzene	ND		ug/l	2.45	0.471	5
Naphthalene	138		ug/l	2.45	0.429	5
4-Chloroaniline	ND		ug/l	2.45	0.627	5
Hexachlorobutadiene	ND		ug/l	2.45	0.419	5
2-Methylnaphthalene	29.3		ug/l	2.45	0.446	5
1,2,4,5-Tetrachlorobenzene	ND		ug/l	2.45	0.391	5
Hexachlorocyclopentadiene	ND		ug/l	2.45	0.750	5
Biphenyl	6.70		ug/l	2.45	0.544	5
2-Chloronaphthalene	ND		ug/l	2.45	0.441	5
2-Nitroaniline	ND		ug/l	2.45	0.676	5
Acenaphthylene	26.0		ug/l	2.45	0.549	5
Dimethylphthalate	ND		ug/l	2.45	0.574	5
2,6-Dinitrotoluene	ND		ug/l	2.45	0.824	5
Acenaphthene	8.92		ug/l	2.45	0.468	5
3-Nitroaniline	ND		ug/l	2.45	0.544	5
Dibenzofuran	31.5		ug/l	2.45	0.446	5
2,4-Dinitrotoluene	ND		ug/l	2.45	0.799	5

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351364-01 D  
 Client ID: WT1-05-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 07:50  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
Fluorene	42.3		ug/l	2.45	0.510	5
Diethylphthalate	ND		ug/l	2.45	0.882	5
4-Nitroaniline	ND		ug/l	2.45	0.549	5
n-Nitrosodiphenylamine	ND		ug/l	2.45	0.353	5
Hexachlorobenzene	ND		ug/l	2.45	0.598	5
Phenanthrene	43.4		ug/l	2.45	0.544	5
Anthracene	4.52		ug/l	2.45	0.672	5
Carbazole	20.2		ug/l	2.45	0.701	5
Di-n-butylphthalate	ND		ug/l	2.45	0.488	5
Fluoranthene	3.70		ug/l	2.45	0.765	5
Pyrene	2.87		ug/l	2.45	0.833	5
Butylbenzylphthalate	ND		ug/l	2.45	0.416	5
3,3'-Dichlorobenzidine	ND		ug/l	2.45	0.946	5
Benzo(a)anthracene	ND		ug/l	2.45	0.902	5
Chrysene	ND		ug/l	2.45	0.696	5
bis(2-Ethylhexyl)phthalate	ND		ug/l	2.45	0.396	5
Di-n-octylphthalate	ND		ug/l	4.90	0.385	5
Benzo(b)fluoranthene	ND		ug/l	2.45	0.321	5
Benzo(k)fluoranthene	ND		ug/l	2.45	0.789	5
Benzo(a)pyrene	ND		ug/l	2.45	0.295	5
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.45	0.439	5
Dibenz(a,h)anthracene	ND		ug/l	2.45	0.314	5
Benzo(g,h,i)perylene	ND		ug/l	2.45	0.534	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	79		30-130
2-Fluorobiphenyl	80		30-130
Terphenyl-d14	88		30-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351364-02 D  
 Client ID: MWN-01-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 08:45  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270E  
 Analytical Date: 09/20/23 19:30  
 Analyst: DB

Extraction Method: EPA 3510C  
 Extraction Date: 09/12/23 13:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
bis(2-Chloroethyl)ether	ND		ug/l	2.27	0.422	5
1,3-Dichlorobenzene	ND		ug/l	2.27	0.356	5
1,4-Dichlorobenzene	ND		ug/l	2.27	0.376	5
1,2-Dichlorobenzene	ND		ug/l	2.27	0.309	5
Benzyl alcohol	ND		ug/l	2.27	0.559	5
bis(2-chloroisopropyl)ether	ND		ug/l	2.27	0.491	5
Acetophenone	ND		ug/l	4.54	0.941	5
Hexachloroethane	ND		ug/l	2.27	0.464	5
Nitrobenzene	ND		ug/l	2.27	0.464	5
Isophorone	ND		ug/l	2.27	0.573	5
bis(2-Chloroethoxy)methane	ND		ug/l	2.27	0.388	5
1,2,4-Trichlorobenzene	ND		ug/l	2.27	0.437	5
Naphthalene	108		ug/l	2.27	0.398	5
4-Chloroaniline	ND		ug/l	2.27	0.582	5
Hexachlorobutadiene	ND		ug/l	2.27	0.389	5
2-Methylnaphthalene	26.6		ug/l	2.27	0.414	5
1,2,4,5-Tetrachlorobenzene	ND		ug/l	2.27	0.362	5
Hexachlorocyclopentadiene	ND		ug/l	2.27	0.695	5
Biphenyl	6.49		ug/l	2.27	0.504	5
2-Chloronaphthalene	ND		ug/l	2.27	0.409	5
2-Nitroaniline	ND		ug/l	2.27	0.627	5
Acenaphthylene	20.1		ug/l	2.27	0.509	5
Dimethylphthalate	ND		ug/l	2.27	0.532	5
2,6-Dinitrotoluene	ND		ug/l	2.27	0.764	5
Acenaphthene	9.51		ug/l	2.27	0.434	5
3-Nitroaniline	ND		ug/l	2.27	0.504	5
Dibenzofuran	34.7		ug/l	2.27	0.414	5
2,4-Dinitrotoluene	ND		ug/l	2.27	0.741	5

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351364-02 D  
 Client ID: MWN-01-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 08:45  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
Fluorene	52.4		ug/l	2.27	0.473	5
Diethylphthalate	ND		ug/l	2.27	0.818	5
4-Nitroaniline	ND		ug/l	2.27	0.509	5
n-Nitrosodiphenylamine	ND		ug/l	2.27	0.327	5
Hexachlorobenzene	ND		ug/l	2.27	0.554	5
Phenanthrene	86.6		ug/l	2.27	0.504	5
Anthracene	13.3		ug/l	2.27	0.623	5
Carbazole	19.6		ug/l	2.27	0.650	5
Di-n-butylphthalate	ND		ug/l	2.27	0.453	5
Fluoranthene	12.3		ug/l	2.27	0.709	5
Pyrene	7.22		ug/l	2.27	0.773	5
Butylbenzylphthalate	ND		ug/l	2.27	0.385	5
3,3'-Dichlorobenzidine	ND		ug/l	2.27	0.877	5
Benzo(a)anthracene	ND		ug/l	2.27	0.836	5
Chrysene	ND		ug/l	2.27	0.645	5
bis(2-Ethylhexyl)phthalate	ND		ug/l	2.27	0.368	5
Di-n-octylphthalate	ND		ug/l	4.54	0.357	5
Benzo(b)fluoranthene	ND		ug/l	2.27	0.298	5
Benzo(k)fluoranthene	ND		ug/l	2.27	0.732	5
Benzo(a)pyrene	ND		ug/l	2.27	0.274	5
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.27	0.407	5
Dibenz(a,h)anthracene	ND		ug/l	2.27	0.291	5
Benzo(g,h,i)perylene	ND		ug/l	2.27	0.495	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	77		30-130
2-Fluorobiphenyl	75		30-130
Terphenyl-d14	92		30-130

Project Name: STEEL WINDS

Lab Number: L2351364

Project Number: 03.0033579.16

Report Date: 10/13/23

## SAMPLE RESULTS

Lab ID: L2351364-03  
 Client ID: WT1-04-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 09:35  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270E  
 Analytical Date: 09/14/23 21:10  
 Analyst: DB

Extraction Method: EPA 3510C  
 Extraction Date: 09/12/23 13:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
bis(2-Chloroethyl)ether	ND		ug/l	0.500	0.093	1
1,3-Dichlorobenzene	ND		ug/l	0.500	0.078	1
1,4-Dichlorobenzene	ND		ug/l	0.500	0.083	1
1,2-Dichlorobenzene	ND		ug/l	0.500	0.068	1
Benzyl alcohol	ND		ug/l	0.500	0.123	1
bis(2-chloroisopropyl)ether	ND		ug/l	0.500	0.108	1
Acetophenone	ND		ug/l	1.00	0.207	1
Hexachloroethane	ND		ug/l	0.500	0.102	1
Nitrobenzene	ND		ug/l	0.500	0.102	1
Isophorone	ND		ug/l	0.500	0.126	1
bis(2-Chloroethoxy)methane	ND		ug/l	0.500	0.085	1
1,2,4-Trichlorobenzene	ND		ug/l	0.500	0.096	1
Naphthalene	28.3		ug/l	0.500	0.088	1
4-Chloroaniline	ND		ug/l	0.500	0.128	1
Hexachlorobutadiene	ND		ug/l	0.500	0.086	1
2-Methylnaphthalene	5.88		ug/l	0.500	0.091	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.500	0.080	1
Hexachlorocyclopentadiene	ND		ug/l	0.500	0.153	1
Biphenyl	1.54		ug/l	0.500	0.111	1
2-Chloronaphthalene	ND		ug/l	0.500	0.090	1
2-Nitroaniline	ND		ug/l	0.500	0.138	1
Acenaphthylene	2.64		ug/l	0.500	0.112	1
Dimethylphthalate	ND		ug/l	0.500	0.117	1
2,6-Dinitrotoluene	ND		ug/l	0.500	0.168	1
Acenaphthene	2.73		ug/l	0.500	0.096	1
3-Nitroaniline	ND		ug/l	0.500	0.111	1
Dibenzofuran	8.61		ug/l	0.500	0.091	1
2,4-Dinitrotoluene	ND		ug/l	0.500	0.163	1

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

**Lab ID:** L2351364-03  
**Client ID:** WT1-04-090523  
**Sample Location:** LACKAWANNA, NY

**Date Collected:** 09/05/23 09:35  
**Date Received:** 09/05/23  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
Fluorene	14.0		ug/l	0.500	0.104	1
Diethylphthalate	ND		ug/l	0.500	0.180	1
4-Nitroaniline	ND		ug/l	0.500	0.112	1
n-Nitrosodiphenylamine	ND		ug/l	0.500	0.072	1
Hexachlorobenzene	ND		ug/l	0.500	0.122	1
Phenanthrene	39.4		ug/l	0.500	0.111	1
Anthracene	5.85		ug/l	0.500	0.137	1
Carbazole	7.05		ug/l	0.500	0.143	1
Di-n-butylphthalate	ND		ug/l	0.500	0.100	1
Fluoranthene	10.1		ug/l	0.500	0.156	1
Pyrene	6.54		ug/l	0.500	0.170	1
Butylbenzylphthalate	ND		ug/l	0.500	0.085	1
3,3'-Dichlorobenzidine	ND		ug/l	0.500	0.193	1
Benz(a)anthracene	0.367	J	ug/l	0.500	0.184	1
Chrysene	0.339	J	ug/l	0.500	0.142	1
bis(2-Ethylhexyl)phthalate	ND		ug/l	0.500	0.081	1
Di-n-octylphthalate	ND		ug/l	1.00	0.079	1
Benzo(b)fluoranthene	ND		ug/l	0.500	0.066	1
Benzo(k)fluoranthene	ND		ug/l	0.500	0.161	1
Benzo(a)pyrene	ND		ug/l	0.500	0.060	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.500	0.090	1
Dibenz(a,h)anthracene	ND		ug/l	0.500	0.064	1
Benzo(g,h,i)perylene	ND		ug/l	0.500	0.109	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	64		30-130
2-Fluorobiphenyl	67		30-130
Terphenyl-d14	97		30-130



**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351364-04 D  
 Client ID: BCP-ORC-1-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 10:25  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270E  
 Analytical Date: 09/20/23 20:00  
 Analyst: DB

Extraction Method: EPA 3510C  
 Extraction Date: 09/12/23 13:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
bis(2-Chloroethyl)ether	ND		ug/l	2.45	0.455	5
1,3-Dichlorobenzene	ND		ug/l	2.45	0.384	5
1,4-Dichlorobenzene	ND		ug/l	2.45	0.406	5
1,2-Dichlorobenzene	ND		ug/l	2.45	0.333	5
Benzyl alcohol	ND		ug/l	2.45	0.603	5
bis(2-chloroisopropyl)ether	ND		ug/l	2.45	0.529	5
Acetophenone	ND		ug/l	4.90	1.01	5
Hexachloroethane	ND		ug/l	2.45	0.500	5
Nitrobenzene	ND		ug/l	2.45	0.500	5
Isophorone	ND		ug/l	2.45	0.618	5
bis(2-Chloroethoxy)methane	ND		ug/l	2.45	0.419	5
1,2,4-Trichlorobenzene	ND		ug/l	2.45	0.471	5
Naphthalene	216		ug/l	2.45	0.429	5
4-Chloroaniline	ND		ug/l	2.45	0.627	5
Hexachlorobutadiene	ND		ug/l	2.45	0.419	5
2-Methylnaphthalene	22.7		ug/l	2.45	0.446	5
1,2,4,5-Tetrachlorobenzene	ND		ug/l	2.45	0.391	5
Hexachlorocyclopentadiene	ND		ug/l	2.45	0.750	5
Biphenyl	3.24		ug/l	2.45	0.544	5
2-Chloronaphthalene	ND		ug/l	2.45	0.441	5
2-Nitroaniline	ND		ug/l	2.45	0.676	5
Acenaphthylene	16.1		ug/l	2.45	0.549	5
Dimethylphthalate	ND		ug/l	2.45	0.574	5
2,6-Dinitrotoluene	ND		ug/l	2.45	0.824	5
Acenaphthene	6.20		ug/l	2.45	0.468	5
3-Nitroaniline	ND		ug/l	2.45	0.544	5
Dibenzofuran	13.4		ug/l	2.45	0.446	5
2,4-Dinitrotoluene	ND		ug/l	2.45	0.799	5

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351364-04 D  
 Client ID: BCP-ORC-1-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 10:25  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
Fluorene	22.5		ug/l	2.45	0.510	5
Diethylphthalate	ND		ug/l	2.45	0.882	5
4-Nitroaniline	ND		ug/l	2.45	0.549	5
n-Nitrosodiphenylamine	ND		ug/l	2.45	0.353	5
Hexachlorobenzene	ND		ug/l	2.45	0.598	5
Phenanthrene	29.5		ug/l	2.45	0.544	5
Anthracene	2.63		ug/l	2.45	0.672	5
Carbazole	31.3		ug/l	2.45	0.701	5
Di-n-butylphthalate	ND		ug/l	2.45	0.488	5
Fluoranthene	5.66		ug/l	2.45	0.765	5
Pyrene	4.25		ug/l	2.45	0.833	5
Butylbenzylphthalate	ND		ug/l	2.45	0.416	5
3,3'-Dichlorobenzidine	ND		ug/l	2.45	0.946	5
Benzo(a)anthracene	ND		ug/l	2.45	0.902	5
Chrysene	ND		ug/l	2.45	0.696	5
bis(2-Ethylhexyl)phthalate	ND		ug/l	2.45	0.396	5
Di-n-octylphthalate	ND		ug/l	4.90	0.385	5
Benzo(b)fluoranthene	ND		ug/l	2.45	0.321	5
Benzo(k)fluoranthene	ND		ug/l	2.45	0.789	5
Benzo(a)pyrene	ND		ug/l	2.45	0.295	5
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.45	0.439	5
Dibenz(a,h)anthracene	ND		ug/l	2.45	0.314	5
Benzo(g,h,i)perylene	ND		ug/l	2.45	0.534	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	75		30-130
2-Fluorobiphenyl	74		30-130
Terphenyl-d14	88		30-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

**Lab ID:** L2351364-05  
**Client ID:** WT1-02-090523  
**Sample Location:** LACKAWANNA, NY

**Date Collected:** 09/05/23 11:25  
**Date Received:** 09/05/23  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270E  
**Analytical Date:** 09/14/23 22:10  
**Analyst:** DB

**Extraction Method:** EPA 3510C  
**Extraction Date:** 09/12/23 13:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
bis(2-Chloroethyl)ether	ND		ug/l	0.500	0.093	1
1,3-Dichlorobenzene	ND		ug/l	0.500	0.078	1
1,4-Dichlorobenzene	ND		ug/l	0.500	0.083	1
1,2-Dichlorobenzene	ND		ug/l	0.500	0.068	1
Benzyl alcohol	ND		ug/l	0.500	0.123	1
bis(2-chloroisopropyl)ether	ND		ug/l	0.500	0.108	1
Acetophenone	ND		ug/l	1.00	0.207	1
Hexachloroethane	ND		ug/l	0.500	0.102	1
Nitrobenzene	ND		ug/l	0.500	0.102	1
Isophorone	ND		ug/l	0.500	0.126	1
bis(2-Chloroethoxy)methane	ND		ug/l	0.500	0.085	1
1,2,4-Trichlorobenzene	ND		ug/l	0.500	0.096	1
Naphthalene	13.2		ug/l	0.500	0.088	1
4-Chloroaniline	ND		ug/l	0.500	0.128	1
Hexachlorobutadiene	ND		ug/l	0.500	0.086	1
2-Methylnaphthalene	3.68		ug/l	0.500	0.091	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.500	0.080	1
Hexachlorocyclopentadiene	ND		ug/l	0.500	0.153	1
Biphenyl	0.855		ug/l	0.500	0.111	1
2-Chloronaphthalene	ND		ug/l	0.500	0.090	1
2-Nitroaniline	ND		ug/l	0.500	0.138	1
Acenaphthylene	1.04		ug/l	0.500	0.112	1
Dimethylphthalate	ND		ug/l	0.500	0.117	1
2,6-Dinitrotoluene	ND		ug/l	0.500	0.168	1
Acenaphthene	1.17		ug/l	0.500	0.096	1
3-Nitroaniline	ND		ug/l	0.500	0.111	1
Dibenzofuran	3.35		ug/l	0.500	0.091	1
2,4-Dinitrotoluene	ND		ug/l	0.500	0.163	1

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

**Lab ID:** L2351364-05  
**Client ID:** WT1-02-090523  
**Sample Location:** LACKAWANNA, NY

**Date Collected:** 09/05/23 11:25  
**Date Received:** 09/05/23  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
Fluorene	6.79		ug/l	0.500	0.104	1
Diethylphthalate	ND		ug/l	0.500	0.180	1
4-Nitroaniline	ND		ug/l	0.500	0.112	1
n-Nitrosodiphenylamine	ND		ug/l	0.500	0.072	1
Hexachlorobenzene	ND		ug/l	0.500	0.122	1
Phenanthrene	11.4		ug/l	0.500	0.111	1
Anthracene	2.35		ug/l	0.500	0.137	1
Carbazole	3.88		ug/l	0.500	0.143	1
Di-n-butylphthalate	ND		ug/l	0.500	0.100	1
Fluoranthene	4.63		ug/l	0.500	0.156	1
Pyrene	4.56		ug/l	0.500	0.170	1
Butylbenzylphthalate	ND		ug/l	0.500	0.085	1
3,3'-Dichlorobenzidine	ND		ug/l	0.500	0.193	1
Benz(a)anthracene	0.209	J	ug/l	0.500	0.184	1
Chrysene	0.168	J	ug/l	0.500	0.142	1
bis(2-Ethylhexyl)phthalate	ND		ug/l	0.500	0.081	1
Di-n-octylphthalate	ND		ug/l	1.00	0.079	1
Benzo(b)fluoranthene	ND		ug/l	0.500	0.066	1
Benzo(k)fluoranthene	ND		ug/l	0.500	0.161	1
Benzo(a)pyrene	ND		ug/l	0.500	0.060	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.500	0.090	1
Dibenz(a,h)anthracene	ND		ug/l	0.500	0.064	1
Benzo(g,h,i)perylene	ND		ug/l	0.500	0.109	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	64		30-130
2,4,6-Tribromophenol	100		15-115
Terphenyl-d14	99		30-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

**Lab ID:** L2351364-06  
**Client ID:** MWN-02-090523  
**Sample Location:** LACKAWANNA, NY

**Date Collected:** 09/05/23 13:05  
**Date Received:** 09/05/23  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270E  
**Analytical Date:** 09/20/23 20:29  
**Analyst:** DB

**Extraction Method:** EPA 3510C  
**Extraction Date:** 09/12/23 13:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
bis(2-Chloroethyl)ether	ND		ug/l	0.485	0.090	1
1,3-Dichlorobenzene	ND		ug/l	0.485	0.076	1
1,4-Dichlorobenzene	ND		ug/l	0.485	0.080	1
1,2-Dichlorobenzene	ND		ug/l	0.485	0.066	1
Benzyl alcohol	ND		ug/l	0.485	0.119	1
bis(2-chloroisopropyl)ether	ND		ug/l	0.485	0.105	1
Acetophenone	0.265	J	ug/l	0.971	0.201	1
Hexachloroethane	ND		ug/l	0.485	0.099	1
Nitrobenzene	ND		ug/l	0.485	0.099	1
Isophorone	ND		ug/l	0.485	0.122	1
bis(2-Chloroethoxy)methane	ND		ug/l	0.485	0.083	1
1,2,4-Trichlorobenzene	ND		ug/l	0.485	0.093	1
Naphthalene	23.3		ug/l	0.485	0.085	1
4-Chloroaniline	ND		ug/l	0.485	0.124	1
Hexachlorobutadiene	ND		ug/l	0.485	0.083	1
2-Methylnaphthalene	3.90		ug/l	0.485	0.088	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.485	0.077	1
Hexachlorocyclopentadiene	ND		ug/l	0.485	0.148	1
Biphenyl	1.00		ug/l	0.485	0.108	1
2-Chloronaphthalene	ND		ug/l	0.485	0.087	1
2-Nitroaniline	ND		ug/l	0.485	0.134	1
Acenaphthylene	3.14		ug/l	0.485	0.109	1
Dimethylphthalate	ND		ug/l	0.485	0.114	1
2,6-Dinitrotoluene	ND		ug/l	0.485	0.163	1
Acenaphthene	1.46		ug/l	0.485	0.093	1
3-Nitroaniline	ND		ug/l	0.485	0.108	1
Dibenzofuran	3.85		ug/l	0.485	0.088	1
2,4-Dinitrotoluene	ND		ug/l	0.485	0.158	1

Project Name: STEEL WINDS

Lab Number: L2351364

Project Number: 03.0033579.16

Report Date: 10/13/23

## SAMPLE RESULTS

Lab ID: L2351364-06  
 Client ID: MWN-02-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 13:05  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
Fluorene	5.84		ug/l	0.485	0.101	1
Diethylphthalate	ND		ug/l	0.485	0.175	1
4-Nitroaniline	ND		ug/l	0.485	0.109	1
n-Nitrosodiphenylamine	ND		ug/l	0.485	0.070	1
Hexachlorobenzene	ND		ug/l	0.485	0.118	1
Phenanthrene	5.72		ug/l	0.485	0.108	1
Anthracene	0.986		ug/l	0.485	0.133	1
Carbazole	4.37		ug/l	0.485	0.139	1
Di-n-butylphthalate	ND		ug/l	0.485	0.097	1
Fluoranthene	0.857		ug/l	0.485	0.151	1
Pyrene	1.86		ug/l	0.485	0.165	1
Butylbenzylphthalate	0.113	J	ug/l	0.485	0.082	1
3,3'-Dichlorobenzidine	ND		ug/l	0.485	0.187	1
Benzo(a)anthracene	ND		ug/l	0.485	0.179	1
Chrysene	ND		ug/l	0.485	0.138	1
bis(2-Ethylhexyl)phthalate	ND		ug/l	0.485	0.079	1
Di-n-octylphthalate	ND		ug/l	0.971	0.076	1
Benzo(b)fluoranthene	ND		ug/l	0.485	0.064	1
Benzo(k)fluoranthene	ND		ug/l	0.485	0.156	1
Benzo(a)pyrene	ND		ug/l	0.485	0.058	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.485	0.087	1
Dibenz(a,h)anthracene	ND		ug/l	0.485	0.062	1
Benzo(g,h,i)perylene	ND		ug/l	0.485	0.106	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	70		30-130
2-Fluorobiphenyl	70		30-130
Terphenyl-d14	92		30-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351364-07 D  
 Client ID: MWN-01B-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 14:05  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270E  
 Analytical Date: 09/20/23 20:59  
 Analyst: DB

Extraction Method: EPA 3510C  
 Extraction Date: 09/12/23 13:48

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
bis(2-Chloroethyl)ether	ND		ug/l	24.5	4.55	50
1,3-Dichlorobenzene	ND		ug/l	24.5	3.84	50
1,4-Dichlorobenzene	ND		ug/l	24.5	4.06	50
1,2-Dichlorobenzene	ND		ug/l	24.5	3.33	50
Benzyl alcohol	ND		ug/l	24.5	6.03	50
bis(2-chloroisopropyl)ether	ND		ug/l	24.5	5.29	50
Acetophenone	ND		ug/l	49.0	10.1	50
Hexachloroethane	ND		ug/l	24.5	5.00	50
Nitrobenzene	ND		ug/l	24.5	5.00	50
Isophorone	ND		ug/l	24.5	6.18	50
bis(2-Chloroethoxy)methane	ND		ug/l	24.5	4.19	50
1,2,4-Trichlorobenzene	ND		ug/l	24.5	4.71	50
Naphthalene	876		ug/l	24.5	4.29	50
4-Chloroaniline	ND		ug/l	24.5	6.27	50
Hexachlorobutadiene	ND		ug/l	24.5	4.19	50
2-Methylnaphthalene	33.7		ug/l	24.5	4.46	50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	24.5	3.91	50
Hexachlorocyclopentadiene	ND		ug/l	24.5	7.50	50
Biphenyl	ND		ug/l	24.5	5.44	50
2-Chloronaphthalene	ND		ug/l	24.5	4.41	50
2-Nitroaniline	ND		ug/l	24.5	6.76	50
Acenaphthylene	23.4	J	ug/l	24.5	5.49	50
Dimethylphthalate	ND		ug/l	24.5	5.74	50
2,6-Dinitrotoluene	ND		ug/l	24.5	8.24	50
Acenaphthene	8.97	J	ug/l	24.5	4.68	50
3-Nitroaniline	ND		ug/l	24.5	5.44	50
Dibenzofuran	22.6	J	ug/l	24.5	4.46	50
2,4-Dinitrotoluene	ND		ug/l	24.5	7.99	50

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351364-07 D  
 Client ID: MWN-01B-090523  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/05/23 14:05  
 Date Received: 09/05/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
Fluorene	32.4		ug/l	24.5	5.10	50
Diethylphthalate	ND		ug/l	24.5	8.82	50
4-Nitroaniline	ND		ug/l	24.5	5.49	50
n-Nitrosodiphenylamine	ND		ug/l	24.5	3.53	50
Hexachlorobenzene	ND		ug/l	24.5	5.98	50
Phenanthrene	51.3		ug/l	24.5	5.44	50
Anthracene	ND		ug/l	24.5	6.72	50
Carbazole	46.1		ug/l	24.5	7.01	50
Di-n-butylphthalate	ND		ug/l	24.5	4.88	50
Fluoranthene	8.28	J	ug/l	24.5	7.65	50
Pyrene	ND		ug/l	24.5	8.33	50
Butylbenzylphthalate	ND		ug/l	24.5	4.16	50
3,3'-Dichlorobenzidine	ND		ug/l	24.5	9.46	50
Benzo(a)anthracene	ND		ug/l	24.5	9.02	50
Chrysene	ND		ug/l	24.5	6.96	50
bis(2-Ethylhexyl)phthalate	ND		ug/l	24.5	3.96	50
Di-n-octylphthalate	ND		ug/l	49.0	3.85	50
Benzo(b)fluoranthene	ND		ug/l	24.5	3.21	50
Benzo(k)fluoranthene	ND		ug/l	24.5	7.89	50
Benzo(a)pyrene	ND		ug/l	24.5	2.95	50
Indeno(1,2,3-cd)pyrene	ND		ug/l	24.5	4.39	50
Dibenz(a,h)anthracene	ND		ug/l	24.5	3.14	50
Benzo(g,h,i)perylene	ND		ug/l	24.5	5.34	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	74		30-130
2-Fluorobiphenyl	76		30-130
Terphenyl-d14	81		30-130



**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270E  
Analytical Date: 09/14/23 16:15  
Analyst: DB

Extraction Method: EPA 3510C  
Extraction Date: 09/12/23 13:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Mansfield Lab for sample(s): 01-07 Batch: WG1826460-1					
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:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270E  
Analytical Date: 09/14/23 16:15  
Analyst: DB

Extraction Method: EPA 3510C  
Extraction Date: 09/12/23 13:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Mansfield Lab for sample(s): 01-07 Batch: WG1826460-1					
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:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270E  
Analytical Date: 09/14/23 16:15  
Analyst: DB

Extraction Method: EPA 3510C  
Extraction Date: 09/12/23 13:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Mansfield Lab for sample(s): 01-07 Batch: WG1826460-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		15-115
Phenol-d5	29		15-115
Nitrobenzene-d5	84		30-130
2-Fluorobiphenyl	76		30-130
2,4,6-Tribromophenol	93		15-115
Terphenyl-d14	93		30-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: STEEL WINDS

Project Number: 03.0033579.16

Lab Number: L2351364

Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Mansfield Lab Associated sample(s): 01-07 Batch: WG1826460-2 WG1826460-3								
bis(2-Chloroethyl)ether	62		63		40-140	2		20
1,3-Dichlorobenzene	45		45		40-140	0		20
1,4-Dichlorobenzene	46		46		40-140	0		20
1,2-Dichlorobenzene	47		47		40-140	0		20
bis(2-chloroisopropyl)ether	61		64		40-140	5		20
Acetophenone	68		72		40-140	6		20
Hexachloroethane	44		44		10-97	0		20
Nitrobenzene	66		69		40-140	4		20
Isophorone	71		76		40-140	7		20
bis(2-Chloroethoxy)methane	67		72		40-140	7		20
1,2,4-Trichlorobenzene	48		48		40-140	0		20
Naphthalene	58		59		40-140	2		20
4-Chloroaniline	72		77		40-140	7		20
Hexachlorobutadiene	45		46		40-140	2		20
2-Methylnaphthalene	57		59		40-140	3		20
1,2,4,5-Tetrachlorobenzene	52		54		40-140	4		20
Hexachlorocyclopentadiene	40		42		10-109	5		20
Biphenyl	66		71		40-140	7		20
2-Chloronaphthalene	54		55		40-140	2		20
2-Nitroaniline	91		93		40-140	2		20
Acenaphthylene	71		73		40-140	3		20
Dimethylphthalate	78		79		40-140	1		20
2,6-Dinitrotoluene	81		82		40-140	1		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: STEEL WINDS

Lab Number: L2351364

Project Number: 03.0033579.16

Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Mansfield Lab Associated sample(s): 01-07 Batch: WG1826460-2 WG1826460-3								
Acenaphthene	67		70		40-140	4		20
3-Nitroaniline	88		89		40-140	1		20
Dibenzofuran	71		72		40-140	1		20
2,4-Dinitrotoluene	83		84		40-140	1		20
Fluorene	77		78		40-140	1		20
Diethylphthalate	79		82		40-140	4		20
4-Nitroaniline	97		99		40-140	2		20
n-Nitrosodiphenylamine	56		60		40-140	7		20
Hexachlorobenzene	73		76		40-140	4		20
Phenanthrene	81		84		40-140	4		20
Anthracene	84		88		40-140	5		20
Carbazole	79		82		40-140	4		20
Di-n-butylphthalate	82		84		40-140	2		20
Fluoranthene	87		91		40-140	4		20
Pyrene	91		97		40-140	6		20
Butylbenzylphthalate	89		93		40-140	4		20
3,3'-Dichlorobenzidine	64		71		40-140	10		20
Benz(a)anthracene	93		96		40-140	3		20
Chrysene	89		93		40-140	4		20
bis(2-Ethylhexyl)phthalate	82		86		40-140	5		20
Di-n-octylphthalate	74		78		40-140	5		20
Benzo(b)fluoranthene	87		92		40-140	6		20
Benzo(k)fluoranthene	85		87		40-140	2		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: STEEL WINDS

Project Number: 03.0033579.16

Lab Number: L2351364

Report Date: 10/13/23

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Semivolatile Organics by GC/MS - Mansfield Lab Associated sample(s): 01-07 Batch: WG1826460-2 WG1826460-3								
Benzo(a)pyrene	86		89		40-140	3		20
Indeno(1,2,3-cd)pyrene	92		97		40-140	5		20
Dibenz(a,h)anthracene	87		90		40-140	3		20
Benzo(g,h,i)perylene	91		94		40-140	3		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
2-Fluorophenol	39		41		15-115
Phenol-d5	28		27		15-115
Nitrobenzene-d5	77		81		30-130
2-Fluorobiphenyl	77		82		30-130
2,4,6-Tribromophenol	91		96		15-115
Terphenyl-d14	94		97		30-130

**Project Name:** STEEL WINDS**Lab Number:** L2351364**Project Number:** 03.0033579.16**Report Date:** 10/13/23**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(*)
L2351364-01A	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-01B	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-01C	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-01D	Amber 1000ml unpreserved	A	7	7	2.1	Y	Absent		A2-SVOC-8270(7)
L2351364-01E	Amber 1000ml unpreserved	A	7	7	2.1	Y	Absent		A2-SVOC-8270(7)
L2351364-02A	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-02B	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-02C	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-02D	Amber 1000ml unpreserved	A	7	7	2.1	Y	Absent		A2-SVOC-8270(7)
L2351364-02E	Amber 1000ml unpreserved	A	7	7	2.1	Y	Absent		A2-SVOC-8270(7)
L2351364-03A	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-03B	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-03C	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-03D	Amber 1000ml unpreserved	A	7	7	2.1	Y	Absent		A2-SVOC-8270(7)
L2351364-03E	Amber 1000ml unpreserved	A	7	7	2.1	Y	Absent		A2-SVOC-8270(7)
L2351364-04A	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-04B	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-04C	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-04D	Amber 1000ml unpreserved	A	7	7	2.1	Y	Absent		A2-SVOC-8270(7)
L2351364-04E	Amber 1000ml unpreserved	A	7	7	2.1	Y	Absent		A2-SVOC-8270(7)
L2351364-05A	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-05B	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-05C	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

Serial\_No:10132317:47  
**Lab Number:** L2351364  
**Report Date:** 10/13/23

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2351364-05D	Amber 1000ml unpreserved	A	7	7	2.1	Y	Absent		A2-SVOC-8270(7)
L2351364-05E	Amber 1000ml unpreserved	A	7	7	2.1	Y	Absent		A2-SVOC-8270(7)
L2351364-06A	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-06B	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-06C	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-06D	Amber 1000ml unpreserved	A	7	7	2.1	Y	Absent		A2-SVOC-8270(7)
L2351364-06E	Amber 1000ml unpreserved	A	7	7	2.1	Y	Absent		A2-SVOC-8270(7)
L2351364-07A	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-07B	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-07C	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)
L2351364-07D	Amber 1000ml unpreserved	A	7	7	2.1	Y	Absent		A2-SVOC-8270(7)
L2351364-07E	Amber 1000ml unpreserved	A	7	7	2.1	Y	Absent		A2-SVOC-8270(7)
L2351364-08A	Vial HCl preserved	A	NA		2.1	Y	Absent		NYCP51-8260(14)



**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

## 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:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

### 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:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

#### Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- 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:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351364  
**Report Date:** 10/13/23

## 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 624.1:** m/p-xylene, o-xylene, Naphthalene

**EPA 625.1:** alpha-Terpineol

**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

### Mansfield Facility

**SM 2540D:** TSS.

**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 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).

**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.

 <b>NEW YORK CHAIN OF CUSTODY</b>	<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab <b>9/16/23</b>	ALPHA Job # <b>L2351364</b>					
		1 of 1							
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	<b>Project Information</b>		<b>Deliverables</b>	<b>Billing Information</b>				
<b>Client Information</b>		Project Name: <b>STEEL WINDS</b>		<input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQulS (1 File) <input checked="" type="checkbox"/> EQulS (4 File) <input type="checkbox"/> Other	<input type="checkbox"/> Same as Client Info PO #				
Client: <b>GZA</b>		Project Location: <b>Lackawanna, NY</b>		<b>Regulatory Requirement</b>					
Address: <b>300 Pearl St. Suite 700</b>		Project # <b>03.0033579.16</b>		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:					
Buffalo NY 14202		(Use Project name as Project #) <input type="checkbox"/>							
Phone: <b>(716) 517-5208</b>		Project Manager: <b>Daniel Troy</b>							
Fax:		ALPHAQuote #:							
Email: <b>Daniel.Troy@GZA.COM</b>		Turn-Around Time		<b>ANALYSIS</b>					
		Standard <input checked="" type="checkbox"/> Due Date:							
These samples have been previously analyzed by Alpha <input type="checkbox"/>		Rush (only if pre approved) <input type="checkbox"/> # of Days:		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below) Sample Specific Comments					
Other project specific requirements/comments:									
Please specify Metals or TAL.									
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date      Time	Sample Matrix	Sampler's Initials	8260 STARS	8270 PAH/SUM	Total Bottles		
<b>51364 -01</b>	<b>WT1-05-090523</b>	<b>9/5/23 7:50</b>	<b>GW</b>	<b>PSN</b>	<b>X</b>	<b>X</b>			
<b>-02</b>	<b>MWN-01-090523</b>				<b>X</b>	<b>X</b>			
<b>-03</b>	<b>WT1-04-090523</b>				<b>V</b>	<b>X</b>			
<b>-04</b>	<b>BCP-ORC-1-090523</b>				<b>X</b>	<b>X</b>			
<b>-05</b>	<b>WT1-02-090523</b>				<b>X</b>	<b>X</b>			
<b>-06</b>	<b>MWN-02-090523</b>				<b>X</b>	<b>X</b>			
<b>-07</b>	<b>MWN-01B-090523</b>				<b>X</b>	<b>X</b>			
<b>-08</b>	<b>TRIP BLANK-1</b>				<b>X</b>				
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 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		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.)	
						Preservative			
		Relinquished By:		Date/Time		Received By:		Date/Time	
		<i>[Signature]</i>		<b>9/5/23 15:05</b>		<i>[Signature]</i>		<b>9/5/23 15:05</b>	
		<i>[Signature]</i>		<b>9/5/23 15:05</b>		<i>[Signature]</i>		<b>9/16/23 00:22</b>	





## ANALYTICAL REPORT

Lab Number:	L2351602
Client:	GZA GeoEnvironmental of New York 300 Pearl Street Suite 700 Buffalo, NY 14202
ATTN:	Dan Troy
Phone:	(716) 844-7050
Project Name:	STEEL WINDS
Project Number:	03.0033579.16
Report Date:	10/13/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

---

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



**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2351602-01	MWN-02B-090623	WATER	LACKAWANNA, NY	09/06/23 08:55	09/06/23
L2351602-02	MWN-02D-090623	WATER	LACKAWANNA, NY	09/06/23 09:50	09/06/23
L2351602-03	MWN-03-090623	WATER	LACKAWANNA, NY	09/06/23 10:45	09/06/23
L2351602-04	MWN-03B-090623	WATER	LACKAWANNA, NY	09/06/23 11:55	09/06/23
L2351602-05	MWN-03D-090623	WATER	LACKAWANNA, NY	09/06/23 12:55	09/06/23
L2351602-06	MWN-04-090623	WATER	LACKAWANNA, NY	09/06/23 13:30	09/06/23
L2351602-07	TRIP BLANK-2	WATER	LACKAWANNA, NY	09/06/23 00:00	09/06/23



**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

### 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:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

### Case Narrative (continued)

#### Report Submission

October 13, 2023: This final report includes the results of all requested analyses.

September 20, 2023: This is a preliminary report.

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

#### Volatile Organics

L2351602-07: Headspace was noted in the sample container utilized for analysis.

#### Dissolved Metals

L2351602-04: The sample has elevated detection limits for all elements due to the dilution required by the sample matrix.

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: 10/13/23

# ORGANICS

# VOLATILES

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351602-01 D  
 Client ID: MWN-02B-090623  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/06/23 08:55  
 Date Received: 09/06/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 09/14/23 16:09  
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Benzene	67		ug/l	1.2	0.40	2.5
Toluene	12		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	9.2		ug/l	6.2	1.8	2.5
o-Xylene	13		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	400		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	2.5	J	ug/l	6.2	1.8	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	98		70-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351602-03  
 Client ID: MWN-03-090623  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/06/23 10:45  
 Date Received: 09/06/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 09/14/23 15:03  
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Benzene	8.3		ug/l	0.50	0.16	1
Toluene	2.0	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	1.2	J	ug/l	2.5	0.70	1
o-Xylene	1.2	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	0.84	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	93		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	103		70-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351602-05  
 Client ID: MWN-03D-090623  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/06/23 12:55  
 Date Received: 09/06/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 09/14/23 15:25  
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	89		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	101		70-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351602-06  
 Client ID: MWN-04-090623  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/06/23 13:30  
 Date Received: 09/06/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 09/14/23 15:47  
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Benzene	0.48	J	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	12		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	93		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	102		70-130



**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351602-07  
 Client ID: TRIP BLANK-2  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/06/23 00:00  
 Date Received: 09/06/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 09/14/23 13:34  
 Analyst: MAG

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	92		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	103		70-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 09/14/23 08:20  
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03,05-07 Batch: WG1827500-5					
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	92		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	102		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: STEEL WINDS

Project Number: 03.0033579.16

Lab Number: L2351602

Report Date: 10/13/23

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03,05-07 Batch: WG1827500-3 WG1827500-4									
Benzene	100		98		70-130		2		20
Toluene	100		100		70-130		0		20
Ethylbenzene	99		93		70-130		6		20
Methyl tert butyl ether	84		83		63-130		1		20
p/m-Xylene	100		90		70-130		11		20
o-Xylene	95		90		70-130		5		20
n-Butylbenzene	97		88		53-136		10		20
sec-Butylbenzene	99		91		70-130		8		20
tert-Butylbenzene	100		93		70-130		7		20
Isopropylbenzene	100		92		70-130		8		20
p-Isopropyltoluene	99		92		70-130		7		20
Naphthalene	94		91		70-130		3		20
n-Propylbenzene	98		93		69-130		5		20
1,3,5-Trimethylbenzene	100		94		64-130		6		20
1,2,4-Trimethylbenzene	100		93		70-130		7		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	93		88		70-130
Toluene-d8	103		102		70-130
4-Bromofluorobenzene	101		102		70-130
Dibromofluoromethane	99		99		70-130

# SEMIVOLATILES

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

**Lab ID:** L2351602-01 D  
**Client ID:** MWN-02B-090623  
**Sample Location:** LACKAWANNA, NY

**Date Collected:** 09/06/23 08:55  
**Date Received:** 09/06/23  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270E  
**Analytical Date:** 09/20/23 18:01  
**Analyst:** DB

**Extraction Method:** EPA 3510C  
**Extraction Date:** 09/12/23 13:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
bis(2-Chloroethyl)ether	ND		ug/l	2.27	0.422	5
1,3-Dichlorobenzene	ND		ug/l	2.27	0.356	5
1,4-Dichlorobenzene	ND		ug/l	2.27	0.376	5
1,2-Dichlorobenzene	ND		ug/l	2.27	0.309	5
Benzyl alcohol	ND		ug/l	2.27	0.559	5
bis(2-chloroisopropyl)ether	ND		ug/l	2.27	0.491	5
Acetophenone	ND		ug/l	4.54	0.941	5
Hexachloroethane	ND		ug/l	2.27	0.464	5
Nitrobenzene	ND		ug/l	2.27	0.464	5
Isophorone	ND		ug/l	2.27	0.573	5
bis(2-Chloroethoxy)methane	ND		ug/l	2.27	0.388	5
1,2,4-Trichlorobenzene	ND		ug/l	2.27	0.437	5
Naphthalene	194		ug/l	2.27	0.398	5
4-Chloroaniline	ND		ug/l	2.27	0.582	5
Hexachlorobutadiene	ND		ug/l	2.27	0.389	5
2-Methylnaphthalene	7.70		ug/l	2.27	0.414	5
1,2,4,5-Tetrachlorobenzene	ND		ug/l	2.27	0.362	5
Hexachlorocyclopentadiene	ND		ug/l	2.27	0.695	5
Biphenyl	1.31	J	ug/l	2.27	0.504	5
2-Chloronaphthalene	ND		ug/l	2.27	0.409	5
2-Nitroaniline	ND		ug/l	2.27	0.627	5
Acenaphthylene	4.03		ug/l	2.27	0.509	5
Dimethylphthalate	ND		ug/l	2.27	0.532	5
2,6-Dinitrotoluene	ND		ug/l	2.27	0.764	5
Acenaphthene	7.02		ug/l	2.27	0.434	5
3-Nitroaniline	ND		ug/l	2.27	0.504	5
Dibenzofuran	5.42		ug/l	2.27	0.414	5
2,4-Dinitrotoluene	ND		ug/l	2.27	0.741	5

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351602-01 D  
 Client ID: MWN-02B-090623  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/06/23 08:55  
 Date Received: 09/06/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
Fluorene	9.24		ug/l	2.27	0.473	5
Diethylphthalate	ND		ug/l	2.27	0.818	5
4-Nitroaniline	ND		ug/l	2.27	0.509	5
n-Nitrosodiphenylamine	0.477	J	ug/l	2.27	0.327	5
Hexachlorobenzene	ND		ug/l	2.27	0.554	5
Phenanthrene	14.9		ug/l	2.27	0.504	5
Anthracene	2.41		ug/l	2.27	0.623	5
Carbazole	20.0		ug/l	2.27	0.650	5
Di-n-butylphthalate	ND		ug/l	2.27	0.453	5
Fluoranthene	3.62		ug/l	2.27	0.709	5
Pyrene	2.35		ug/l	2.27	0.773	5
Butylbenzylphthalate	ND		ug/l	2.27	0.385	5
3,3'-Dichlorobenzidine	ND		ug/l	2.27	0.877	5
Benzo(a)anthracene	ND		ug/l	2.27	0.836	5
Chrysene	ND		ug/l	2.27	0.645	5
bis(2-Ethylhexyl)phthalate	ND		ug/l	2.27	0.368	5
Di-n-octylphthalate	ND		ug/l	4.54	0.357	5
Benzo(b)fluoranthene	ND		ug/l	2.27	0.298	5
Benzo(k)fluoranthene	ND		ug/l	2.27	0.732	5
Benzo(a)pyrene	ND		ug/l	2.27	0.274	5
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.27	0.407	5
Dibenz(a,h)anthracene	ND		ug/l	2.27	0.291	5
Benzo(g,h,i)perylene	ND		ug/l	2.27	0.495	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	88		30-130
2-Fluorobiphenyl	88		30-130
Terphenyl-d14	96		30-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351602-03  
 Client ID: MWN-03-090623  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/06/23 10:45  
 Date Received: 09/06/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270E  
 Analytical Date: 09/14/23 18:42  
 Analyst: DB

Extraction Method: EPA 3510C  
 Extraction Date: 09/12/23 13:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
bis(2-Chloroethyl)ether	ND		ug/l	0.485	0.090	1
1,3-Dichlorobenzene	ND		ug/l	0.485	0.076	1
1,4-Dichlorobenzene	ND		ug/l	0.485	0.080	1
1,2-Dichlorobenzene	0.112	J	ug/l	0.485	0.066	1
Benzyl alcohol	ND		ug/l	0.485	0.119	1
bis(2-chloroisopropyl)ether	ND		ug/l	0.485	0.105	1
Acetophenone	ND		ug/l	0.971	0.201	1
Hexachloroethane	ND		ug/l	0.485	0.099	1
Nitrobenzene	ND		ug/l	0.485	0.099	1
Isophorone	ND		ug/l	0.485	0.122	1
bis(2-Chloroethoxy)methane	ND		ug/l	0.485	0.083	1
1,2,4-Trichlorobenzene	ND		ug/l	0.485	0.093	1
Naphthalene	13.8		ug/l	0.485	0.085	1
4-Chloroaniline	ND		ug/l	0.485	0.124	1
Hexachlorobutadiene	ND		ug/l	0.485	0.083	1
2-Methylnaphthalene	2.55		ug/l	0.485	0.088	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.485	0.077	1
Hexachlorocyclopentadiene	ND		ug/l	0.485	0.148	1
Biphenyl	0.617		ug/l	0.485	0.108	1
2-Chloronaphthalene	ND		ug/l	0.485	0.087	1
2-Nitroaniline	ND		ug/l	0.485	0.134	1
Acenaphthylene	1.29		ug/l	0.485	0.109	1
Dimethylphthalate	ND		ug/l	0.485	0.114	1
2,6-Dinitrotoluene	ND		ug/l	0.485	0.163	1
Acenaphthene	1.33		ug/l	0.485	0.093	1
3-Nitroaniline	ND		ug/l	0.485	0.108	1
Dibenzofuran	2.37		ug/l	0.485	0.088	1
2,4-Dinitrotoluene	ND		ug/l	0.485	0.158	1

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

**Lab ID:** L2351602-03  
**Client ID:** MWN-03-090623  
**Sample Location:** LACKAWANNA, NY

**Date Collected:** 09/06/23 10:45  
**Date Received:** 09/06/23  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
Fluorene	4.28		ug/l	0.485	0.101	1
Diethylphthalate	ND		ug/l	0.485	0.175	1
4-Nitroaniline	ND		ug/l	0.485	0.109	1
n-Nitrosodiphenylamine	0.097	J	ug/l	0.485	0.070	1
Hexachlorobenzene	ND		ug/l	0.485	0.118	1
Phenanthrene	7.86		ug/l	0.485	0.108	1
Anthracene	0.848		ug/l	0.485	0.133	1
Carbazole	3.40		ug/l	0.485	0.139	1
Di-n-butylphthalate	ND		ug/l	0.485	0.097	1
Fluoranthene	2.56		ug/l	0.485	0.151	1
Pyrene	1.69		ug/l	0.485	0.165	1
Butylbenzylphthalate	ND		ug/l	0.485	0.082	1
3,3'-Dichlorobenzidine	ND		ug/l	0.485	0.187	1
Benzo(a)anthracene	ND		ug/l	0.485	0.179	1
Chrysene	ND		ug/l	0.485	0.138	1
bis(2-Ethylhexyl)phthalate	ND		ug/l	0.485	0.079	1
Di-n-octylphthalate	ND		ug/l	0.971	0.076	1
Benzo(b)fluoranthene	ND		ug/l	0.485	0.064	1
Benzo(k)fluoranthene	ND		ug/l	0.485	0.156	1
Benzo(a)pyrene	ND		ug/l	0.485	0.058	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.485	0.087	1
Dibenz(a,h)anthracene	ND		ug/l	0.485	0.062	1
Benzo(g,h,i)perylene	ND		ug/l	0.485	0.106	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	73		30-130
2-Fluorobiphenyl	75		30-130
Terphenyl-d14	93		30-130



**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351602-05  
 Client ID: MWN-03D-090623  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/06/23 12:55  
 Date Received: 09/06/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270E  
 Analytical Date: 09/14/23 19:12  
 Analyst: DB

Extraction Method: EPA 3510C  
 Extraction Date: 09/12/23 13:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
bis(2-Chloroethyl)ether	ND		ug/l	0.485	0.090	1
1,3-Dichlorobenzene	ND		ug/l	0.485	0.076	1
1,4-Dichlorobenzene	ND		ug/l	0.485	0.080	1
1,2-Dichlorobenzene	ND		ug/l	0.485	0.066	1
Benzyl alcohol	ND		ug/l	0.485	0.119	1
bis(2-chloroisopropyl)ether	ND		ug/l	0.485	0.105	1
Acetophenone	ND		ug/l	0.971	0.201	1
Hexachloroethane	ND		ug/l	0.485	0.099	1
Nitrobenzene	ND		ug/l	0.485	0.099	1
Isophorone	ND		ug/l	0.485	0.122	1
bis(2-Chloroethoxy)methane	ND		ug/l	0.485	0.083	1
1,2,4-Trichlorobenzene	ND		ug/l	0.485	0.093	1
Naphthalene	ND		ug/l	0.485	0.085	1
4-Chloroaniline	ND		ug/l	0.485	0.124	1
Hexachlorobutadiene	ND		ug/l	0.485	0.083	1
2-Methylnaphthalene	ND		ug/l	0.485	0.088	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.485	0.077	1
Hexachlorocyclopentadiene	ND		ug/l	0.485	0.148	1
Biphenyl	ND		ug/l	0.485	0.108	1
2-Chloronaphthalene	ND		ug/l	0.485	0.087	1
2-Nitroaniline	ND		ug/l	0.485	0.134	1
Acenaphthylene	ND		ug/l	0.485	0.109	1
Dimethylphthalate	ND		ug/l	0.485	0.114	1
2,6-Dinitrotoluene	ND		ug/l	0.485	0.163	1
Acenaphthene	2.00		ug/l	0.485	0.093	1
3-Nitroaniline	ND		ug/l	0.485	0.108	1
Dibenzofuran	ND		ug/l	0.485	0.088	1
2,4-Dinitrotoluene	ND		ug/l	0.485	0.158	1

Project Name: STEEL WINDS

Lab Number: L2351602

Project Number: 03.0033579.16

Report Date: 10/13/23

## SAMPLE RESULTS

Lab ID: L2351602-05  
 Client ID: MWN-03D-090623  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/06/23 12:55  
 Date Received: 09/06/23  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Mansfield Lab						
Fluorene	0.686		ug/l	0.485	0.101	1
Diethylphthalate	ND		ug/l	0.485	0.175	1
4-Nitroaniline	ND		ug/l	0.485	0.109	1
n-Nitrosodiphenylamine	0.358	J	ug/l	0.485	0.070	1
Hexachlorobenzene	ND		ug/l	0.485	0.118	1
Phenanthrene	1.77		ug/l	0.485	0.108	1
Anthracene	0.347	J	ug/l	0.485	0.133	1
Carbazole	ND		ug/l	0.485	0.139	1
Di-n-butylphthalate	ND		ug/l	0.485	0.097	1
Fluoranthene	0.313	J	ug/l	0.485	0.151	1
Pyrene	0.208	J	ug/l	0.485	0.165	1
Butylbenzylphthalate	ND		ug/l	0.485	0.082	1
3,3'-Dichlorobenzidine	ND		ug/l	0.485	0.187	1
Benzo(a)anthracene	ND		ug/l	0.485	0.179	1
Chrysene	ND		ug/l	0.485	0.138	1
bis(2-Ethylhexyl)phthalate	0.450	J	ug/l	0.485	0.079	1
Di-n-octylphthalate	ND		ug/l	0.971	0.076	1
Benzo(b)fluoranthene	ND		ug/l	0.485	0.064	1
Benzo(k)fluoranthene	ND		ug/l	0.485	0.156	1
Benzo(a)pyrene	ND		ug/l	0.485	0.058	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.485	0.087	1
Dibenz(a,h)anthracene	ND		ug/l	0.485	0.062	1
Benzo(g,h,i)perylene	ND		ug/l	0.485	0.106	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	70		30-130
2-Fluorobiphenyl	71		30-130
Terphenyl-d14	61		30-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351602-06  
 Client ID: MWN-04-090623  
 Sample Location: LACKAWANNA, NY

Date Collected: 09/06/23 13:30  
 Date Received: 09/06/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270E  
 Analytical Date: 09/20/23 18:31  
 Analyst: DB

Extraction Method: EPA 3510C  
 Extraction Date: 09/12/23 13:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
bis(2-Chloroethyl)ether	ND		ug/l	0.454	0.084	1
1,3-Dichlorobenzene	ND		ug/l	0.454	0.071	1
1,4-Dichlorobenzene	ND		ug/l	0.454	0.075	1
1,2-Dichlorobenzene	ND		ug/l	0.454	0.062	1
Benzyl alcohol	ND		ug/l	0.454	0.112	1
bis(2-chloroisopropyl)ether	ND		ug/l	0.454	0.098	1
Acetophenone	0.674	J	ug/l	0.909	0.188	1
Hexachloroethane	ND		ug/l	0.454	0.093	1
Nitrobenzene	ND		ug/l	0.454	0.093	1
Isophorone	ND		ug/l	0.454	0.114	1
bis(2-Chloroethoxy)methane	ND		ug/l	0.454	0.078	1
1,2,4-Trichlorobenzene	ND		ug/l	0.454	0.087	1
Naphthalene	6.09		ug/l	0.454	0.080	1
4-Chloroaniline	ND		ug/l	0.454	0.116	1
Hexachlorobutadiene	ND		ug/l	0.454	0.078	1
2-Methylnaphthalene	0.900		ug/l	0.454	0.083	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	0.454	0.072	1
Hexachlorocyclopentadiene	ND		ug/l	0.454	0.139	1
Biphenyl	0.167	J	ug/l	0.454	0.101	1
2-Chloronaphthalene	ND		ug/l	0.454	0.082	1
2-Nitroaniline	ND		ug/l	0.454	0.125	1
Acenaphthylene	ND		ug/l	0.454	0.102	1
Dimethylphthalate	ND		ug/l	0.454	0.106	1
2,6-Dinitrotoluene	1.13		ug/l	0.454	0.153	1
Acenaphthene	2.06		ug/l	0.454	0.087	1
3-Nitroaniline	ND		ug/l	0.454	0.101	1
Dibenzofuran	0.780		ug/l	0.454	0.083	1
2,4-Dinitrotoluene	ND		ug/l	0.454	0.148	1

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

**SAMPLE RESULTS**

**Lab ID:** L2351602-06  
**Client ID:** MWN-04-090623  
**Sample Location:** LACKAWANNA, NY

**Date Collected:** 09/06/23 13:30  
**Date Received:** 09/06/23  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Mansfield Lab</b>						
Fluorene	1.33		ug/l	0.454	0.095	1
Diethylphthalate	ND		ug/l	0.454	0.164	1
4-Nitroaniline	ND		ug/l	0.454	0.102	1
n-Nitrosodiphenylamine	ND		ug/l	0.454	0.065	1
Hexachlorobenzene	ND		ug/l	0.454	0.111	1
Phenanthrene	1.63		ug/l	0.454	0.101	1
Anthracene	0.334	J	ug/l	0.454	0.124	1
Carbazole	2.58		ug/l	0.454	0.130	1
Di-n-butylphthalate	ND		ug/l	0.454	0.091	1
Fluoranthene	0.405	J	ug/l	0.454	0.142	1
Pyrene	1.16		ug/l	0.454	0.154	1
Butylbenzylphthalate	ND		ug/l	0.454	0.077	1
3,3'-Dichlorobenzidine	ND		ug/l	0.454	0.175	1
Benzo(a)anthracene	ND		ug/l	0.454	0.167	1
Chrysene	ND		ug/l	0.454	0.129	1
bis(2-Ethylhexyl)phthalate	0.264	J	ug/l	0.454	0.074	1
Di-n-octylphthalate	ND		ug/l	0.909	0.071	1
Benzo(b)fluoranthene	ND		ug/l	0.454	0.060	1
Benzo(k)fluoranthene	ND		ug/l	0.454	0.146	1
Benzo(a)pyrene	ND		ug/l	0.454	0.055	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.454	0.081	1
Dibenz(a,h)anthracene	ND		ug/l	0.454	0.058	1
Benzo(g,h,i)perylene	ND		ug/l	0.454	0.099	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	80		30-130
2-Fluorobiphenyl	80		30-130
Terphenyl-d14	94		30-130

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270E  
Analytical Date: 09/14/23 16:15  
Analyst: DB

Extraction Method: EPA 3510C  
Extraction Date: 09/12/23 13:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatle Organics by GC/MS - Mansfield Lab for sample(s): 01,03,05-06 Batch: WG1826460-1					
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:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270E  
Analytical Date: 09/14/23 16:15  
Analyst: DB

Extraction Method: EPA 3510C  
Extraction Date: 09/12/23 13:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Mansfield Lab for sample(s): 01,03,05-06 Batch: WG1826460-1					
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:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270E  
Analytical Date: 09/14/23 16:15  
Analyst: DB

Extraction Method: EPA 3510C  
Extraction Date: 09/12/23 13:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Mansfield Lab for sample(s): 01,03,05-06 Batch: WG1826460-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		15-115
Phenol-d5	29		15-115
Nitrobenzene-d5	84		30-130
2-Fluorobiphenyl	76		30-130
2,4,6-Tribromophenol	93		15-115
Terphenyl-d14	93		30-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: STEEL WINDS

Lab Number: L2351602

Project Number: 03.0033579.16

Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Mansfield Lab Associated sample(s): 01,03,05-06 Batch: WG1826460-2 WG1826460-3								
bis(2-Chloroethyl)ether	62		63		40-140	2		20
1,3-Dichlorobenzene	45		45		40-140	0		20
1,4-Dichlorobenzene	46		46		40-140	0		20
1,2-Dichlorobenzene	47		47		40-140	0		20
bis(2-chloroisopropyl)ether	61		64		40-140	5		20
Acetophenone	68		72		40-140	6		20
Hexachloroethane	44		44		10-97	0		20
Nitrobenzene	66		69		40-140	4		20
Isophorone	71		76		40-140	7		20
bis(2-Chloroethoxy)methane	67		72		40-140	7		20
1,2,4-Trichlorobenzene	48		48		40-140	0		20
Naphthalene	58		59		40-140	2		20
4-Chloroaniline	72		77		40-140	7		20
Hexachlorobutadiene	45		46		40-140	2		20
2-Methylnaphthalene	57		59		40-140	3		20
1,2,4,5-Tetrachlorobenzene	52		54		40-140	4		20
Hexachlorocyclopentadiene	40		42		10-109	5		20
Biphenyl	66		71		40-140	7		20
2-Chloronaphthalene	54		55		40-140	2		20
2-Nitroaniline	91		93		40-140	2		20
Acenaphthylene	71		73		40-140	3		20
Dimethylphthalate	78		79		40-140	1		20
2,6-Dinitrotoluene	81		82		40-140	1		20



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: STEEL WINDS

Lab Number: L2351602

Project Number: 03.0033579.16

Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Mansfield Lab Associated sample(s): 01,03,05-06 Batch: WG1826460-2 WG1826460-3								
Acenaphthene	67		70		40-140	4		20
3-Nitroaniline	88		89		40-140	1		20
Dibenzofuran	71		72		40-140	1		20
2,4-Dinitrotoluene	83		84		40-140	1		20
Fluorene	77		78		40-140	1		20
Diethylphthalate	79		82		40-140	4		20
4-Nitroaniline	97		99		40-140	2		20
n-Nitrosodiphenylamine	56		60		40-140	7		20
Hexachlorobenzene	73		76		40-140	4		20
Phenanthrene	81		84		40-140	4		20
Anthracene	84		88		40-140	5		20
Carbazole	79		82		40-140	4		20
Di-n-butylphthalate	82		84		40-140	2		20
Fluoranthene	87		91		40-140	4		20
Pyrene	91		97		40-140	6		20
Butylbenzylphthalate	89		93		40-140	4		20
3,3'-Dichlorobenzidine	64		71		40-140	10		20
Benz(a)anthracene	93		96		40-140	3		20
Chrysene	89		93		40-140	4		20
bis(2-Ethylhexyl)phthalate	82		86		40-140	5		20
Di-n-octylphthalate	74		78		40-140	5		20
Benzo(b)fluoranthene	87		92		40-140	6		20
Benzo(k)fluoranthene	85		87		40-140	2		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: STEEL WINDS

Project Number: 03.0033579.16

Lab Number: L2351602

Report Date: 10/13/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Mansfield Lab Associated sample(s): 01,03,05-06 Batch: WG1826460-2 WG1826460-3								
Benzo(a)pyrene	86		89		40-140	3		20
Indeno(1,2,3-cd)pyrene	92		97		40-140	5		20
Dibenz(a,h)anthracene	87		90		40-140	3		20
Benzo(g,h,i)perylene	91		94		40-140	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	39		41		15-115
Phenol-d5	28		27		15-115
Nitrobenzene-d5	77		81		30-130
2-Fluorobiphenyl	77		82		30-130
2,4,6-Tribromophenol	91		96		15-115
Terphenyl-d14	94		97		30-130

## METALS

**Project Name:** STEEL WINDS

**Lab Number:** L2351602

**Project Number:** 03.0033579.16

**Report Date:** 10/13/23

**SAMPLE RESULTS**

Lab ID: L2351602-01

Date Collected: 09/06/23 08:55

Client ID: MWN-02B-090623

Date Received: 09/06/23

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
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	0.02674		mg/l	0.00050	0.00016	1	09/08/23 09:55	09/13/23 18:37	EPA 3005A	1,6020B	WKP



**Project Name:** STEEL WINDS**Lab Number:** L2351602**Project Number:** 03.0033579.16**Report Date:** 10/13/23**SAMPLE RESULTS**

Lab ID: L2351602-02

Date Collected: 09/06/23 09:50

Client ID: MWN-02D-090623

Date Received: 09/06/23

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
<b>Total Metals - Mansfield Lab</b>											
Arsenic, Total	0.00075		mg/l	0.00050	0.00016	1	09/08/23 09:55	09/13/23 18:06	EPA 3005A	1,6020B	WKP
Barium, Total	0.9583		mg/l	0.00050	0.00017	1	09/08/23 09:55	09/13/23 18:06	EPA 3005A	1,6020B	WKP
Chromium, Total	0.00037	J	mg/l	0.00100	0.00017	1	09/08/23 09:55	09/13/23 18:06	EPA 3005A	1,6020B	WKP



Project Name: STEEL WINDS

Lab Number: L2351602

Project Number: 03.0033579.16

Report Date: 10/13/23

## SAMPLE RESULTS

Lab ID: L2351602-04

Date Collected: 09/06/23 11:55

Client ID: MWN-03B-090623

Date Received: 09/06/23

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
<b>Dissolved Metals - Mansfield Lab</b>											
Arsenic, Dissolved	0.00378	J	mg/l	0.00500	0.00165	10	09/11/23 11:50	09/14/23 09:45	EPA 3005A	1,6020B	EJF
Barium, Dissolved	1.388		mg/l	0.00500	0.00173	10	09/11/23 11:50	09/14/23 09:45	EPA 3005A	1,6020B	EJF
Chromium, Dissolved	ND		mg/l	0.01000	0.00178	10	09/11/23 11:50	09/14/23 09:45	EPA 3005A	1,6020B	EJF
Manganese, Dissolved	0.05038		mg/l	0.01000	0.00440	10	09/11/23 11:50	09/14/23 09:45	EPA 3005A	1,6020B	EJF

**Project Name:** STEEL WINDS**Lab Number:** L2351602**Project Number:** 03.0033579.16**Report Date:** 10/13/23**SAMPLE RESULTS**

Lab ID: L2351602-05

Date Collected: 09/06/23 12:55

Client ID: MWN-03D-090623

Date Received: 09/06/23

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
<b>Dissolved Metals - Mansfield Lab</b>											
Barium, Dissolved	0.9672		mg/l	0.00050	0.00017	1	09/11/23 11:50	09/14/23 00:30	EPA 3005A	1,6020B	WKP
Manganese, Dissolved	0.3512		mg/l	0.00100	0.00044	1	09/11/23 11:50	09/14/23 00:30	EPA 3005A	1,6020B	WKP



Project Name: STEEL WINDS

Lab Number: L2351602

Project Number: 03.0033579.16

Report Date: 10/13/23

## 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): 01-02 Batch: WG1824837-1									
Arsenic, Total	ND	mg/l	0.00050	0.00016	1	09/08/23 09:55	09/13/23 17:31	1,6020B	WKP
Barium, Total	ND	mg/l	0.00050	0.00017	1	09/08/23 09:55	09/13/23 17:31	1,6020B	WKP
Chromium, Total	ND	mg/l	0.00100	0.00017	1	09/08/23 09:55	09/13/23 17:31	1,6020B	WKP

### Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 04-05 Batch: WG1825154-1									
Arsenic, Dissolved	ND	mg/l	0.00050	0.00016	1	09/11/23 11:50	09/13/23 17:51	1,6020B	WKP
Barium, Dissolved	ND	mg/l	0.00050	0.00017	1	09/11/23 11:50	09/13/23 17:51	1,6020B	WKP
Chromium, Dissolved	ND	mg/l	0.00100	0.00017	1	09/11/23 11:50	09/13/23 17:51	1,6020B	WKP
Manganese, Dissolved	ND	mg/l	0.00100	0.00044	1	09/11/23 11:50	09/13/23 17:51	1,6020B	WKP

### Prep Information

Digestion Method: EPA 3005A



## Lab Control Sample Analysis

Batch Quality Control

Project Name: STEEL WINDS

Project Number: 03.0033579.16

Lab Number: L2351602

Report Date: 10/13/23

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1824837-2								
Arsenic, Total	100		-		80-120	-		
Barium, Total	102		-		80-120	-		
Chromium, Total	99		-		80-120	-		
Dissolved Metals - Mansfield Lab Associated sample(s): 04-05 Batch: WG1825154-2								
Arsenic, Dissolved	103		-		80-120	-		
Barium, Dissolved	98		-		80-120	-		
Chromium, Dissolved	93		-		80-120	-		
Manganese, Dissolved	93		-		80-120	-		

### Matrix Spike Analysis Batch Quality Control

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

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): 01-02    QC Batch ID: WG1824837-3    QC Sample: L2351602-01    Client ID: MWN-02B-090623												
Arsenic, Total	0.02674	0.12	0.1457	99		-	-		75-125	-		20
Barium, Total	0.0518	2	2.038	99		-	-		75-125	-		20
Chromium, Total	0.0004J	0.2	0.1972	99		-	-		75-125	-		20
Dissolved Metals - Mansfield Lab Associated sample(s): 04-05    QC Batch ID: WG1825154-3    QC Sample: L2351756-09    Client ID: MS Sample												
Arsenic, Dissolved	0.00120	0.12	0.1269	105		-	-		75-125	-		20
Barium, Dissolved	1.730	2	3.544	91		-	-		75-125	-		20
Chromium, Dissolved	0.00128	0.2	0.1857	92		-	-		75-125	-		20
Manganese, Dissolved	0.1166	0.5	0.6039	97		-	-		75-125	-		20

## Lab Duplicate Analysis

*Batch Quality Control*

Project Name: STEEL WINDS

Project Number: 03.0033579.16

Lab Number: L2351602

Report Date: 10/13/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1824837-4 QC Sample: L2351602-01 Client ID: MWN-02B-090623						
Arsenic, Total	0.02674	0.02674	mg/l	0		20
Dissolved Metals - Mansfield Lab Associated sample(s): 04-05 QC Batch ID: WG1825154-4 QC Sample: L2351756-09 Client ID: DUP Sample						
Arsenic, Dissolved	0.00120	0.00117	mg/l	2		20
Barium, Dissolved	1.730	1.672	mg/l	3		20
Chromium, Dissolved	0.00128	0.00132	mg/l	3		20
Manganese, Dissolved	0.1166	0.1235	mg/l	6		20

**Project Name:** STEEL WINDS**Lab Number:** L2351602**Project Number:** 03.0033579.16**Report Date:** 10/13/23**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(*)
L2351602-01A	Vial HCl preserved	A	NA		2.0	Y	Absent		NYCP51-8260(14)
L2351602-01B	Vial HCl preserved	A	NA		2.0	Y	Absent		NYCP51-8260(14)
L2351602-01C	Vial HCl preserved	A	NA		2.0	Y	Absent		NYCP51-8260(14)
L2351602-01D	Plastic 250ml HNO3 preserved	A	<2	<2	2.0	Y	Absent		AS-6020T(180)
L2351602-01E	Amber 1000ml unpreserved	A	>12	>12	2.0	Y	Absent		A2-SVOC-8270(7)
L2351602-01F	Amber 1000ml unpreserved	A	>12	>12	2.0	Y	Absent		A2-SVOC-8270(7)
L2351602-02A	Plastic 250ml HNO3 preserved	A	7	7	2.0	Y	Absent		BA-6020T(180),CR-6020T(180),AS-6020T(180)
L2351602-03A	Vial HCl preserved	A	NA		2.0	Y	Absent		NYCP51-8260(14)
L2351602-03B	Vial HCl preserved	A	NA		2.0	Y	Absent		NYCP51-8260(14)
L2351602-03C	Vial HCl preserved	A	NA		2.0	Y	Absent		NYCP51-8260(14)
L2351602-03D	Amber 1000ml unpreserved	A	>12	>12	2.0	Y	Absent		A2-SVOC-8270(7)
L2351602-03E	Amber 1000ml unpreserved	A	>12	>12	2.0	Y	Absent		A2-SVOC-8270(7)
L2351602-04A	Plastic 250ml unpreserved	A	7	7	2.0	Y	Absent		-
L2351602-04X	Plastic 120ml HNO3 preserved Filtrates	A	NA		2.0	Y	Absent		MN-6020S(180),CR-6020S(180),BA-6020S(180),AS-6020S(180)
L2351602-05A	Vial HCl preserved	A	NA		2.0	Y	Absent		NYCP51-8260(14)
L2351602-05B	Vial HCl preserved	A	NA		2.0	Y	Absent		NYCP51-8260(14)
L2351602-05C	Vial HCl preserved	A	NA		2.0	Y	Absent		NYCP51-8260(14)
L2351602-05D	Plastic 250ml unpreserved	A	7	7	2.0	Y	Absent		-
L2351602-05E	Amber 1000ml unpreserved	A	7	7	2.0	Y	Absent		A2-SVOC-8270(7)
L2351602-05F	Amber 1000ml unpreserved	A	7	7	2.0	Y	Absent		A2-SVOC-8270(7)
L2351602-05X	Plastic 120ml HNO3 preserved Filtrates	A	NA		2.0	Y	Absent		MN-6020S(180),BA-6020S(180)
L2351602-06A	Vial HCl preserved	A	NA		2.0	Y	Absent		NYCP51-8260(14)
L2351602-06B	Vial HCl preserved	A	NA		2.0	Y	Absent		NYCP51-8260(14)

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

Serial\_No:10132316:56  
**Lab Number:** L2351602  
**Report Date:** 10/13/23

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2351602-06C	Vial HCl preserved	A	NA		2.0	Y	Absent		NYCP51-8260(14)
L2351602-06D	Amber 1000ml unpreserved	A	>12	>12	2.0	Y	Absent		A2-SVOC-8270(7)
L2351602-06E	Amber 1000ml unpreserved	A	>12	>12	2.0	Y	Absent		A2-SVOC-8270(7)
L2351602-07A	Vial HCl preserved	A	NA		2.0	Y	Absent		NYCP51-8260(14)

**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

## 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:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

### 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:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

#### Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- 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.)

Report Format: DU Report with 'J' Qualifiers





**Project Name:** STEEL WINDS  
**Project Number:** 03.0033579.16

**Lab Number:** L2351602  
**Report Date:** 10/13/23

## 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 624.1:** m/p-xylene, o-xylene, Naphthalene

**EPA 625.1:** alpha-Terpineol

**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

### Mansfield Facility

**SM 2540D:** TSS.

**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 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).

**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**

---

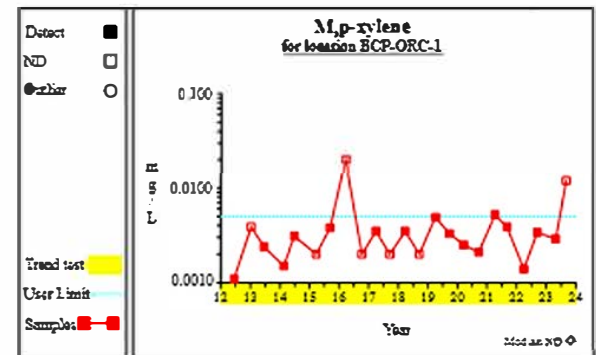
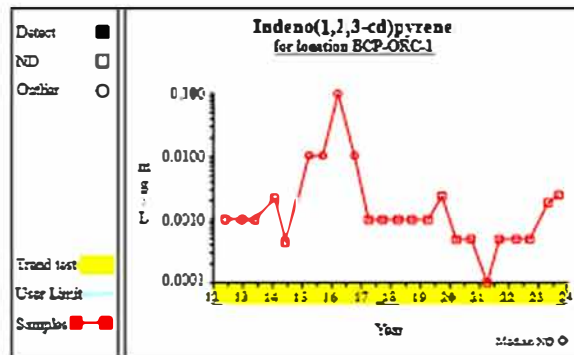
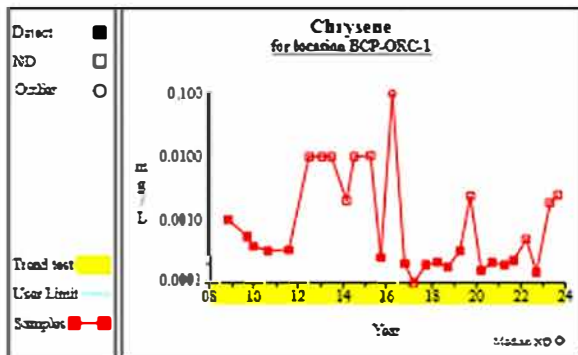
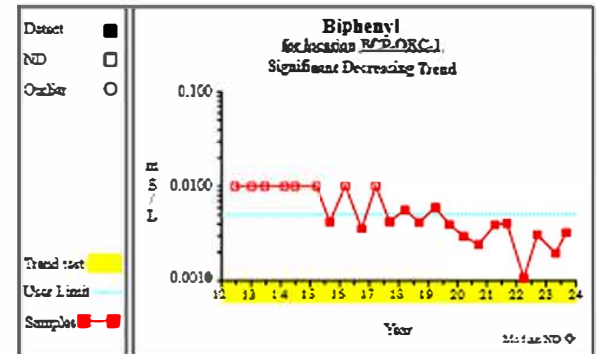
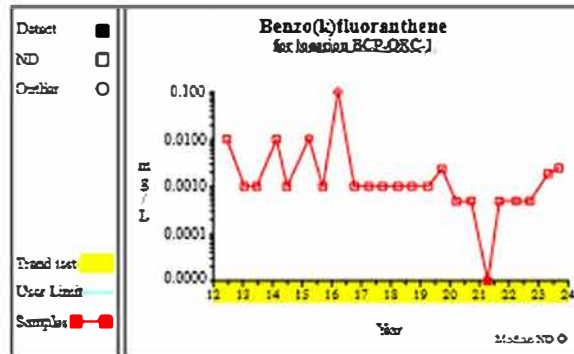
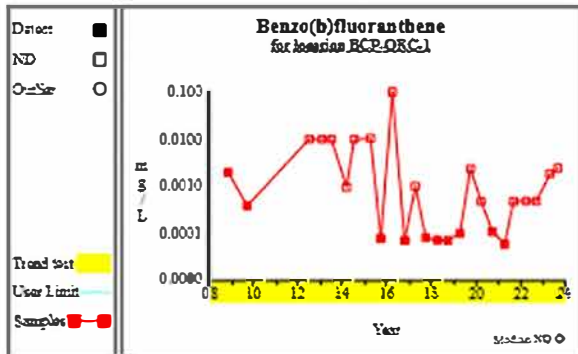
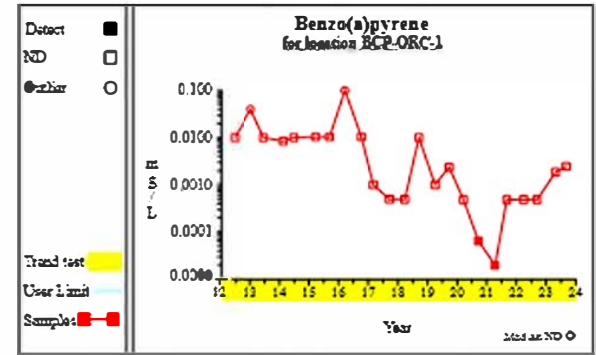
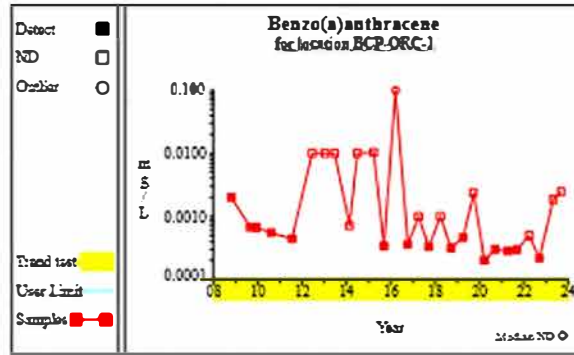
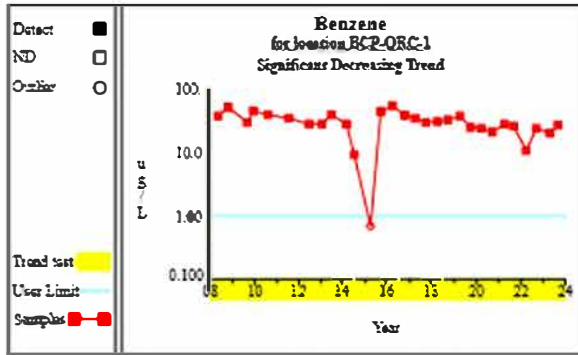
For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 <b>ALPHA</b> <small>ANALYSIS</small>	<b>NEW YORK CHAIN OF CUSTODY</b>	<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab	ALPHA Job #						
			1 of 1	9/7/23	L2351602						
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	<b>Project Information</b> Project Name: <u>Steel Winds</u> Project Location: <u>Lachawanna, NY</u> Project # <u>03.0033579.16</u> (Use Project name as Project #) <input type="checkbox"/>		<b>Deliverables</b> <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input checked="" type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		<b>Billing Information</b> <input type="checkbox"/> Same as Client Info PO #					
<b>Client Information</b> Client: <u>GZA</u> Address: <u>300 Pearl St, Suite 700</u> <u>Buffalo, NY 14202</u> Phone: <u>716-517-5708</u> Fax: Email: <u>Dan.E.Troy@GZA.Com</u>		Project Manager: <u>Daniel Troy</u> ALPHAQuote #: Turn-Around Time: Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:					
These samples have been previously analyzed by Alpha <input type="checkbox"/>			<b>ANALYSIS</b>			<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input checked="" type="checkbox"/> Lab to do (Please Specify below)					
Other project specific requirements/comments:  Please specify Metals or TAL.			Total Bottles			<b>Sample Specific Comments</b>					
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection	Sample Matrix	Sampler's Initials	8260 STARS	8270 PAH/SIM	6010P AS	6010D Br	6010D Mn	6010D Cr	Sample Specific Comments
		Date      Time									
<u>51602-01</u>	<u>MWN-02B-090623</u>	<u>9-6-23</u> <u>8:55</u>	<u>GW</u>	<u>DSN</u>	X	X	X				
<u>-02</u>	<u>MWN-02D-090623</u>	↓					X	X		X	
<u>-03</u>	<u>MWN-03-090623</u>	↓			X	X					
<u>-04</u>	<u>MWN-03B-090623</u>	↓					X	X	X	X	
<u>-05</u>	<u>MWN-03D-090623</u>	↓			X	X		X	X		<u>-LAB Filter Metals</u>
<u>-06</u>	<u>MWN-04-090623</u>	↓			X	X		X			<u>-LAB Filter Metals</u>
<u>-07</u>	<u>TRIP BLANK-2</u>	↓	<u>w</u>		X						
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 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		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.)			
		Relinquished By:		Date/Time		Received By:		Date/Time			
		<u>[Signature]</u>		<u>9-6-23 14:00</u>		<u>[Signature]</u>		<u>9/6/23 1400</u>			
		<u>[Signature]</u>		<u>9/6/23 1400</u>		<u>[Signature]</u>		<u>9/7/23 0020</u>			

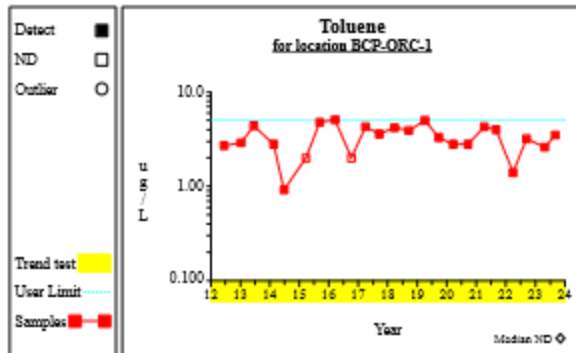
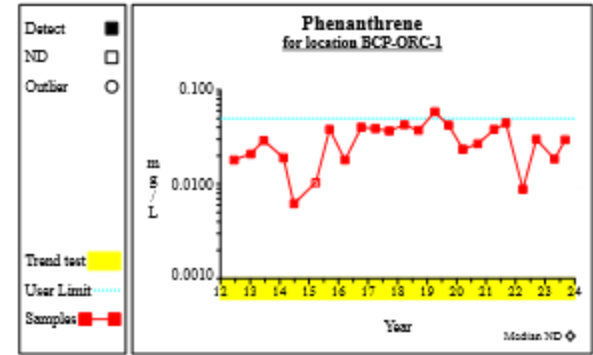
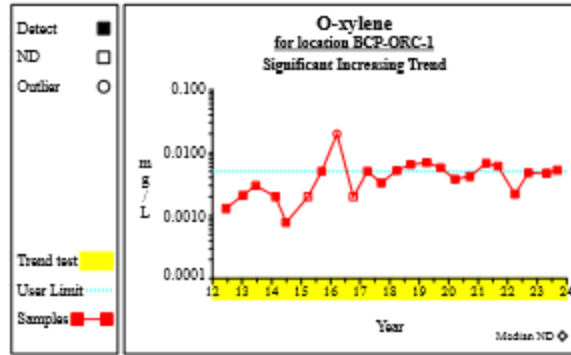
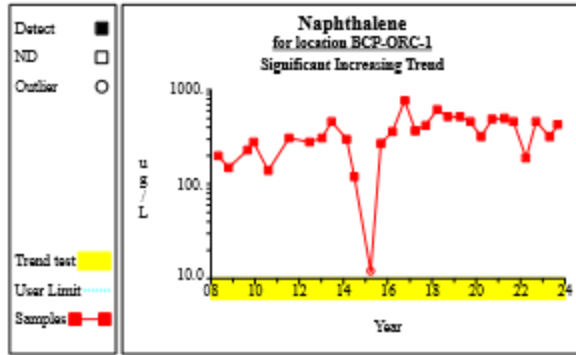


**APPENDIX C**  
**TIME SERIES PLOTS**

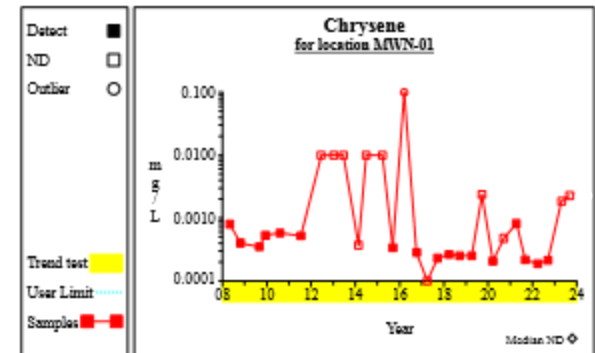
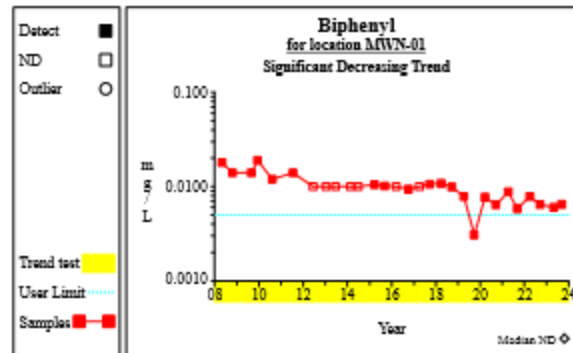
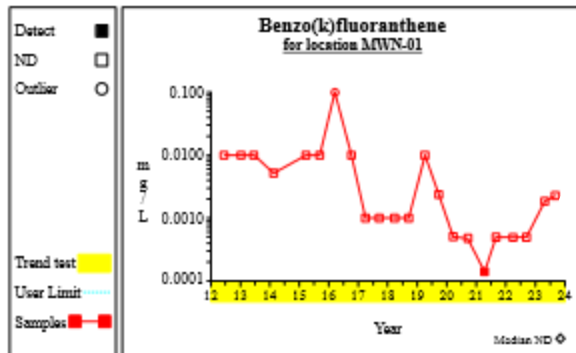
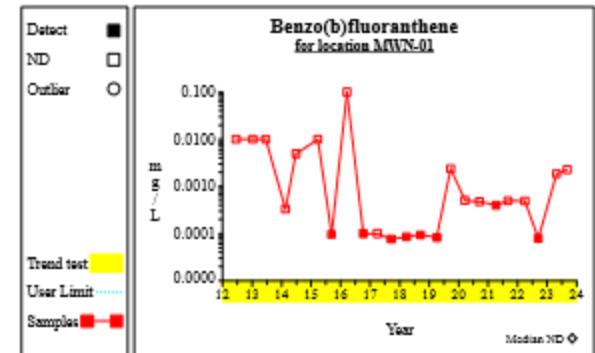
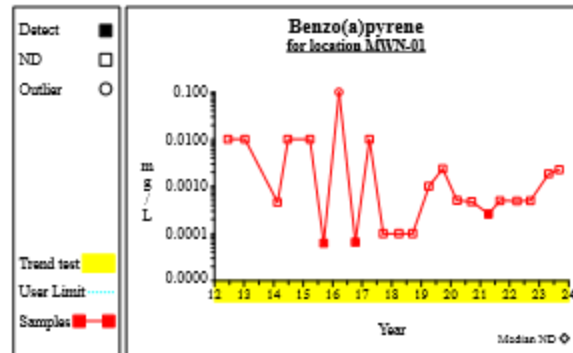
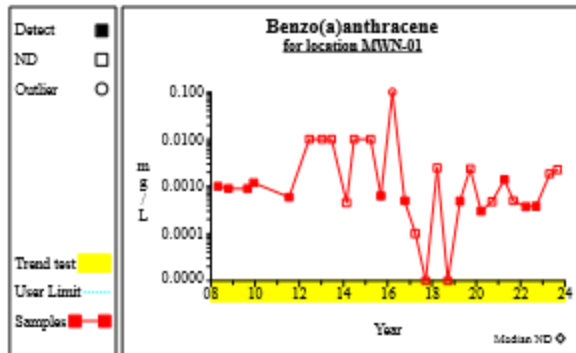
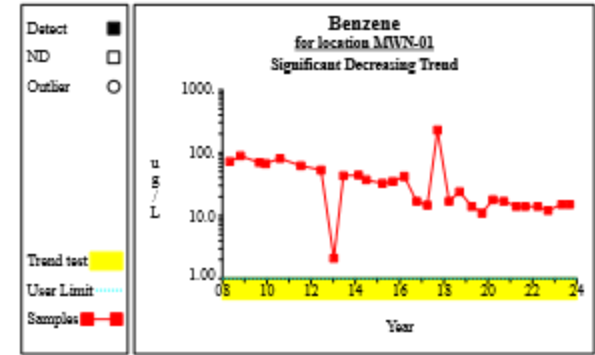
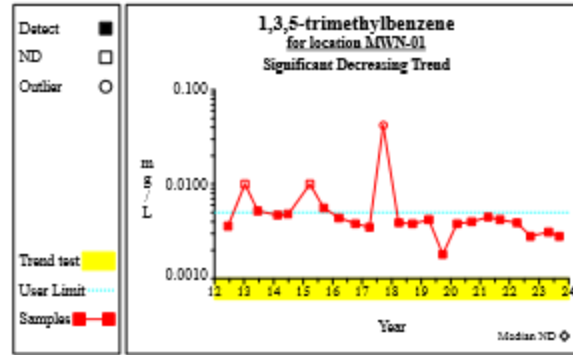
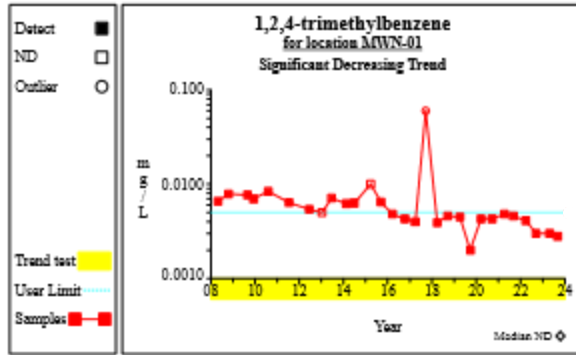
## Time Series



### Time Series

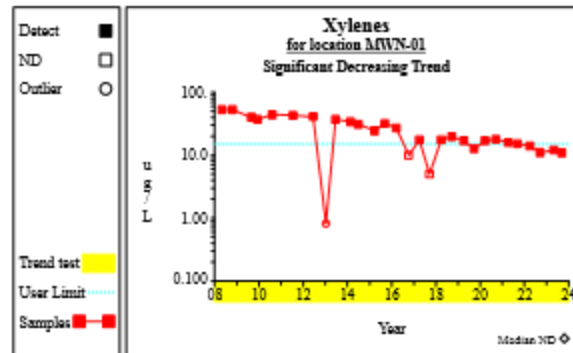
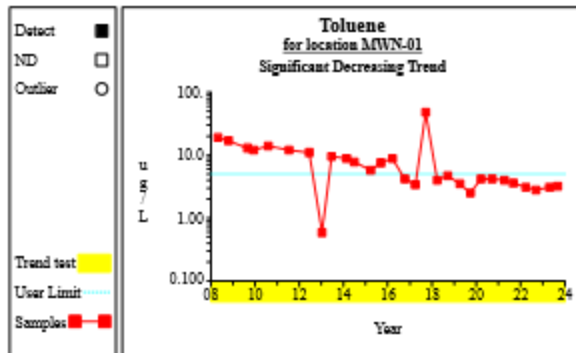
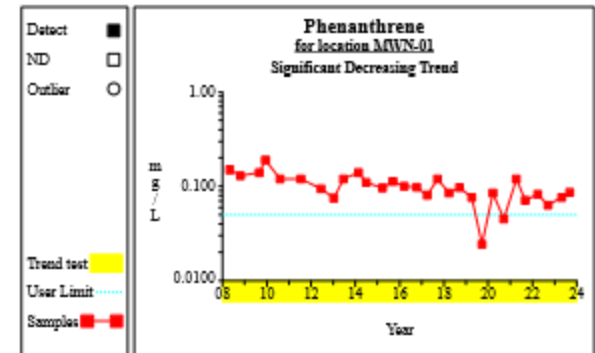
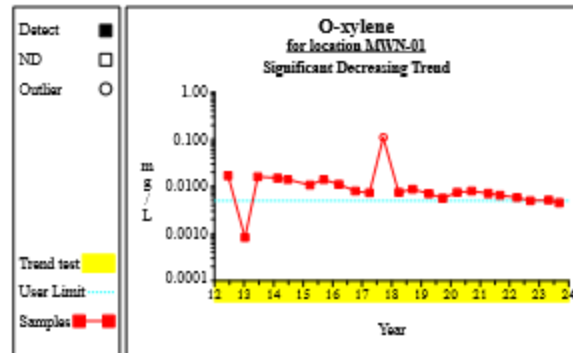
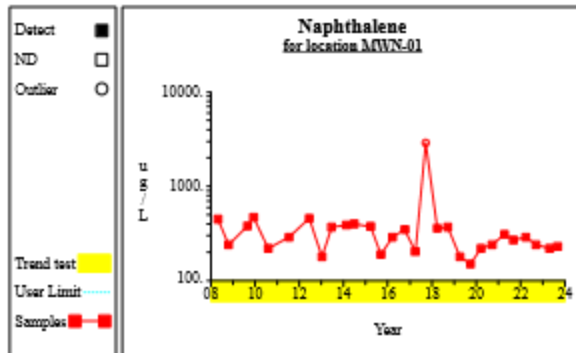
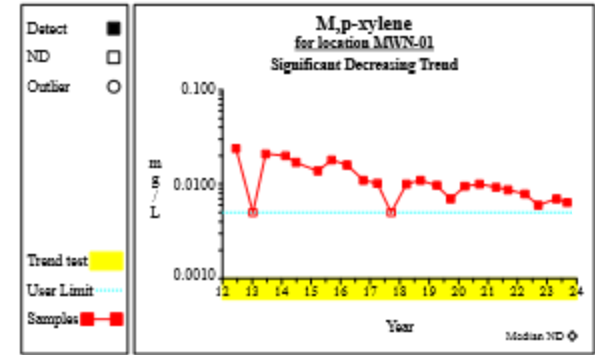
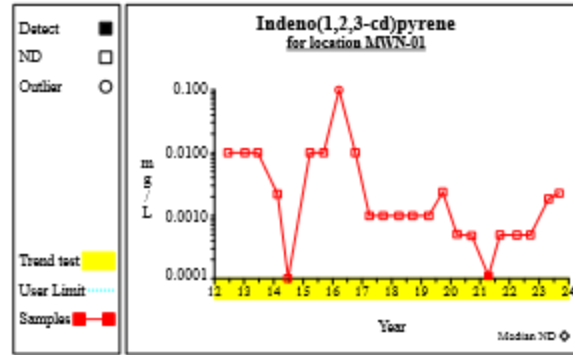
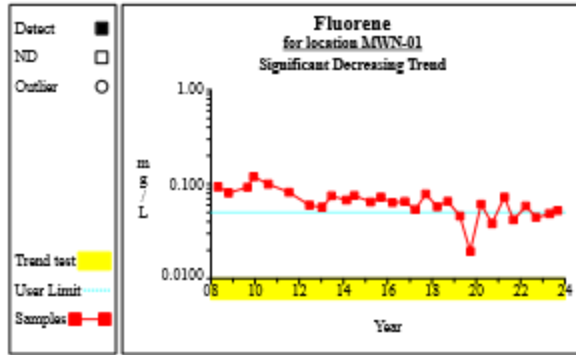


### Time Series



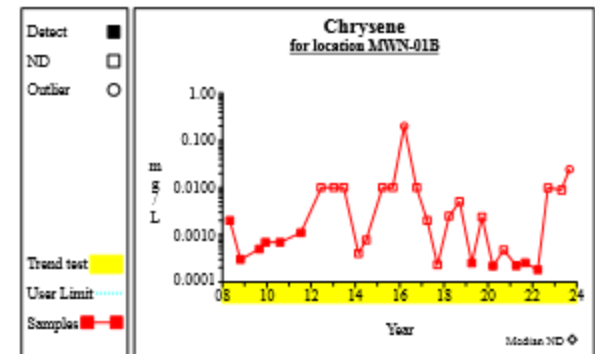
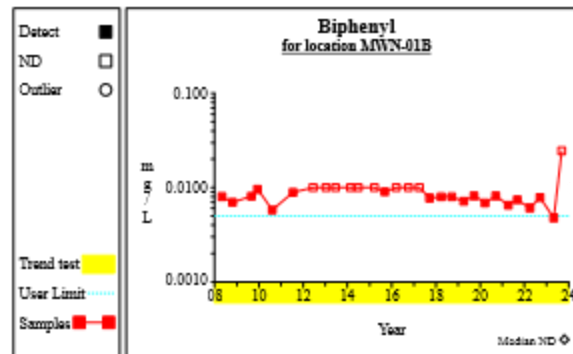
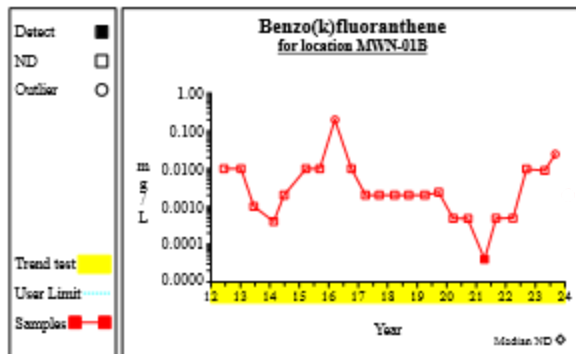
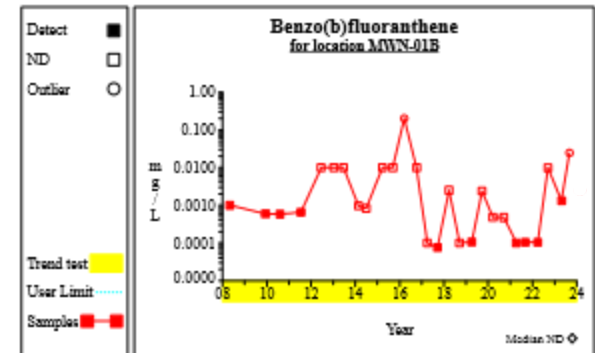
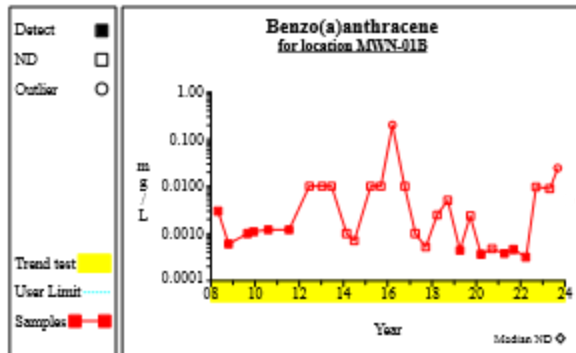
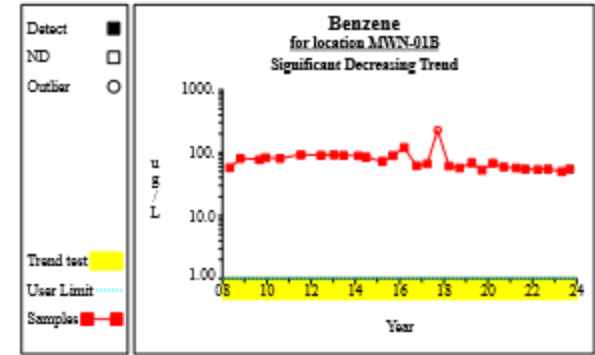
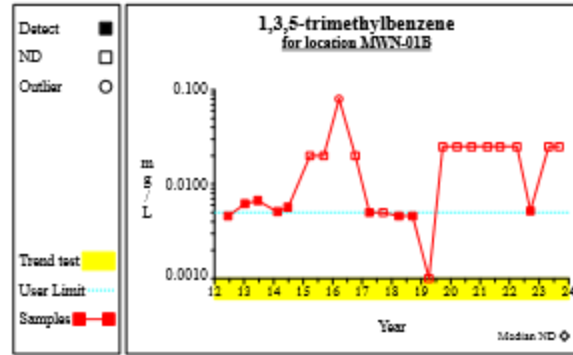
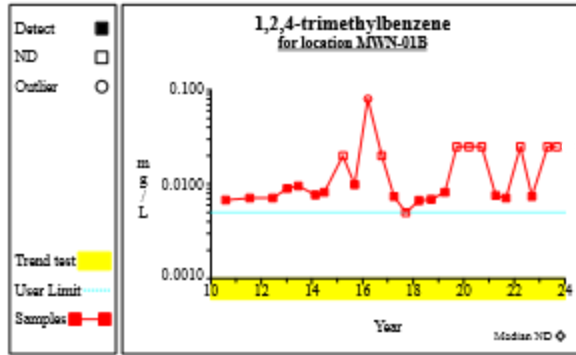


### Time Series

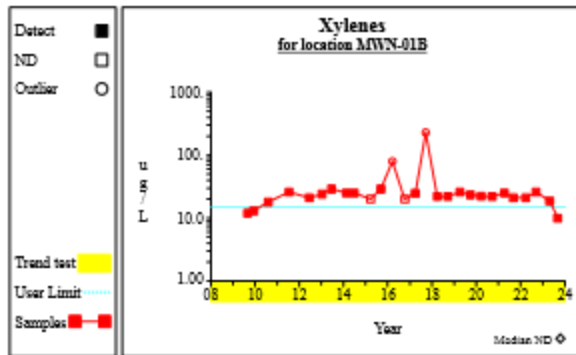
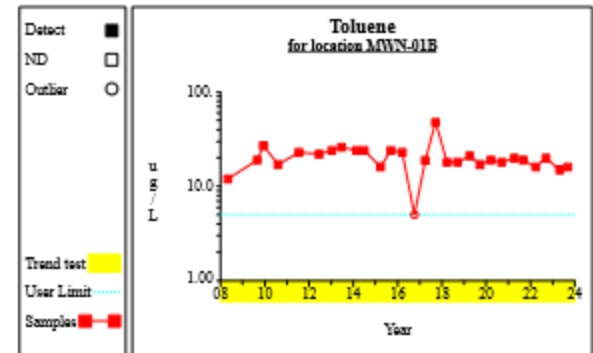
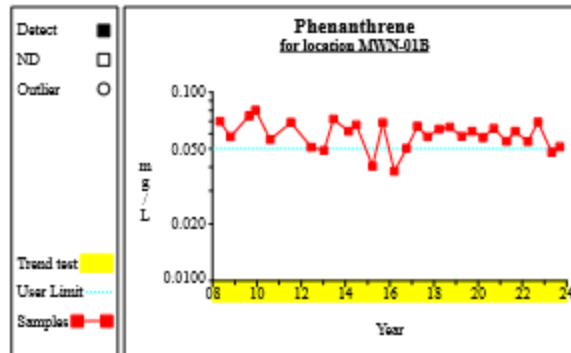
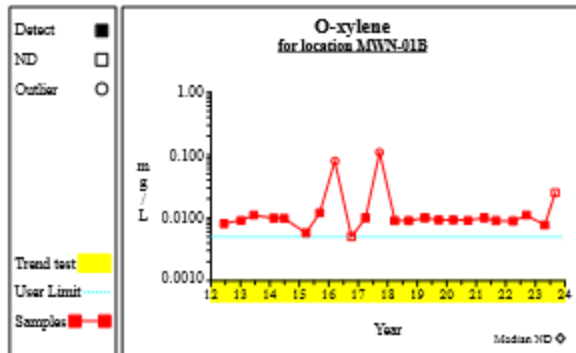
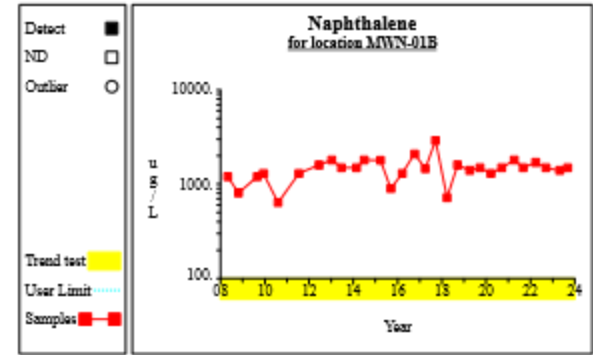
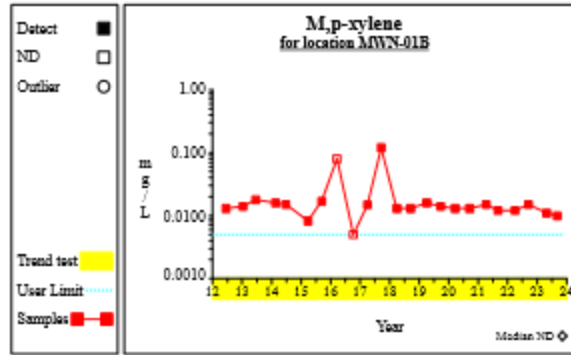
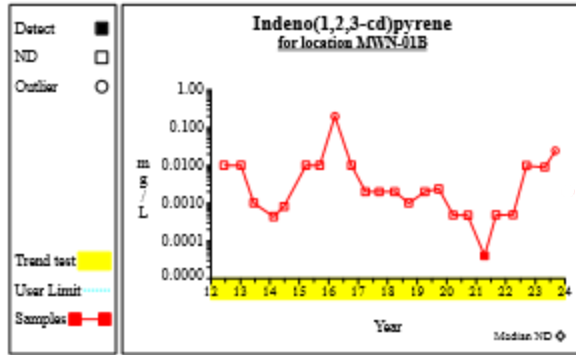




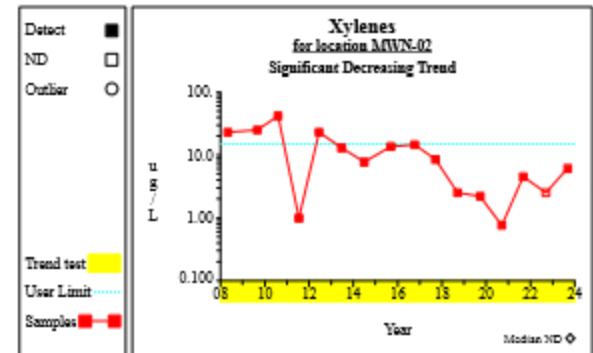
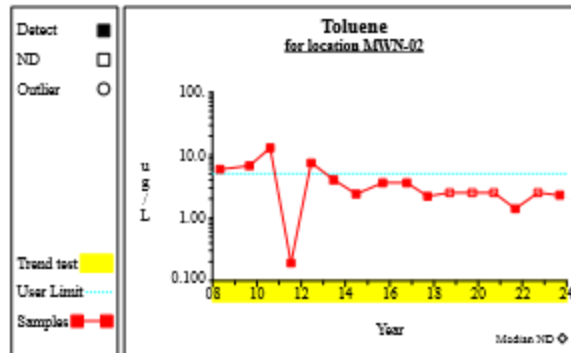
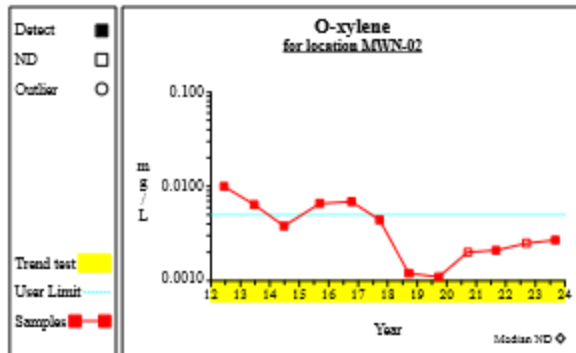
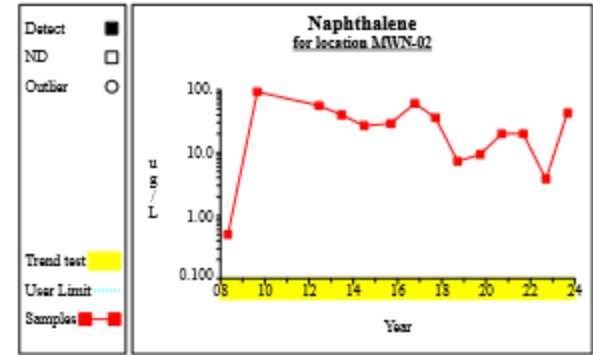
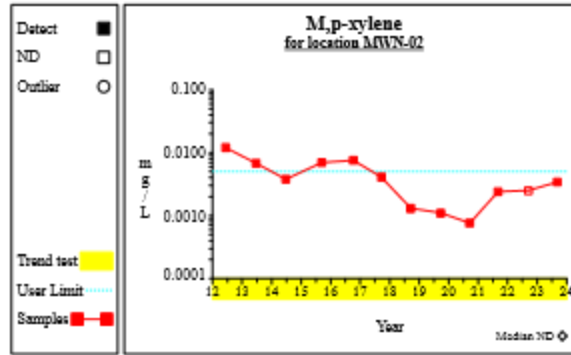
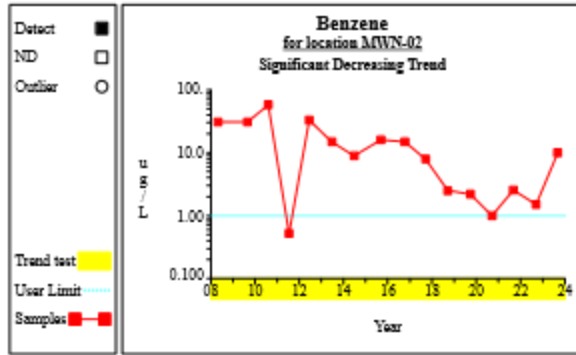
### Time Series



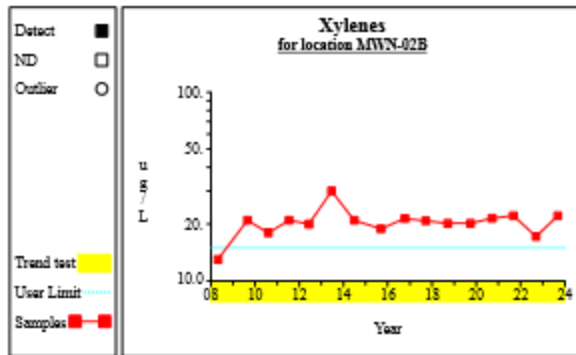
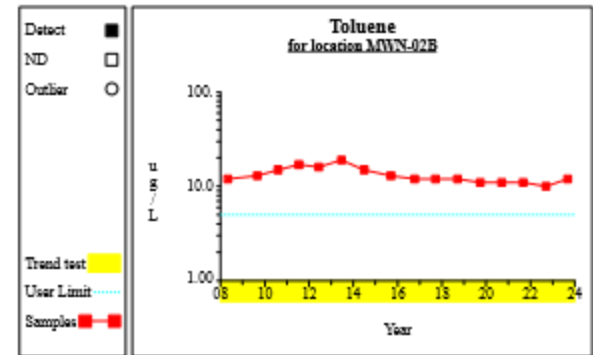
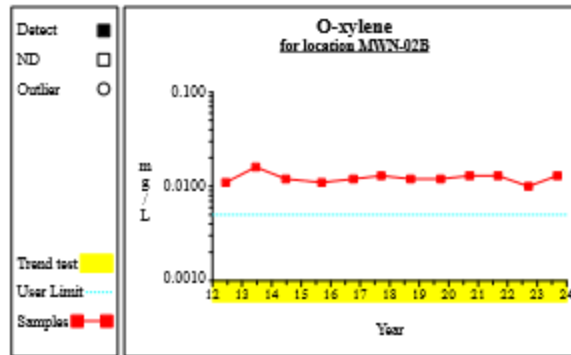
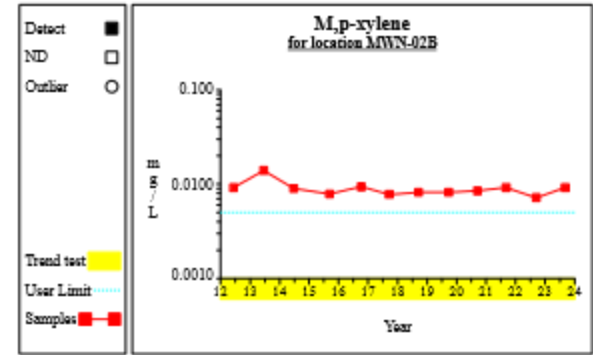
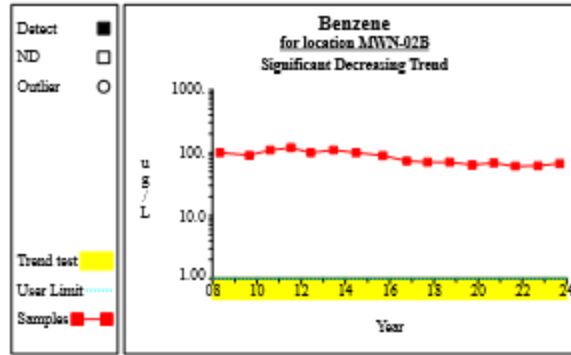
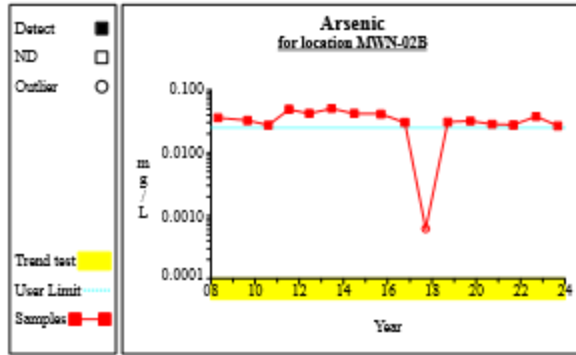
### Time Series



### Time Series



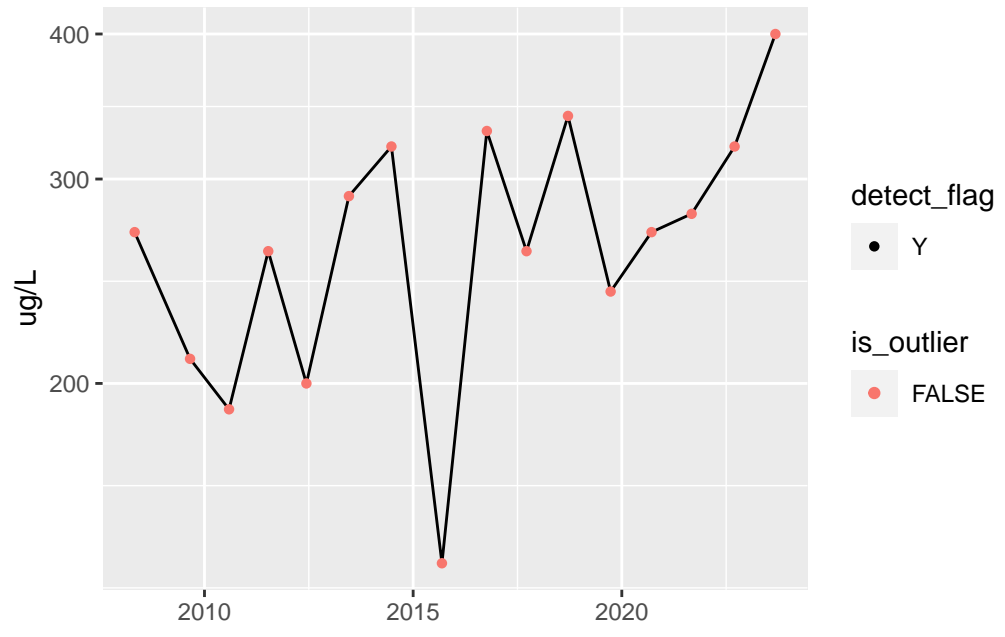
### Time Series



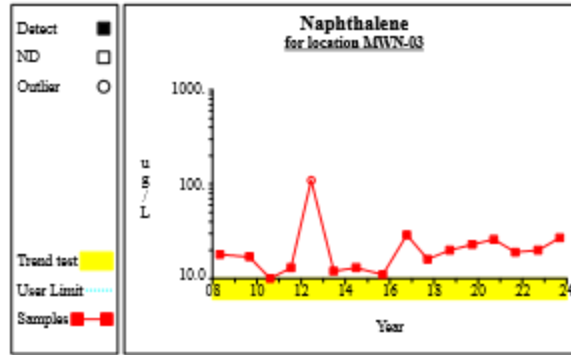
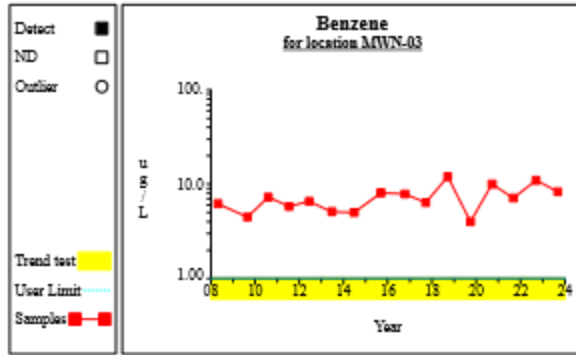
# Naphthalene

for location MWN-02B

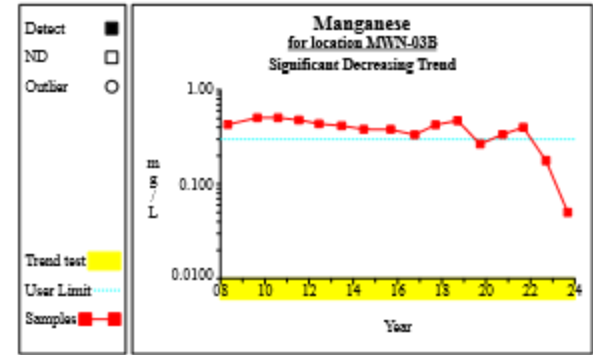
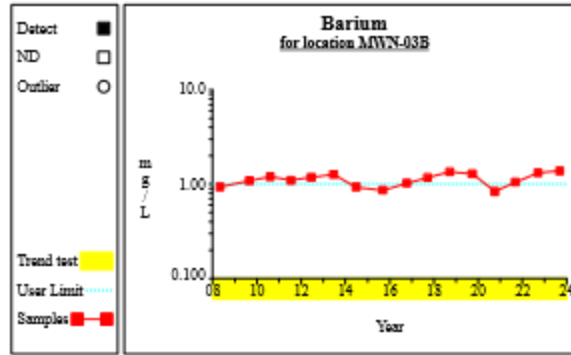
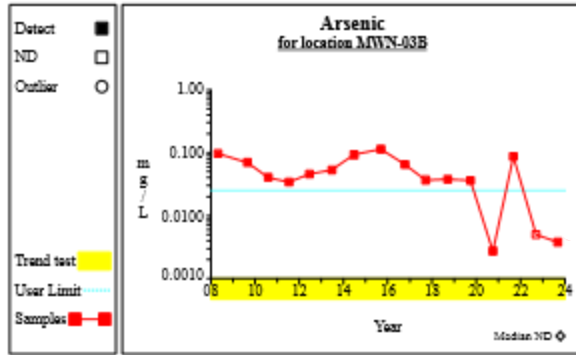
Significant Increasing Trend (p=0.04)



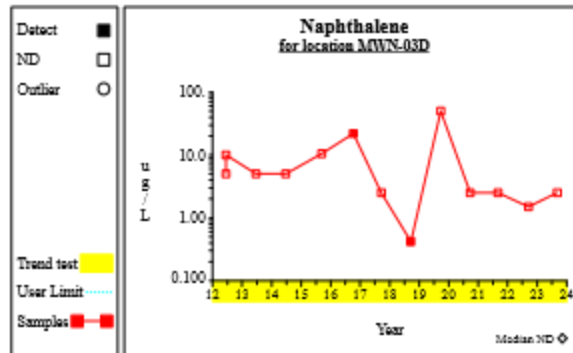
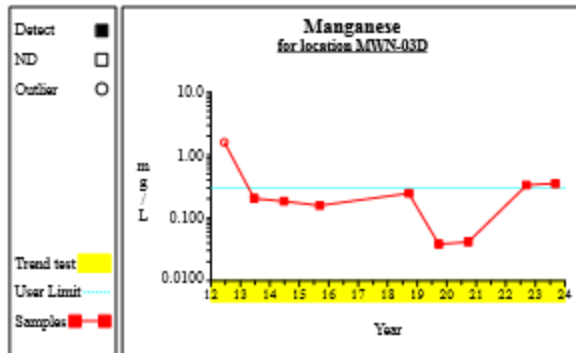
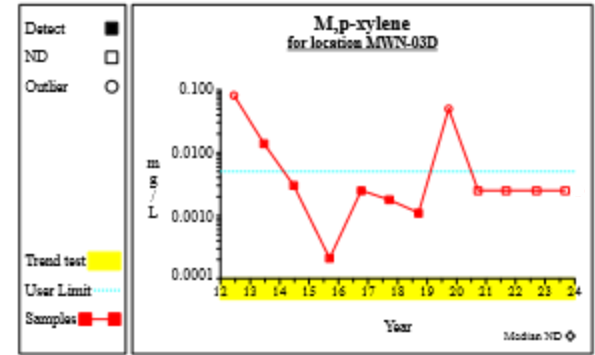
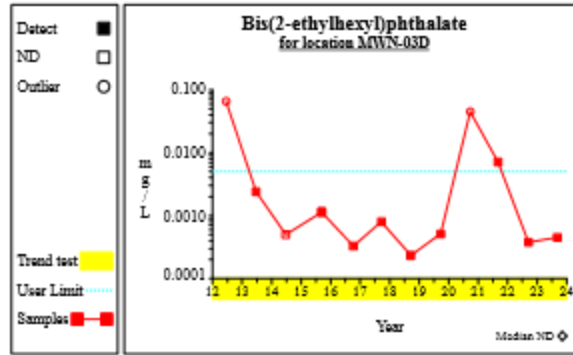
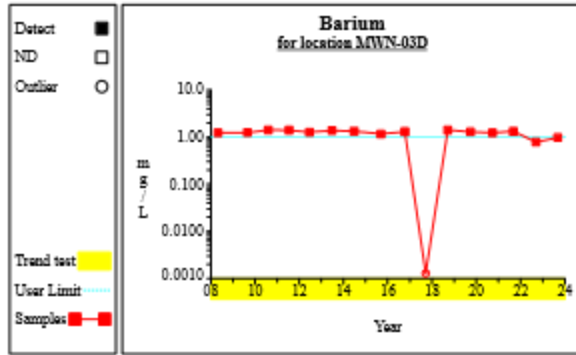
### Time Series



### Time Series

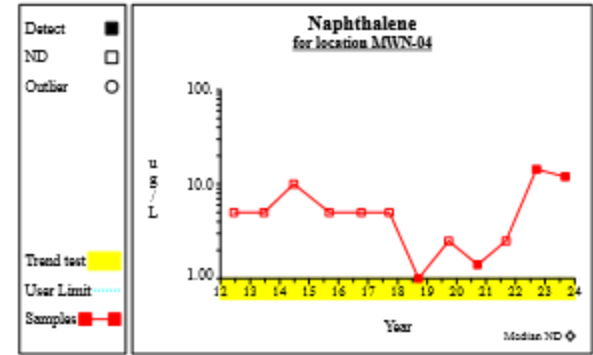
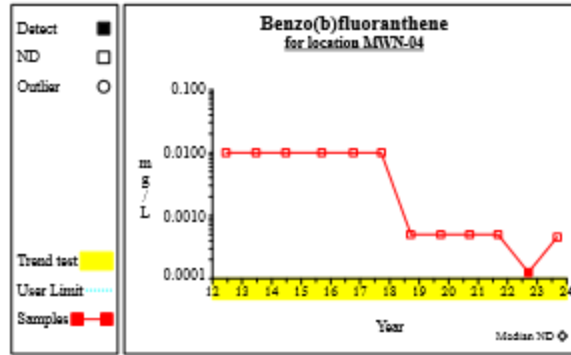
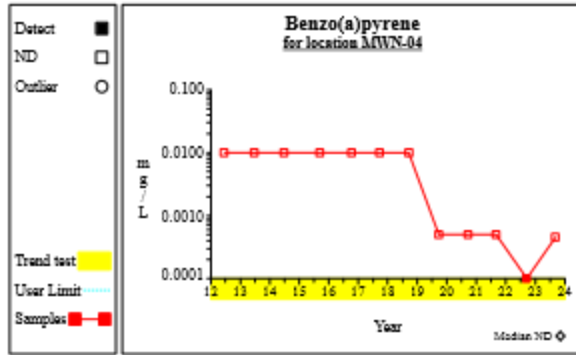


### Time Series

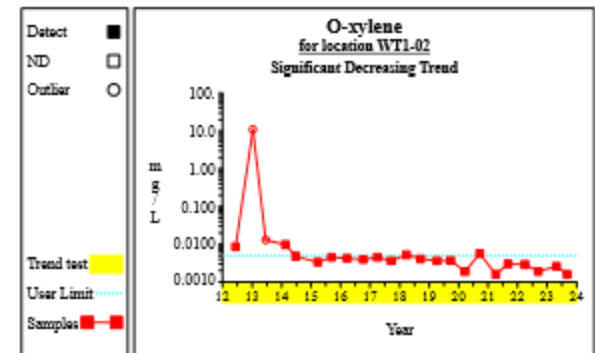
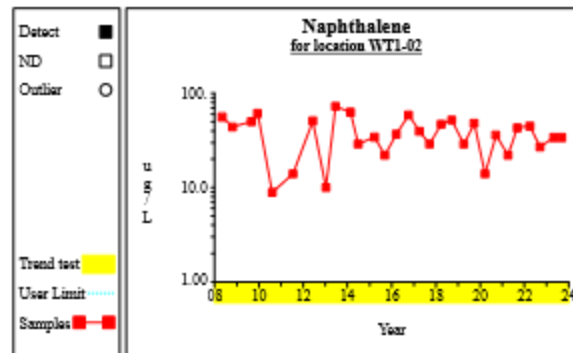
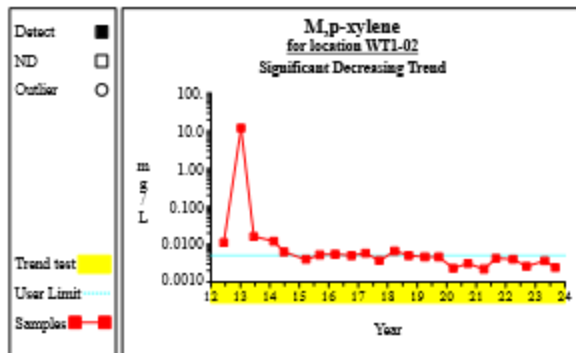
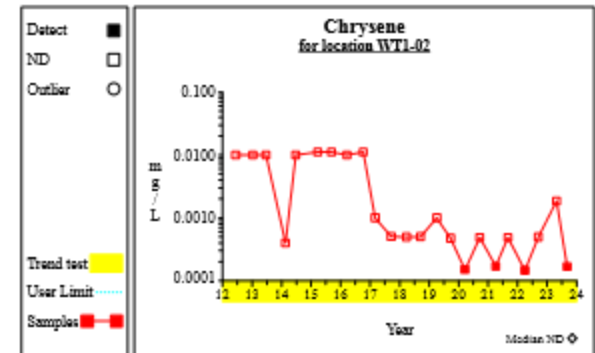
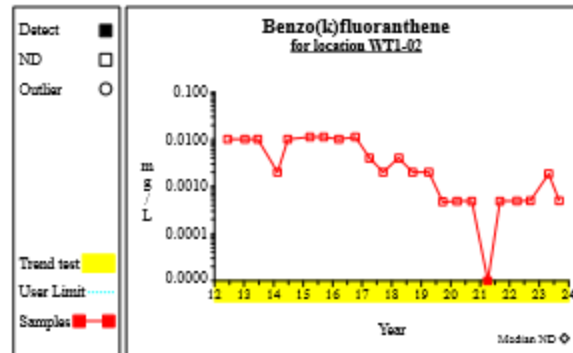
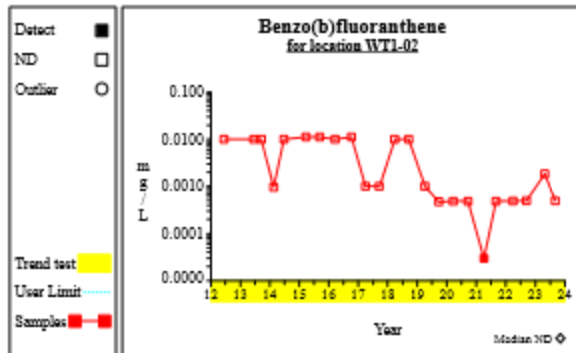
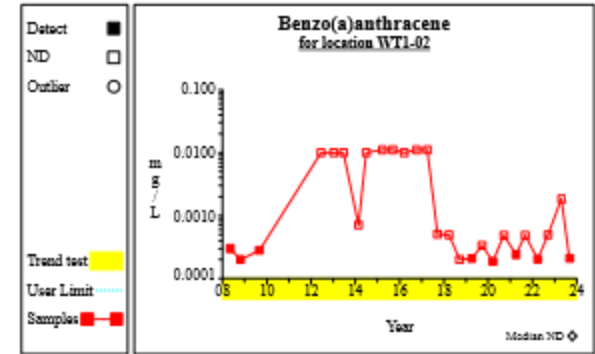
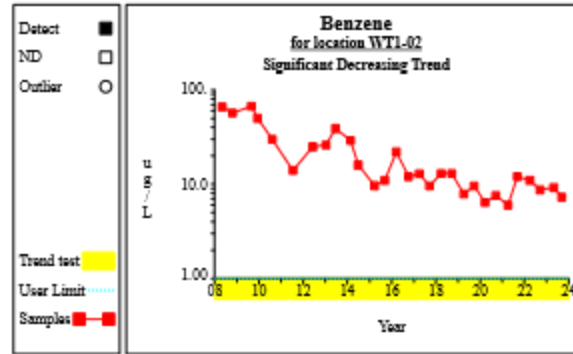
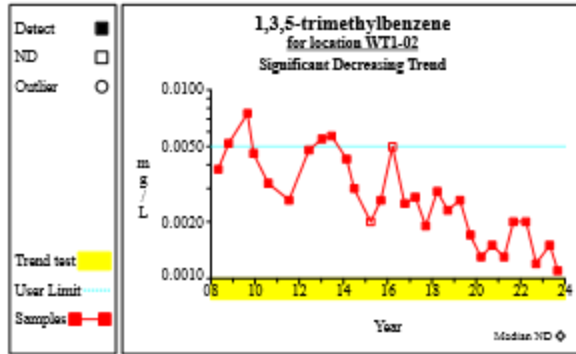




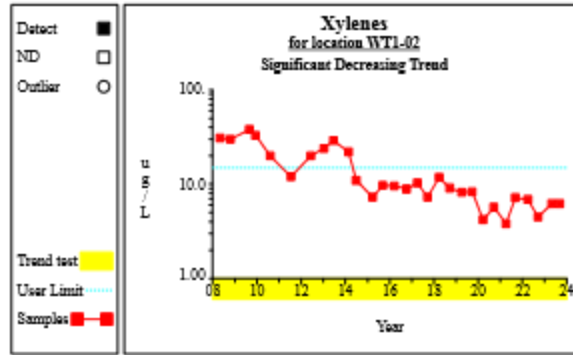
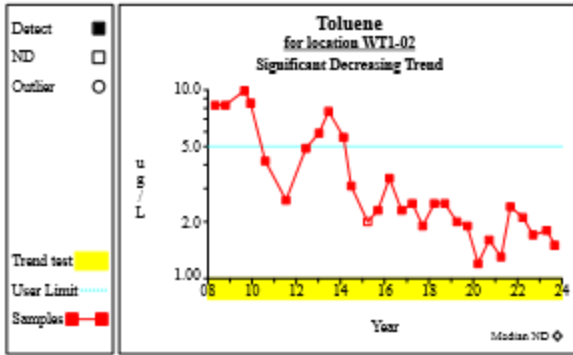
### Time Series



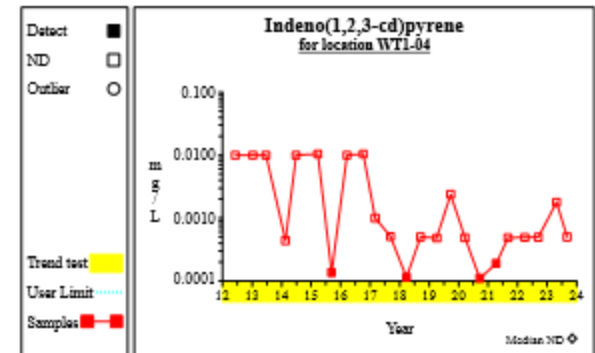
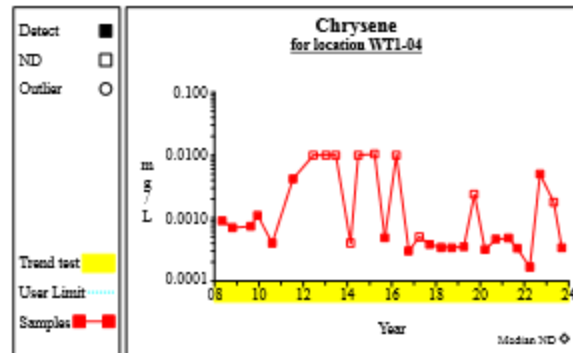
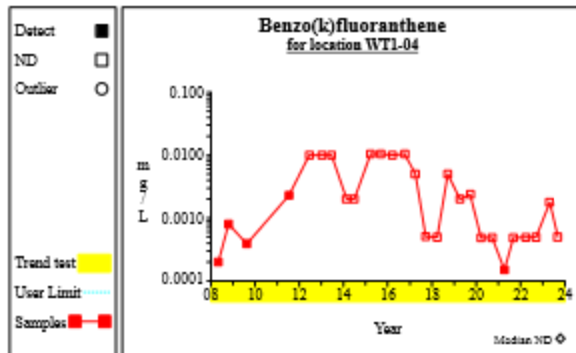
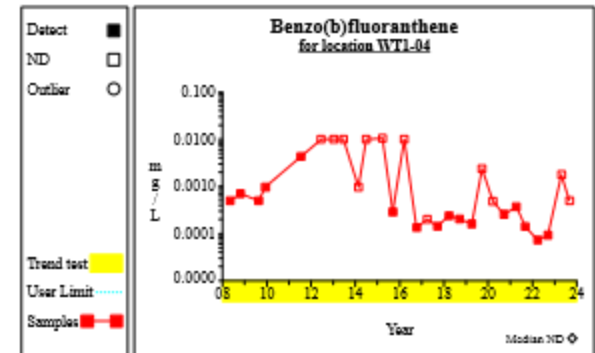
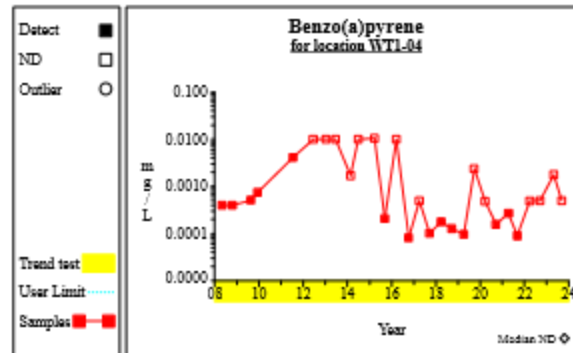
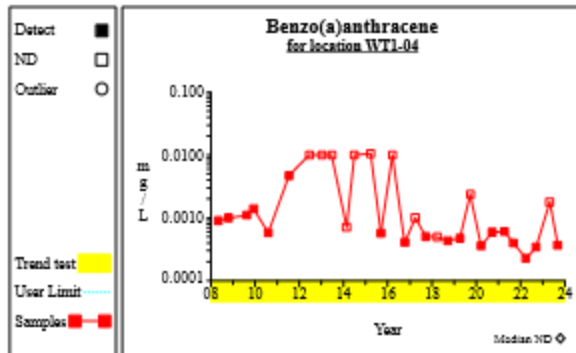
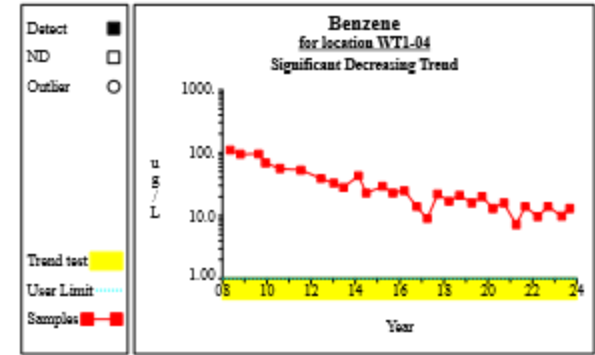
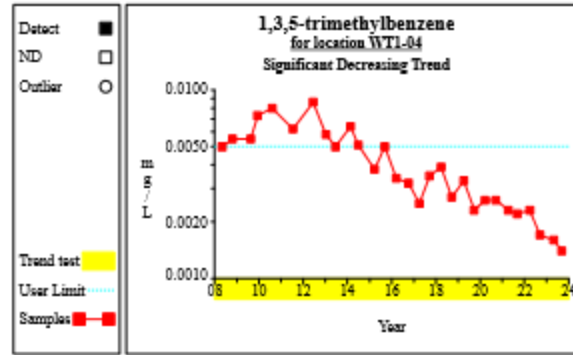
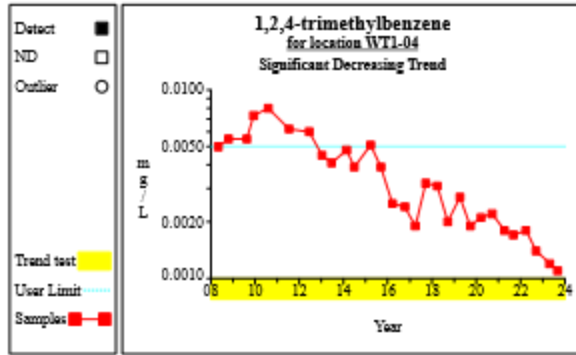
### Time Series



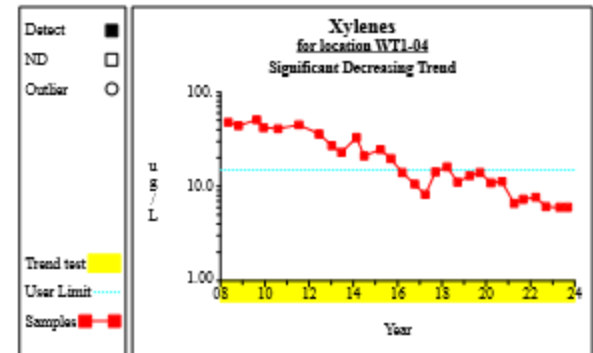
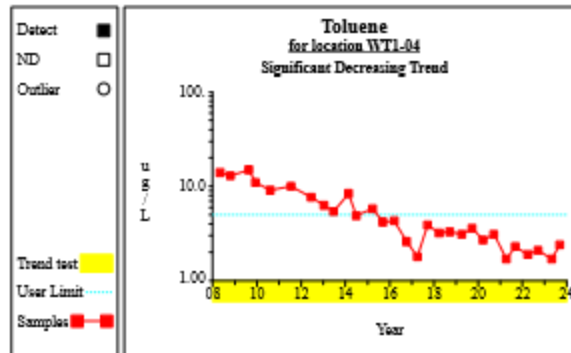
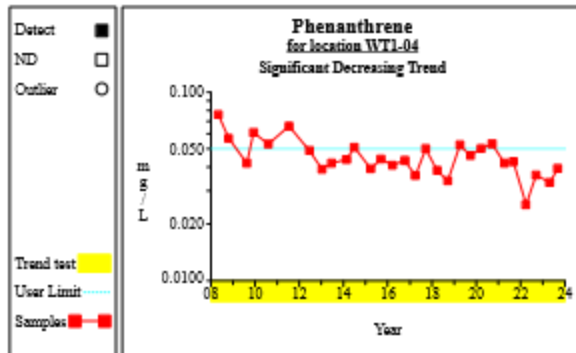
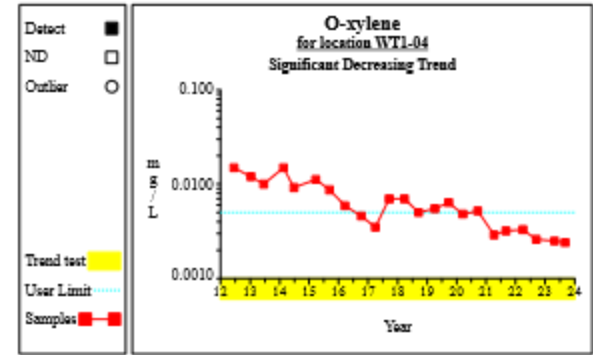
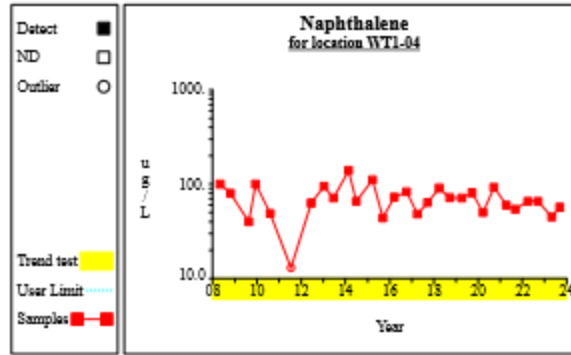
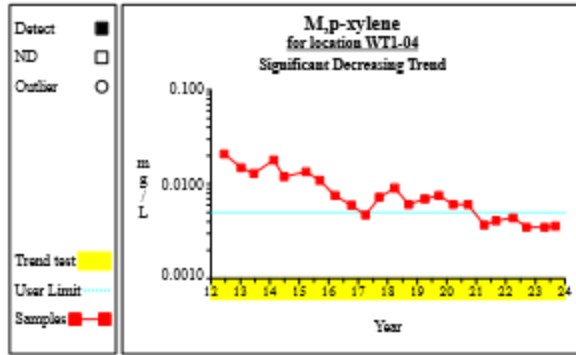
### Time Series



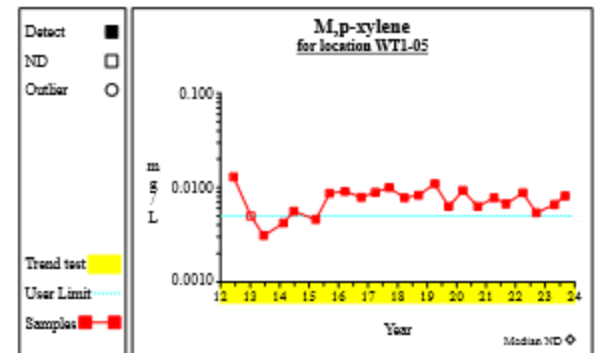
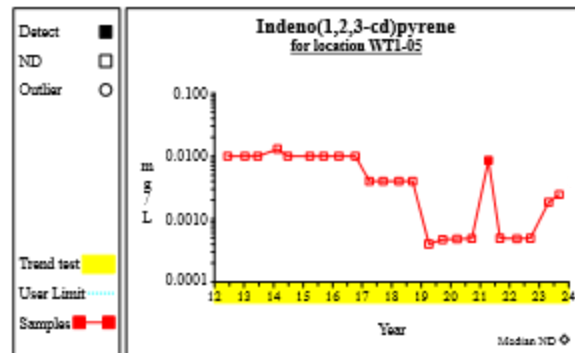
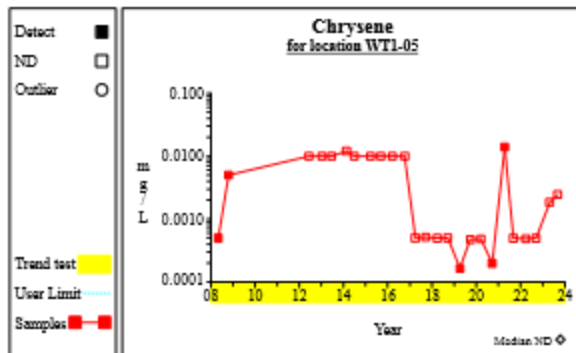
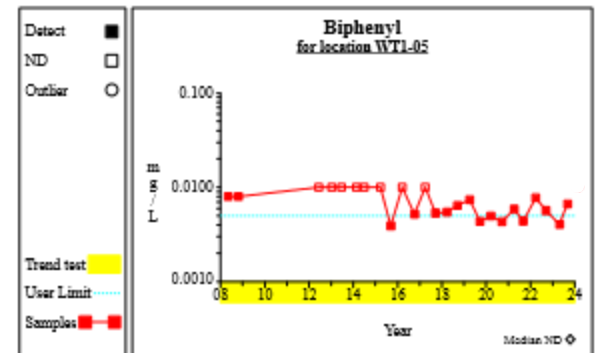
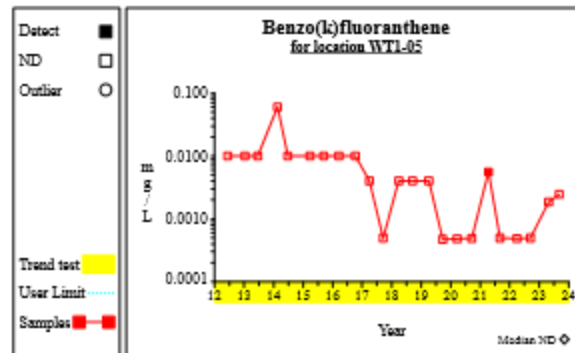
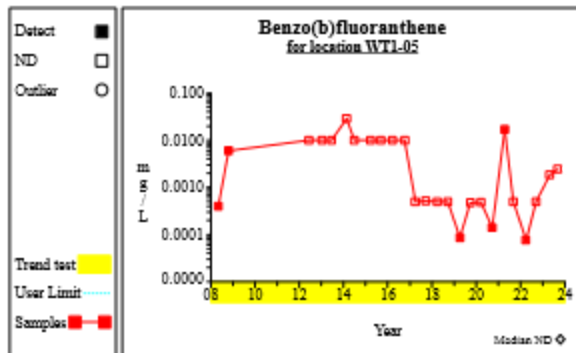
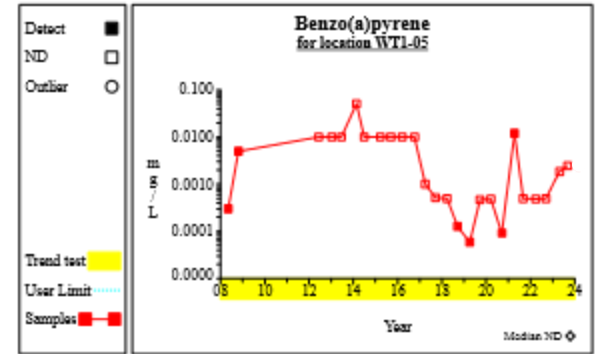
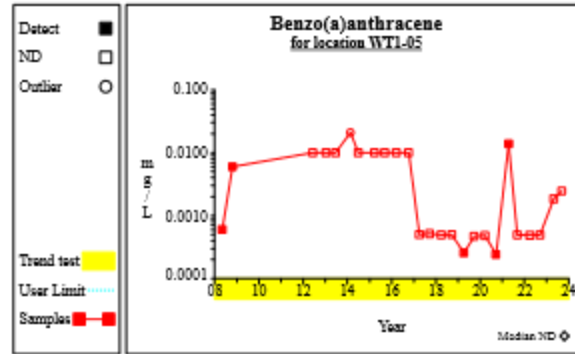
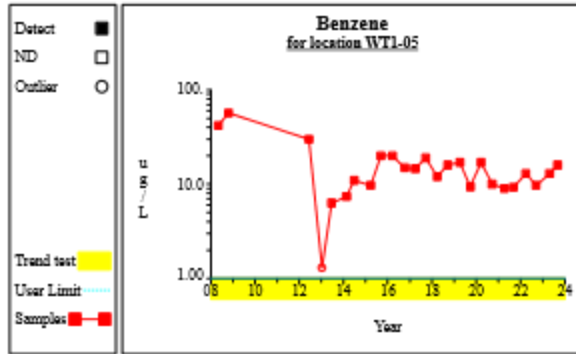
### Time Series



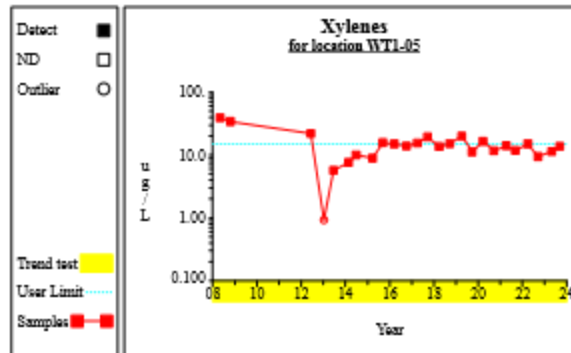
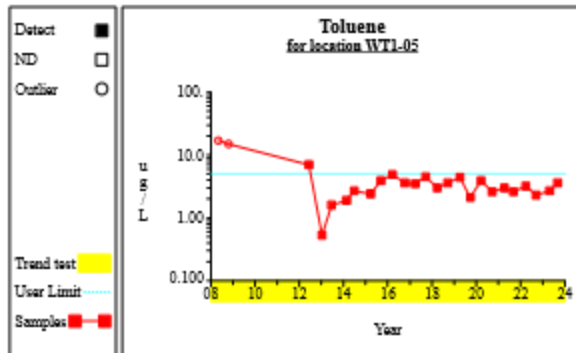
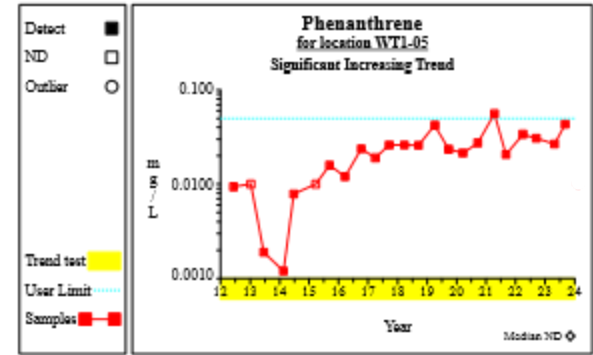
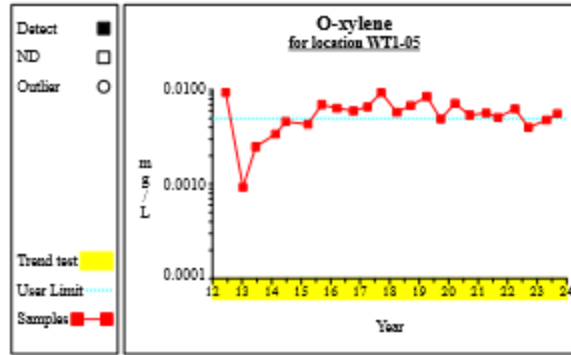
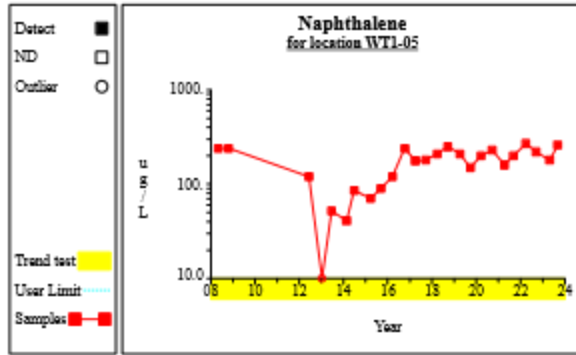
### Time Series



### Time Series



### Time Series





**APPENDIX D**  
**WELL DEVELOPMENT FORMS**



**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 :	<b>MWN-01</b>	Ground Surface Elevation:	582.99	Riser/Screen Material:	PVC
Installation Date:	8/30/90	Groundwater Elevation:	570.37	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 (°C)	Turbidity (NTU)	Color
15.22	11.71-11.81	1.244-1.258	11.5 - 12.0	2.80-3.48	Clear

Notes:

**Field Observations**

Field Observations		Parameters +/-	Sampling Information
Exterior Observations:	ok	pH +/- 0.1	Sample ID: <b>MWN-01-090523</b>
		Conductivity +/- 3%	Sample Time: 8:45
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 8260B
Locked ( <b>yes/no</b> )	Well Cap ( <b>yes/no</b> )	Surface Seal Intact ( <b>yes/no</b> )	PID Measurement: ND
			Odors: SVOC B/N Via EPA 8270C

**Well Quality Data**

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/5/2023	8:25	14.85	0	11.92	1.237	11.7	10.41	None	4.8	-189.9	Depth of Water: 14.77
	8:35	14.85	4	11.93	1.223	12.2	5.31	None	0.5	-280.4	Length of Water Column: 4.38
	8:40	14.85	6	11.92	1.221	12.2	4.98	None	0.4	-282	Depth of Well: 19.15
	8:45	14.85	8	11.92	1.217	12.2	4.4	None	0.4	-285.6	Sheen Observed: Y <b>N</b>
											DNAPL Observed: Y <b>N</b>
											Did Well Go Dry: Y <b>N</b>
											Other: 4" diameter well
											1 Well Volume = 2.8 gal

**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 :	<b>MWN-01B</b>	Ground Surface Elevation:	583.79	Riser/Screen Material:	PVC
Installation Date:	11/2/92	Groundwater Elevation:	571.31	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 (°C)	Turbidity (NTU)	Color
15.22	11.1-11.46	0.776-0.891	10.6-10.8	22.18-78.2	Clear

Notes:

**Field Observations**

Field Observations	Parameters +/-	Sampling Information
Exterior Observations: ok	pH +/- 0.1	Sample ID: <b>MWN-01B-090523</b>
	Conductivity +/- 3%	Sample Time: 14:05
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 8260B
Locked ( <b>yes/no</b> )	Well Cap ( <b>yes/no</b> )	Surface Seal Intact ( <b>yes/no</b> )
		PID Measurement: ND
		Odors: SVOC B/N Via EPA 8270C

**Well Quality Data**

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/5/2023	13:45	15.79	0	11.03	0.686	12.8	43.7	None	7.5	-182.1	Depth of Water: 15.72
	13:55	15.79	4	11.52	0.786	12.2	27.71	None	4.8	-235.5	Length of Water Column: 16.52
	14:00	15.79	6	11.55	0.797	12.2	26.12	None	5.4	-242.8	Depth of Well: 32.24
	14:05	15.79	8	11.55	0.799	12.2	24.36	None	5	-249.6	Sheen Observed: Y <b>N</b>
											DNAPL Observed: Y <b>N</b>
											Did Well Go Dry: Y <b>N</b>
											Other: 2" diameter well
											1 Well Volume = 2.6 gal

**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 :	<b>WT1-02</b>	Ground Surface Elevation:	598.5	Riser/Screen Material:	PVC
Installation Date:	6/11/07	Groundwater Elevation:	573.4	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 (°C)	Turbidity (NTU)	Color
27.82	11.93-11.98	1.588-1.605	13-13.1	1.40-1.75	Clear

Notes:

**Field Observations**

**Parameters +/-**

**Sampling Information**

Exterior Observations: ok	pH +/- 0.1	Sample ID: <b>WT1-02-090523</b>
	Conductivity +/- 3%	Sample Time: 11:25
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 8260B
Locked ( <b>yes/no</b> )	Well Cap ( <b>yes/no</b> )	Surface Seal Intact ( <b>yes/no</b> )
		PID Measurement: ND
		Odors: SVOC B/N Via EPA 8270C

**Well Quality Data**

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/5/2023	11:05	27.85	0	12.22	1.858	12.9	7.69	None	38.9	-50.2	Depth of Water: 27.38
	11:15	27.85	2	12.31	1.847	12.8	7.86	None	17.7	-88.8	Length of Water Column: 10.4
	11:20	27.85	3	12.32	1.836	12.9	6.98	None	15.7	-96.7	Depth of Well: 37.78
	11:25	27.85	4	12.32	1.833	12.9	7.11	None	14.6	-101.3	Sheen Observed: Y <b>N</b>
											DNAPL Observed: Y <b>N</b>
											Did Well Go Dry: Y <b>N</b>
											Other: 4" diameter well
											1 Well Volume = 6.8 gal

**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 :	<b>WT1-04</b>	Ground Surface Elevation:	<u>584.43</u>	Riser/Screen Material:	PVC
Installation Date:	<u>5/21/07</u>	Groundwater Elevation:	<u>573.24</u>	Top of Screen Depth:	<u>15.52</u>
Installed By:	<u>Turnkey</u>	Monitoring Point Elevator	<u>586.45</u>	Bottom of Screen Depth:	<u>25.52</u>
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 (°C)	Turbidity (NTU)	Color
13.76	11.73-11.78	1.326-1.682	13.0-13.3	2.62-4.50	Clear

Notes:

**Field Observations**

Field Observations	Parameters +/-	Sampling Information
Exterior Observations: ok	pH +/- 0.1	Sample ID: <b>WT1-04-090523</b>
	Conductivity +/- 3%	Sample Time: 9:35
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 8260B
Locked (yes/no)	Well Cap (yes/no)	Surface Seal Intact (yes/no)
		PID Measurement: ND
		Odors: SVOC B/N Via EPA 8270C

**Well Quality Data**

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/5/2023	9:10	14.12	0	12.03	1.391	14.9	32.91	None	3.2	-206.9	Depth of Water: 13.21
	9:20	14.12	1	11.97	1.22	15	45.56	None	0.6	-258.9	Length of Water Column: 12.31
	9:25	14.12	1.5	11.97	1.224	15.1	44.82	None	0.4	-264.7	Depth of Well: 25.52
	9:30	14.12	2	11.97	1.22	15.1	42.16	None	0.3	-272.4	Sheen Observed: Y N
	9:35	14.12	2.5	11.97	1.218	15.1	44.32	None	0.3	-280.2	DNAPL Observed: Y N
											Did Well Go Dry: Y N
											Other: 2" diameter well
											1 Well Volume = 1.9 gal

**STEEL WINDS ANNUAL/SEMI-ANNUAL GROUNDWATER MONITORING EVENT  
WELL DEVELOPMENT FORM  
LACKAWANNA, NEW YORK**

**Historic Information**

Boring Log Available (yes/no/attached): 16  
 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: 572.37 Top of Screen Depth: 13.30  
 Installed By: Turnkey Monitoring Point Elevator 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 (°C)	Turbidity (NTU)	Color
12.48	11.51-11.61	1.292-1.347	12.8-13.0	0.98-1.52	Clear

Notes:

**Field Observations**

Field Observations	Parameters +/-	Sampling Information
Exterior Observations: ok	pH +/- 0.1	Sample ID: <b>WT1-05-090523</b>
	Conductivity +/- 3%	Sample Time: 7:50
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 8260B
Locked (yes/no)	Well Cap (yes/no)	Surface Seal Intact (yes/no)
		PID Measurement: ND
		Odors: SVOC B/N Via EPA 8270C

**Well Quality Data**

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/5/2023	7:30	12.04	0	11.71	1.237	12.9	213	None	26.2	-98.8	Depth of Water: 12.04
	7:40	12.04	8	11.82	1.277	12.9	62.82	None	2.3	-227.8	Length of Water Column: 11.26
	7:45	12.04	12	11.8	1.269	12.9	70.12	None	1.9	-234.8	Depth of Well: 23.3
	7:50	12.04	16	11.78	1.254	12.9	68.32	None	1.6	-241.6	Sheen Observed: Y N
											DNAPL Observed: Y N
											Did Well Go Dry: Y N
											Other: 2" diameter well
											1 Well Volume = 1.8 gal

**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 :	<b>BCP-ORC-1</b>	Ground Surface Elevation:	<u>589.47</u>	Riser/Screen Material:	PVC
Installation Date:	<u>10/3/07</u>	Groundwater Elevation:	<u>573.24</u>	Top of Screen Depth:	<u>24.68</u>
Installed By:	<u>Turnkey</u>	Monitoring Point Elevator	<u>591.97</u>	Bottom of Screen Depth:	<u>34.68</u>
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 (°C)	Turbidity (NTU)	Color
19.23	11.60-11.78	1.041-1.105	11.5-11.7	1.12-1.74	Clear

Notes:

**Field Observations**

Field Observations	Parameters +/-	Sampling Information
Exterior Observations: <u>ok</u>	pH +/- 0.1	Sample ID: <b>BCP-ORC-090523</b>
	Conductivity +/- 3%	Sample Time: 10:25
Interior Observations: <u>ok</u>	Temperature +/- 10%	# of Sample Containers: Five
	Turbidity +/- 10%	Duplicate Sample ID: NA
	ORP +/- 10mV	Sample Analysis:
Signs of Damage/Tampering: <u>None</u>	DO +/- 10%	VOC STARS List via EPA 8260B
Locked ( <b>yes/no</b> )	Well Cap ( <b>yes/no</b> )	Surface Seal Intact ( <b>yes/no</b> )
		PID Measurement: ND
		Odors: SVOC B/N Via EPA 8270C

**Well Quality Data**

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/5/2023	10:05	19.1	0	11.84	1.119	12.3	6.3	None	15.9	-54.6	Depth of Water: 18.73
	10:15	19.18	1	11.76	1.007	12.6	5.59	None	3.2	-197.8	Length of Water Column: 15.95
	10:20	19.18	1.5	11.74	0.999	12.7	5.09	None	2.6	-205.2	Depth of Well: 34.68
	10:25	19.18	2	11.74	0.995	12.7	5.12	None	2.2	-210.4	Sheen Observed: Y N
											DNAPL Observed: Y N
											Did Well Go Dry: Y N
											Other: 4" diameter, Sulfur odor.
											1 Well Volume = 10.4 gal

**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 :	<b>MWN-02</b>	Ground Surface Elevation:	598.89	Riser/Screen Material:	PVC
Installation Date:	9/10/90	Groundwater Elevation:	572.93	Top of Screen Depth:	23.62
Installed By:	Turnkey	Monitoring Point Elevator	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 (°C)	Turbidity (NTU)	Color
28.49	11.71-11.85	1.853-1.965	12.5-12.7	2.16-2.62	Clear

Notes:

**Field Observations**

Field Observations	Parameters +/-	Sampling Information
Exterior Observations: ok	pH +/- 0.1	Sample ID: <b>MWN-02-090523</b>
	Conductivity +/- 3%	Sample Time: 13:05
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 8260B
Locked ( <b>yes/no</b> )	Well Cap ( <b>yes/no</b> )	Surface Seal Intact ( <b>yes/no</b> )
		PID Measurement: ND
		Odors: SVOC B/N Via EPA 8270C

**Well Quality Data**

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/5/2023	12:45	28.17	0	12.19	1.802	12.8	6	None	27.2	-19.8	Depth of Water: 28.08
	12:55	28.17	2	12.34	1.866	12.7	4.58	None	9	-64.2	Length of Water Column: 5.54
	13:00	28.17	3	12.35	1.882	12.7	4.52	None	8.8	-72.2	Depth of Well: 33.62
	13:05	28.17	4	12.35	1.89	12.7	4.5	None	8.2	-80.9	Sheen Observed: Y N
											DNAPL Observed: Y N
											Did Well Go Dry: Y N
											Other: 4" diameter well
											1 Well Volume = 3.6 gal

**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 :	<b>MWN-02B</b>	Ground Surface Elevation:	599.00	Riser/Screen Material:	PVC
Installation Date:	11/2/92	Groundwater Elevation:	572.89	Top of Screen Depth:	46.28
Installed By:	Turnkey	Monitoring Point Elevator	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 (°C)	Turbidity (NTU)	Color
28.73	11.07-11.18	0.833-0.902	13.2-13.9	1.48-2.88	Clear

Notes:

**Field Observations**

Field Observations	Parameters +/-	Sampling Information
Exterior Observations: ok	pH +/- 0.1	Sample ID: <b>MWN-02B-090623</b>
	Conductivity +/- 3%	Sample Time: 8:55
Interior Observations ok	Temperature +/- 10%	# of Sample Containers: Six
	Turbidity +/- 10%	Duplicate Sample ID: NA
	ORP +/- 10mV	Sample Analysis: Arsenic
Signs of Damage/Tampering: None	DO +/- 10%	VOC STARS List via EPA 8260B
Locked (yes/no)	Well Cap (yes/no)	Surface Seal Intact (yes/no)
		PID Measurement: ND
		Odors: SVOC B/N Via EPA 8270C, arsenic

**Well Quality Data**

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (uMhos/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/6/2023	8:35	29.72	0	11.43	0.875	13.2	4.33	None	3	-188.3	Depth of Water: 28.39
	8:45	29.72	4	11.46	0.884	13.2	33.12	None	2.3	-256.7	Length of Water Column: 27.89
	8:50	29.72	6	11.45	0.891	13.2	37.27	None	2	-262.9	Depth of Well: 56.28
	8:55	29.72	8	11.45	0.89	13.2	38.32	None	1.9	-269.4	Sheen Observed: Y N
											DNAPL Observed: Y N
											Did Well Go Dry: Y N
											Other: 2" diameter well, Sulfur odor.
											1 Well Volume = 4.5 gal



**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 :	<b>MWN-02D</b>	Ground Surface Elevation:	600.61	Riser/Screen Material:	PVC
Installation Date:	8/4/95	Groundwater Elevation:	573.95	Top of Screen Depth:	74.34
Installed By:	Turnkey	Monitoring Point Elevator	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 (°C)	Turbidity (NTU)	Color
29.3	7.86	2.027	13.8	189.3	Clear

Notes:

**Field Observations**

**Parameters +/-**

**Sampling Information**

Exterior Observations: ok	pH +/- 0.1	Sample ID: <b>MWN-02D-090623</b>
	Conductivity +/- 3%	Sample Time: 9:50
Interior Observations ok	Temperature +/- 10%	# of Sample Containers: One
	Turbidity +/- 10%	Duplicate Sample ID: NA
	ORP +/- 10mV	Sample Analysis: Barium, Arsenic
	DO +/- 10%	Chromium
Signs of Damage/Tampering: None		
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 (°C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/6/2023	9:30	29.12	0	7.53	1.937	14.6	80.92	None	8	-11.2	Depth of Water: 29.0
	9:40	29.12	1	7.03	1.962	14	28.72	None	1.2	-53.7	Length of Water Column: 50.34
	9:45	29.12	1.5	7.03	1.969	14	29.4	None	1	-59.2	Depth of Well: 79.34
	9:50	29.12	2	7.01	1.971	14	26.22	None	0.8	-63.8	Sheen Observed: Y N
											DNAPL Observed: Y N
											Did Well Go Dry: Y N
											Other: 2" diameter well, Sulfur odor.
											1 Well Volume = 8.1 gal

**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 :	<b>MWN-03</b>	Ground Surface Elevation:	609.79	Riser/Screen Material:	PVC
Installation Date:	9/6/90	Groundwater Elevation:	572.71	Top of Screen Depth:	39.17
Installed By:	Turnkey	Monitoring Point Elevator	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 (°C)	Turbidity (NTU)	Color
39.49	12.49	3.058	14.3	4.06	Clear

Notes:

**Field Observations**

**Parameters +/-**

**Sampling Information**

Exterior Observations: ok	pH +/- 0.1	Sample ID: <b>MWN-03-090623</b>
	Conductivity +/- 3%	Sample Time: 10:45
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 8260B
Locked (yes/no)	Well Cap (yes/no)	Surface Seal Intact (yes/no)
		PID Measurement: ND
		Odors: SVOC B/N Via EPA 8270C

**Well Quality Data**

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged (Gal)	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/6/2023	10:25	40.06	0	12.21	2.866	14.2	116.7	None	6.3	-268.6	Depth of Water: 39.25
	10:35	40.06	1	12.42	2.873	14	21.55	None	0.6	-395.7	Length of Water Column: 9.92
	10:40	40.06	1.5	12.42	2.87	14.1	18.91	None	0.4	-402.5	Depth of Well: 49.17
	10:45	40.06	2	12.42	2.87	14.2	16.27	None	0.3	-411.1	Sheen Observed: Y N
											DNAPL Observed: Y N
											Did Well Go Dry: Y N
											Other: 4" diameter well
											1 Well Volume = 6.4 gal

**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 :	<b>MWN-03B</b>	Ground Surface Elevation:	609.57	Riser/Screen Material:	PVC
Installation Date:	11/5/92	Groundwater Elevation:	572.17	Top of Screen Depth:	60.72
Installed By:	Turnkey	Monitoring Point Elevator	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 (°C)	Turbidity (NTU)	Color
39.64	6.62	27.71	14.2	40.12	Clear

Notes:

**Field Observations**

Field Observations	Parameters +/-	Sampling Information
Exterior Observations: ok	pH +/- 0.1	Sample ID: <b>MWN-03B-090623</b>
	Conductivity +/- 3%	Sample Time: 11:55
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 ( <b>yes/no</b> )	Well Cap ( <b>yes/no</b> )	Surface Seal Intact ( <b>yes/no</b> )
		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 (°C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/6/2023	11:55	41.68	15	7.3	27.35	16	131.28	None	27	-19.2	Depth of Water: 40.12
											Length of Water Column: 30.6
											Depth of Well: 70.72
											Sheen Observed: Y N
											DNAPL Observed: Y N
											Did Well Go Dry: Y N
											Other: GZA purged three well volumes (15 gallons) with bailer.
											Sample was collected with bailer.
											2" diameter well
											1 Well Volume = 4.9 gal

**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 :	<b>MWN-03D</b>	Ground Surface Elevation:	610.75	Riser/Screen Material:	PVC
Installation Date:	7/29/94	Groundwater Elevation:	574.14	Top of Screen Depth:	111.26
Installed By:	Turnkey	Monitoring Point Elevator	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 (°C)	Turbidity (NTU)	Color
39.49	7.26	26.11	13.5	165.2	Clear

Notes:

**Field Observations**

**Parameters +/-**

**Sampling Information**

Exterior Observations: ok	pH +/- 0.1	Sample ID: <b>MWN-03D-090623</b>
	Conductivity +/- 3%	Sample Time: 12:55
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: None	DO +/- 10%	VOC STARS List via EPA 8260B
Locked ( <b>yes/no</b> )	Well Cap ( <b>yes/no</b> )	Surface Seal Intact ( <b>yes/no</b> )
		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 (°C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/6/2023	12:55	40.97	39	7.64	3.129	16.7	53.3	None	25.1	-105.1	Depth of Water: 39.37
											Length of Water Column: 81.89
											Depth of Well: 121.26
											Sheen Observed: Y N
											DNAPL Observed: Y N
											Did Well Go Dry: Y N
											Other: GZA purged three well volumes (39 gallons) with bailer.
											Samples were collected with bailer.
											1 Well Volume=13.1 gal
											2" diameter well

**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 :	<b>MWN-04</b>	Ground Surface Elevation:	621.02	Riser/Screen Material:	PVC
Installation Date:	9/12/90	Groundwater Elevation:	572.46	Top of Screen Depth:	48.53
Installed By:	Turnkey	Monitoring Point Elevator	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 (°C)	Turbidity (NTU)	Color
51.36	11.35	3.54	17.3	33.47	Clear

Notes:

**Field Observations**

Field Observations	Parameters +/-	Sampling Information
Exterior Observations: ok	pH +/- 0.1	Sample ID: <b>MWN-04-090623</b>
	Conductivity +/- 3%	Sample Time: 13:30
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 8260B
Locked ( <b>yes/no</b> )	Well Cap ( <b>yes/no</b> )	Surface Seal Intact ( <b>yes/no</b> )
		PID Measurement: ND
		Odors: SVOC B/N Via EPA 8270C

**Well Quality Data**

Date	Time	Depth to Water ft bgs	Cumulative Volume Purged	pH (Standard Units)	Specific Conductance (mS/cm)	Temperature (°C)	Turbidity (NTU)	Color	Dissolved Oxygen %	Oxygen Reduction Potential	Notes
9/6/2023	13:30	53.68	6	11.52	3.525	17.2	12.95	None	48.9	-25.3	Depth of Water: 50.99
											Length of Water Column: 7.54
											Depth of Well: 58.53
											Sheen Observed: Y N
											DNAPL Observed: Y N
											Did Well Go Dry: Y N
											Other: GZA purged 6 gallons to dry with bailer
											1 well volume=4.9 gal
											4" diameter well



GZA GeoEnvironmental, Inc.