

**Former Jameco Industries Site**  
**WYANDANCH, SUFFOLK COUNTY, NEW YORK**

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**Periodic Review Report**

**NYSDEC Site Number: #1-52-006**

**Linzer Corporation**  
248 Wyandanch Avenue  
West Babylon, New York

**Prepared by:**  
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**JUNE 2019**

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## PERIODIC REVIEW REPORT

### 1.0 EXECUTIVE SUMMARY

Goldman Environmental Consultants, Inc. (GEC) of Braintree, Massachusetts - retained by the Linzer Corporation - prepared the following Periodic Review Report (PRR) for 248 Wyandanch Avenue, Wyandanch, New York ("Site"). A PRR is required for sites in active Site management with the New York State Department of Environmental Conservation (NYSDEC) as promulgated in Section 6.3(b) of DER-10 and covers the reporting period of May 31, 2018 to May 31, 2019 and reports on Site specific management requirements as described in the Site Management Plan (SMP), dated July 27, 2009, prepared by GEC and approved by the NYSDEC, and addendum to the SMP requested and approved by the NYSDEC on March 31, 2016. Annual groundwater monitoring is conducted during the spring. Semi-annual Site inspections are conducted in the spring and fall.

GEC is also recommending/requesting that IC/EC inspections be conducted at a reduced frequency – to take place annually in April of each year in conjunction with groundwater monitoring.

#### ***Summary***

The Site (#1-52-006) consists of approximately 9.35 +/- acres and located in a mixed industrial/commercial/residential area. The Site is improved with a single-story concrete block building surrounded by paved and unpaved areas. The Site Locus is included as Figure 1 and the Site Plan is included as Figure 2. The Site is currently owned and occupied by Linzer Corporation, Inc. (Linzer), a manufacturer of painting products and has occupied the Site since early 1999. Prior to 1999, Jameco Industries (Jameco) occupied the property. Jameco used the Site to manufacture plumbing fixtures; some manufacturing included plating parts with chrome and nickel.

Environmental investigations have identified five discreet Areas of Concern (AOC) on the Site. Elevated concentrations of metals and volatile organic compounds (VOCs) from plating activities and process wastewater discharges were measured across several portions of the Site in areas identified as AOC-1, AOC-2, AOC-3, and AOC-5. Polycyclic Aromatic Hydrocarbons (PAHs) from a release of cutting oil were detected in the northern portion of the Site identified as AOC-4.

Remedial activities - completed in January 2008 - are summarized in the August 2011 Final Engineering Report, prepared by GEC. Activities included; the closure of the concrete leaching pool structures, the removal of contaminated soils, in-situ stabilization of metals in soil, and the implementation of Institutional Controls / Engineered Controls (IC/EC) as described in an Environmental Easement prepared for the Site - executed by the current owner, Linzer. In accordance with the SMP (dated July 27, 2009) and the Soil Management Plan (dated January 22, 2009), the remedial program includes long-term groundwater monitoring and the inspection of the five AOCs.

### ***Effectiveness of the Remedial Program***

The remedial program has proven effective in fulfillment of remedial goals outlined in the SMP. Currently, only slightly elevated concentrations of nickel exceed the NYSDEC Class GA Groundwater Standard (Class-GA) at the Site. Analytical results for the annual sampling event (conducted in May 2019) indicate steady state conditions for monitored parameters since remedial activities were completed in 2006. Refer to Table 1 for the May 2019 groundwater sampling plan. Relative to the monitoring of the effectiveness of the remedial program only minor modifications were made, which was to exclude sampling of MW-19 for PAHs due to the presence of a measurable thickness of light non-aqueous phase liquid (LNAPL). It is likely that the LNAPL in MW-19 is trapped within the sand pack of the well, and not representative of conditions within the formation. However, as a precaution GEC will retest existing monitoring wells in the vicinity of MW-19 for PAHs during the next sampling round to determine if this represents an ongoing source to groundwater. Groundwater samples were submitted to Contest Laboratories of Longmeadow, Massachusetts (Laboratory ID: 10899) for analysis. Refer to Attachment 3 for the laboratory certification of analysis and Tables 2 and 3 for a summary of poly-cyclic aromatic hydrocarbons (PAHs) and total metals results, respectively.

During the 2018/2019 monitoring period, GEC noted no significant change in the concentration of metals found in groundwater. The nickel concentration detected at MW-5R (0.20 µg/L) was lower than what was detected in April of 2018, and remains within the historical range and lower than the 3.64 µg/L detected in April of 2016. All other metal concentrations were within historical range and similar to detections reported in the previous PRR.

As reported historically, detected concentrations of nickel at MW-2, MW-4, and MW-5R exceeded the Class-GA standard in samples collected during the recent monitoring event conducted on May 6, 2019.

No reported concentrations of PAHs exceeded Class-GA standards or laboratory detection limits. However, as indicated above GEC will expand the sampling program to retest adjacent and downgradient wells from MW-19 during the next sampling round.

### ***Compliance***

No compliance issues were found with the groundwater sampling program, SMP, or the IC/EC described in the Environmental Easement. On January 23, 2012, the NYSDEC notified Linzer that all remediation work required at the Jameco Site is completed. The Site was subsequently reclassified as a Class 4 Environmental Site. Watts (the previous PRP) addressed the “existing OHM condition” and fulfilled its obligation required in the Purchase and Sale agreement with Linzer. Under the Environmental Easement that Linzer entered into with NYSDEC on August 2, 2012, Linzer assumed all of the remaining obligations under the NYSDEC-approved Site Management Plan. In a letter, dated May 16, 2012, Linzer consented to the responsibility of the remaining periodic inspections, monitoring and reporting as outlined in the SMP.



## ***Recommendations***

Linzer should continue monitoring the effectiveness of the remedial program at the currently approved frequency with the following modification:

IC/EC inspections should be conducted at a reduced frequency – to take place annually in April or May in conjunction with the annual groundwater monitoring.

## **2.0 SITE OVERVIEW**

The Site, located in the Suffolk County, New York, is identified as Block 02 and Lots 73.1 and 37.6 on the Suffolk County Tax Map, Parcel Numbers District 0100, Section 82.00. The 9.35 ± acre (Parcels 1 and 3) Site is located within a mixed industrial/commercial/residential area bounded by Wyandanch Avenue to the north, Rockland Avenue to the east, Mount Avenue to the west-southwest, and residential properties to the south-southeast. Refer to Figure 2 for a site plan depicting the boundaries of the Site.

Environmental investigations have identified five discrete AOCs on the Site and are as follows;

- AOC - 1 - located to the east-southeast of the building directly east of the current loading dock area - contained a seepage lagoon where four heavy metals (chromium, nickel, copper and zinc) were released to the environment at levels exceeding relevant standards, criteria, and guidance in soil. All four metals were also detected in groundwater downgradient of AOC-1; however, only nickel was detected above relevant standards, criteria, and guidance.
- AOC – 2 – located within the former Jameco building near the center of the building - was formerly a degreasing area. Elevated concentrations of VOCs (i.e., trichloroethene (TCE), 1,2-dichloroethene (1,2-DCE) and tetrachloroethene (PCE)) were detected above relevant standards, criteria, and guidance in soil and groundwater in this area.
- AOC – 3 - a square area extending southward from the southern property line - was the former location of forty-eight leaching chambers that received treated process water. A release to the environment of four heavy metals (chromium, nickel, copper and zinc) occurred to the soil during the leaching process. Moderate to elevated concentrations of metals above relevant standards, criteria, and guidance were detected in soils in this area. Low to moderate concentrations of metals above relevant standards, criteria, and guidance were also detected in groundwater within the former leaching pool area.
- AOC – 4 - located beneath and in front of the Site building's north side - is where machine cutting oil was released to a leaching pool system. As a result, both soil and groundwater in the area were impacted by the presence of LNAPL and PAHs.

- AOC – 5 - located within the former Jameco building near the center of the building - was a former a metal plating shop. Four metals (chromium, nickel, copper and zinc) were detected in soil at concentrations exceeding relevant standards, criteria, and guidance. In groundwater, chromium, copper, and zinc were detected at concentrations above relevant standards, criteria, and guidance.

Refer to Figure 2 for a site plan for the location of all five AOCs.

In December 1983, NYSDEC listed the Site as a Class 2a site. In May 1992 the NYSDEC reclassified the Site to Class 2 - however, after petitioning by Jameco Industries, Inc. the Site was reclassified to Class 4 in February 1993. Following additional investigations, the Site was reclassified back to Class 2 in February 1996. The NYSDEC issued a Record of Decision (ROD) for the Site dated March 2003. Amendments were added to the ROD based on the results of supplemental subsurface investigations conducted in accordance with a *Work Plan for Soil and Groundwater Sampling and Analysis* dated June 2003. The results of the subsurface investigation are documented in a *Draft Final Pre-Remedial Design / Remedial Action Soil and Groundwater Sampling Work Plan* dated May 2004. On May 11, 2005, NYSDEC issued a ROD Amendment letter outlining proposed amendments to the selected alternative remedies for the affected areas.

In August 2005, a Remedial Design Plan, summarizing the steps necessary to implement the proposed Amended ROD, was submitted. In March 2006 the final ROD Amendment was issued. ROD activities commenced in the fall of 2006. Chemical injections were completed on November 6, 2006. The replacement of monitoring wells MW-3 and MW-4 were completed on April 29, 2008. The Final Engineering Report dated August 29, 2011, summarized site remedies conducted at the Site in accordance with the ROD.

The NYSDEC approved the Final Engineering Report on September 14, 2011. On January 23, 2012, the NYSDEC changed the Site classification from Class 2 to Class 4. Among the reasons the NYSDEC cited for this change were that the remedy has been constructed consistent with the ROD Amendment and the requisite institutional controls, in the form of an environmental easement were in place.

As stated in the Amended ROD the Remedial Action Objectives (RAOs) were to eliminate or mitigate all significant threats to public health and/or the environment.

The remediation goals for the Site were to eliminate or reduce to the extent practicable;

- Exposures of persons at or around the site to metals and PAHs in soil and groundwater, and
- The release of contaminants from soil into groundwater that may create exceedances of ambient groundwater quality standards.

The remediation goals for the Site also included attaining, to the extent practicable, and with changes authorized by NYSDEC staff:

- Ambient Class GA groundwater quality standards; and
- The soil cleanup objectives specified in Technical and Administrative Guidance Memorandum (TAGM) #4046.

As part of the Amended ROD, groundwater monitoring is required. The SMP dated July 27, 2009 and submitted to NYSDEC, describes the post-remedial groundwater monitoring plan, a reporting schedule and appropriate institutional controls.

According to the groundwater sampling plan, samples are collected from wells identified in Table 1 and analyzed for the listed analytes. Sampling was conducted quarterly for the first year after initiation of remediation and then semi-annually for the next four years. The year of quarterly sampling was completed on September 11, 2008; the semi-annual monitoring began in March 2009 and has continued until on April 2015. GEC, on behalf of Linzer, requested a change in the groundwater monitoring frequency to an annual event instead of a semi-annual event. Approval for this change was granted on March 31, 2016. This report summarizes the annual sampling conducted during May 2019 and semi-annual inspection of the IC/ECs conducted in October 2018 and May 2019.

According to the Amended ROD, an environmental easement was implemented, and a soil management plan developed to ensure safety if contaminated soils were disturbed during any future subsurface construction activities. The easement was recorded by the Suffolk County Clerk's Office on August 2, 2010.

The SMP was issued to the NYSDEC and approved on August 12, 2009. According to the plan, the NYSDEC would be notified of construction or development activities that may disturb existing subsurface contamination. A periodic certification, prepared by a professional engineer or environmental professional acceptable to NYSDEC, would also be submitted certifying that institutional controls and engineering controls remain effective. Periodic certification must be provided until the NYSDEC notifies in writing that this certification is no longer required. Please refer to the Periodic Review Report Certification Statement and IC/EC Certification form in Attachment 1.

### **3.0 REMEDY PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS**

IC/ECs established for the Site include the maintenance of a protective soil cover system over each AOC and a prohibition against development of groundwater as a source of potable or process water without treatment. These controls have been implemented to reduce exposures of persons at or around the Site to metals and PAHs in soil and groundwater.

During the May 2019 monitoring event, groundwater samples were collected for dissolved chromium, nickel, and/or copper from monitoring wells MW-2, MW-3, MW-4, MW-5R, MW-10, MW-12, and MW-26R, and for PAHS from monitoring wells MW-20, MW-21 and MW-23.

Laboratory analytical results are used to evaluate the effectiveness of the remedial program.

GEC did not collect a groundwater sample from MW-19 for PAHs during this monitoring period due to the presence of 0.02 feet of LNAPL within the well. The product thickness was measured with an oil water interface probe. GEC performed pump-down transmissivity tests at MW-19 in both October of 2018 and May of 2019, neither of these tests resulted in any measurable thickness of product returning into the annular space of the well. If LNAPL is present during the next sampling round GEC will once again conduct the pump-down test. If product does not return to the well, GEC will collect a groundwater sample for PAHs.

The selected remedies to reduce or eliminate the release of contaminants from soil into groundwater are effective at remediating nickel, copper, chromium, zinc, and PAHs. Refer to Table 2 and 3 for a summary of the analytical results for PAHs and metals, respectively.

- The concentration of nickel in three of seven groundwater samples (MW-2, MW-4, and MW-5R) analyzed exceeded Class-GA standard, but were all within post-remedial historical ranges.
- Low to non-detect concentrations of copper were reported for two of three groundwater samples (MW-10 and MW-26R) analyzed and are within the historical ranges. MW-12 (0.860 µg/L) exceeded Class-GA standard, though this falls within the historical range for the Site; the historic high of 0.98 µg/L was observed April of 2015.
- Chromium was not detected above laboratory detection limits in two of three groundwater samples analyzed. MW-12 (0.013 µg/L) is within historical ranges
- Monitoring wells MW-19, MW-20, MW-21 and MW-23 are listed to be sampled for PAHs. These wells are located within AOC-4, on the north side of the Site building. MW-19 was not sampled due to the presence of 0.02 feet of LNAPL as measured with an oil/water interface probe. The LNAPL observed at MW-19 does not appear to be a significant continuing source of PAHs within AOC-4 based on recent results, which is consistent with previous sampling results. No PAHs were detected in groundwater at concentrations above laboratory detection limits, which are slightly increased from previous reported detection limits, some of which are above Class-GA standards.

#### **4.0 IC/EC PLAN COMPLIANCE REPORT**

##### ***Institutional Controls***

Institutional Controls at the Site were established to prevent exposure of persons at or around the Site to metals and PAHs in groundwater by prohibiting the use of groundwater as a source of potable or process water without appropriate water quality treatment. An Environmental Easement has been recorded on the property Deed with additional restrictions imposed to ensure safety if residual contaminated soils were to be disturbed. The Environmental Easement requires a soil management plan if and when excavation activities take place on Site in any of the AOCs. A Soil

Management Plan was submitted as an attachment in the approved SMP. The SMP was approved by the NYSDEC in a letter dated August 12, 2009. The Soil Management Plan describes what is required during any future excavation work within the AOCs. Linzer is required to provide annual certification to NYSDEC certifying that the institutional and engineering controls are still in place and effective.

The performance of the institutional controls is evaluated by visual inspections and interviews with on-Site representatives. Interviews consist of asking the current owner about any future plans to utilize groundwater water at the Site or if any excavations were conducted and/or are planned to be conducted within an AOC.

### ***Engineering Controls***

Engineering controls consisting of soil cover systems placed over contaminated soil/fill remaining on Site were established to prevent exposure of persons at or around the Site to metals and PAHs in soil. Figure 2 shows the five AOCs and the form of engineering control at each AOC. The cover system is different in each of the AOCs and is comprised of one or more of the following:

- clean backfill,
- bituminous concrete (“asphalt”) pavement; and/or,
- concrete foundation slabs of buildings.

Performance for each type of soil cover system is evaluated by conducting a visual inspection to evaluate the integrity and completeness of the cover over each AOC.

### ***Status of IC/EC Objectives***

GEC visited the site on October 15, 2018 and May 6, 2019 to inspect Site conditions and collect groundwater samples (May 2019 only). Please refer to photographs taken during the October 2018 and the May 2019 inspection, in Attachment 2. The institutional and engineered controls described above are fully in place and were effective at fulfilling the objective to prevent exposure of persons at or around the Site to metals and PAHs in soil and groundwater.

- AOC-1 is completely covered by the bituminous concrete pavement adjacent to the loading docks.
- AOC-2 and AOC-5 are completely within the existing Site building and covered by the concrete foundation slab.
- AOC-3 is covered by approximately 5 feet of clean backfill (0 to 5 feet deep) and 6 feet of excavated soil reused for backfill (6 to 11 feet deep). Approximately 6 to 12 inches of compacted crushed concrete and Recycled Concrete Aggregate (RCA) blend is located at the surface.

- AOC-4 is about 75 percent located beneath the building concrete foundation slab, and about 25 percent located in front of the building and covered with approximately 8 to 10 feet of clean backfill soils, including a vegetative cover (grass) at the surface.
- According to an interview with Linzer personnel, there are plans for expansion of a Site building. GEC has reviewed plans for the expansion and no impacts to any AOC are expected. Work is planned to expand the Site building to the east away from AOC-1. There may be pavement encroachment onto AOC-1, but as of now there are no plans to remove pavement from this area leading to potential exposure to metals contaminated soil. GEC and Linzer are in regular communication on the status of this project, which is currently in permitting.

#### ***Corrective Measures***

No corrective measures are needed at this time.

#### ***Conclusions and Recommendations***

Current Site conditions comply with the provisions of the IC/EC Plan.

Linzer should continue with the monitoring events at the approved frequency.

GEC is recommending/requesting that IC/EC inspections be conducted at a reduced frequency – to take place annually in April/May in conjunction with groundwater monitoring. Linzer is forthcoming and pro-actively consults GEC with proposed plans for any improvements to the Site that may disturb the sub-surface within or outside of the AOCs in accordance with the recorded environmental easement.

### **5.0 MONITORING PLAN COMPLIANCE REPORT**

#### ***Groundwater Monitoring Plan Components***

Historically there were a total of 24 groundwater monitoring wells on Site; however, a subset of 11 monitoring wells is included in the current Monitoring Plan that was initiated in June 2012. For the 2020 sampling round the number of wells will be increased to 13, as discussed below.

The Monitoring Plan stipulates that, prior to collection of groundwater samples the groundwater level in each well shall be measured and recorded. Groundwater samples are to be collected with the low-flow sampling method. Laboratory analysis includes total chromium, copper, and nickel via USEPA Method 6010/7000s and/or PAHs via USEPA Method 8270C. Samples must be submitted to a certified New York state laboratory under proper chain-of-custody documentation. Please refer to Table 1 attached for a summary of the groundwater monitoring plan. GEC has modified the monitoring plan for the next sampling round to include monitoring wells MW-16 and MW-17 for PAHs.

### ***Monitoring Completed During Reporting Period***

Since the submittal of the last PRR in June 2018 one round of long-term groundwater monitoring has been conducted during May 2019. A total of 11 monitoring wells were to be sampled for metals or PAHs as shown in Table 1. Due to the presence of LNAPL at MW-19 a total of 10 monitoring wells were sampled in May 2019.

Prior to groundwater sampling, the groundwater level in each well was measured and recorded. Peristaltic pumps with polyethylene tubing were used to purge and sample monitoring wells. Groundwater samples were collected using the USEPA Region II “Groundwater Sampling Procedure – Low Stress (low flow) Purging and Sampling (March 16, 1998) and field parameters monitored included: dissolved oxygen, pH, temperature, specific conductance, ORP, and turbidity. Laboratory analysis included total chromium, copper and nickel via USEPA Method 6010 or PAHs via USEPA Method 8270C. Samples were submitted to Contest Laboratories of Longmeadow, Massachusetts a New York State certified laboratory under proper chain-of-custody documentation. A copy of the analytical reports and chains-of-custody are included in Attachment 3.

### ***Comparison with Remedial Objectives***

The remediation goal for the Site is to attain, to the extent practicable, ambient Class GA groundwater quality standards. Overall, metal concentrations are consistent compared to historical data.

Three (MW-2, MW-4, and MW-5R) of the seven monitoring wells sampled for nickel exceeded the Class-GA standard.

Class-GA standard was exceeded for copper in MW-12 (0.860 µg/L ) which is within historic ranges, the other two wells were not detected above laboratory detection limits. No Class-GA standard was exceeded for chromium. Chromium was detected in one of three samples at low concentrations. Please refer to Table 3 for a summary of analytical data for metals.

Monitoring wells MW-19, MW-20, MW-21 and MW-23 are listed to be sampled for PAHs. These wells are located within AOC-4, on the north side of the Site building. MW-19 was not sampled due to the presence of 0.02 feet of LNAPL as measured with an oil/water interface probe. The LNAPL observed at MW-19 does not appear to be a significant continuing source of PAHs within AOC-4, which is consistent with previous sampling results. However, GEC will increase the sampling network in the vicinity AOC-4 to retest monitoring wells in the area for PAHs. No PAHs were detected in groundwater at concentrations above laboratory detection limits, which are slightly elevated from previous reported detection limits, some of which are above the Class-GA standards.

Please refer to Table 2 for a summary of PAHs analytical data.

### ***Changes made to Groundwater Monitoring Component of Site Management Plan***

Monitoring during this reporting period complied with the change previously proposed to the NYSDEC in GEC’s December 2009 Annual Monitoring Report that made recommendations to

eliminate some monitoring wells from the annual sampling. During long-term groundwater monitoring it became evident that some individual wells no longer exceeded Class-GA standards for one or more analyses. Therefore, GEC reduced the groundwater monitoring scope by eliminating sampling of MW-3, MW-5R, MW-7, MW-10, MW-11, MW-12, MW-16, MW-17, and MW-26R for PAH analysis. In addition, metal analyses were reduced to total chromium, copper and nickel only in MW-10, MW-12 and MW-26R, and nickel only in MW-2, MW-3, MW-4 and MW-5R. The PRR submitted for the June 2015 to May 2016 monitoring period discussed the reasoning behind reducing the monitoring frequency from semi-annually to an annual event. GEC received oral approval from the NYSDEC after submitting this PRR and official approval in the form of a Site Management Addendum letter dated March 31, 2016 (included in the June 2017 PRR).

As discussed above, GEC will add MW-16 and MW-17 back to the sampling plan for 2020 for PAHs due to the persistence of LNAPL in MW-19.

## **6.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS**

### ***SMP Compliance***

The IC/EC established in the Environmental Easement prevents exposure of persons at or around the Site to metals and PAHs in soil and groundwater. All requirements of the IC/EC and Environmental Easement were met during the reporting period. Site inspections to verify the effectiveness of the IC/EC will continue.

Long-term groundwater monitoring was established in the SMP to determine if cleanup goals for groundwater could be achieved. The monitoring plan was modified in GEC's December 2009 Annual Monitoring Report based on years of data which showed clean groundwater in certain monitoring wells. GEC has modified the sampling plan in 2016 to go from semiannual sampling to annual sampling with NYSDEC authorization.

### ***Performance and Effectiveness of the Remedy***

The IC/EC established in the Environmental Easement have been effective in achieving the remedial objective to eliminate exposures of persons at or around the Site to metals and PAHs in soil and groundwater. Currently the groundwater data have shown that the other remedial objectives have been or will likely be obtained over time: to reduce the release of contaminants from soil into groundwater that may create exceedances of ambient groundwater quality standards; to meet ambient Class GA Groundwater Standards; and to meet soil cleanup objectives specified in Technical and Administrative Guidance Memorandum (TAGM) #4046.

Continued annual groundwater monitoring is sufficient to evaluate the variability of total chromium, copper, and nickel concentrations in groundwater. The LNAPL that is present historically in MW-19 does not appear to be contributing to groundwater contamination as the recent analytical results suggest. However, to evaluate whether the LNAPL is an artifact (trapped in the sand pack of the well) or representative of conditions in the formation, GEC will increase the sampling network within AOC-4 to include MW-16 and MW-17 for PAHs in 2020.



The current remedy has significantly improved water quality. GEC will continue to monitor its effectiveness.

#### ***PRR Submittal Schedule***

The frequency of PRR submittals is not expected to change. The next PRR will be due 12 months from the submittal deadline of this report, or June 30, 2020. The frequency of sampling and Site inspections shall be conducted annually – assuming NYSDEC continuing approval of modifying the inspection frequency from semi-annual to an annual event.

#### **7.0 WARRANTY**

The conclusions and recommendations contained in this report are based on the information available to GEC as of the date of this document. The conclusions and recommendations may require revision if future regulatory changes occur. GEC provides no warranties on information provided by third parties and contained herein. Data compiled was in accordance with GEC's existing procedures and consistent with the NYSDEC regulations, and should not be construed beyond its limitations. Any interpretations or use of this report other than those expressed herein are not warranted.

The use, partial use, or duplication of this report without the written consent of Goldman Environmental Consultants, Inc., and the Linzer Corporation is strictly prohibited.

Respectfully submitted,

**Goldman Environmental Consultants, Inc.**

Prepared By:

*Andrew Foley*

Andrew P Foley  
Project Scientist

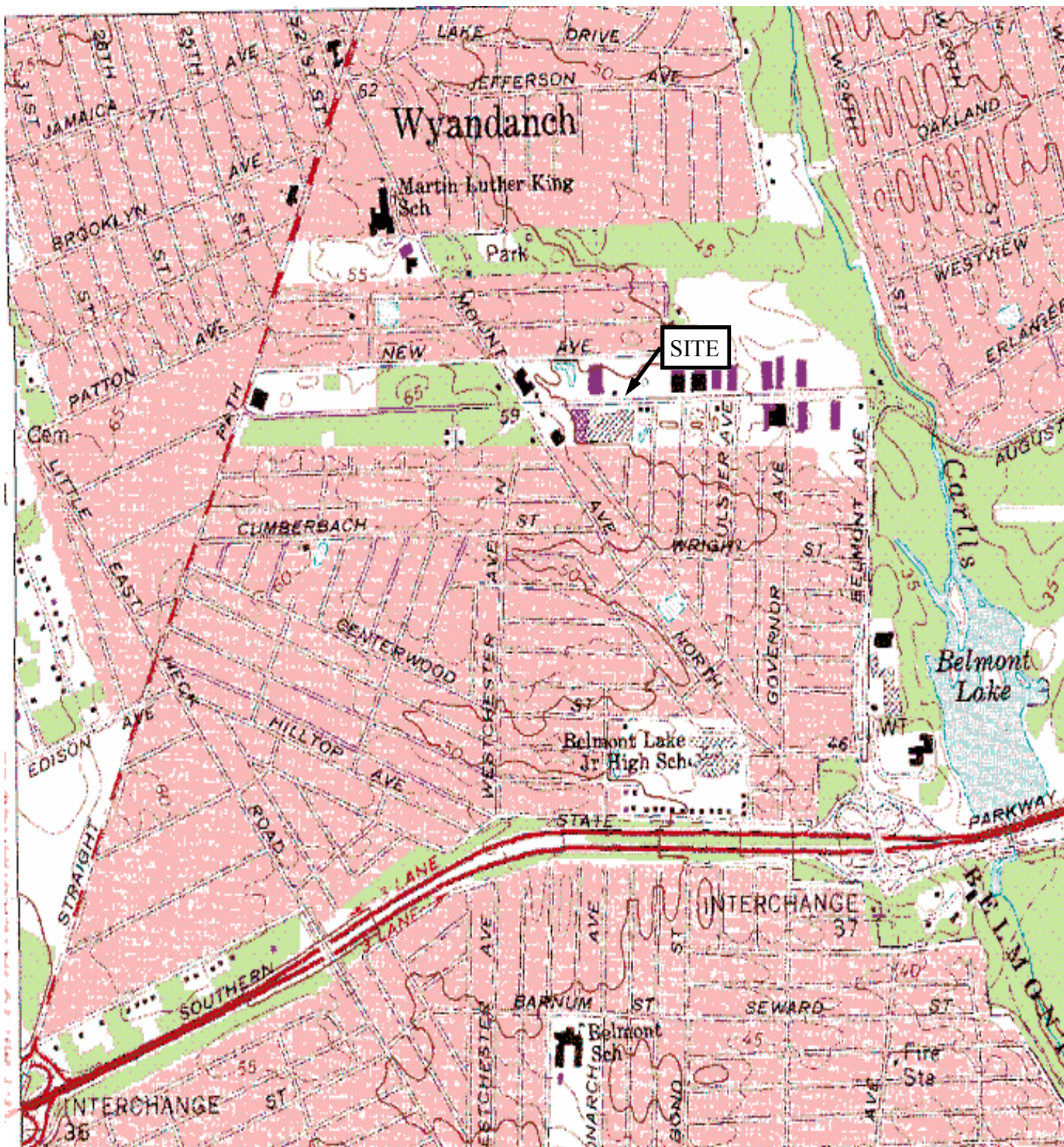
Approved By:

*Brian T. Butler*

Brian T. Butler, PG  
Senior Vice President, Operations

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## FIGURES



USGS 7.5 Minute Topographic

Bay Shore  
New York, Quadrangle



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### SITE LOCUS

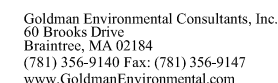
248 Wyandanch Avenue  
Wyandanch, New York

GEC Project #: 444-5010

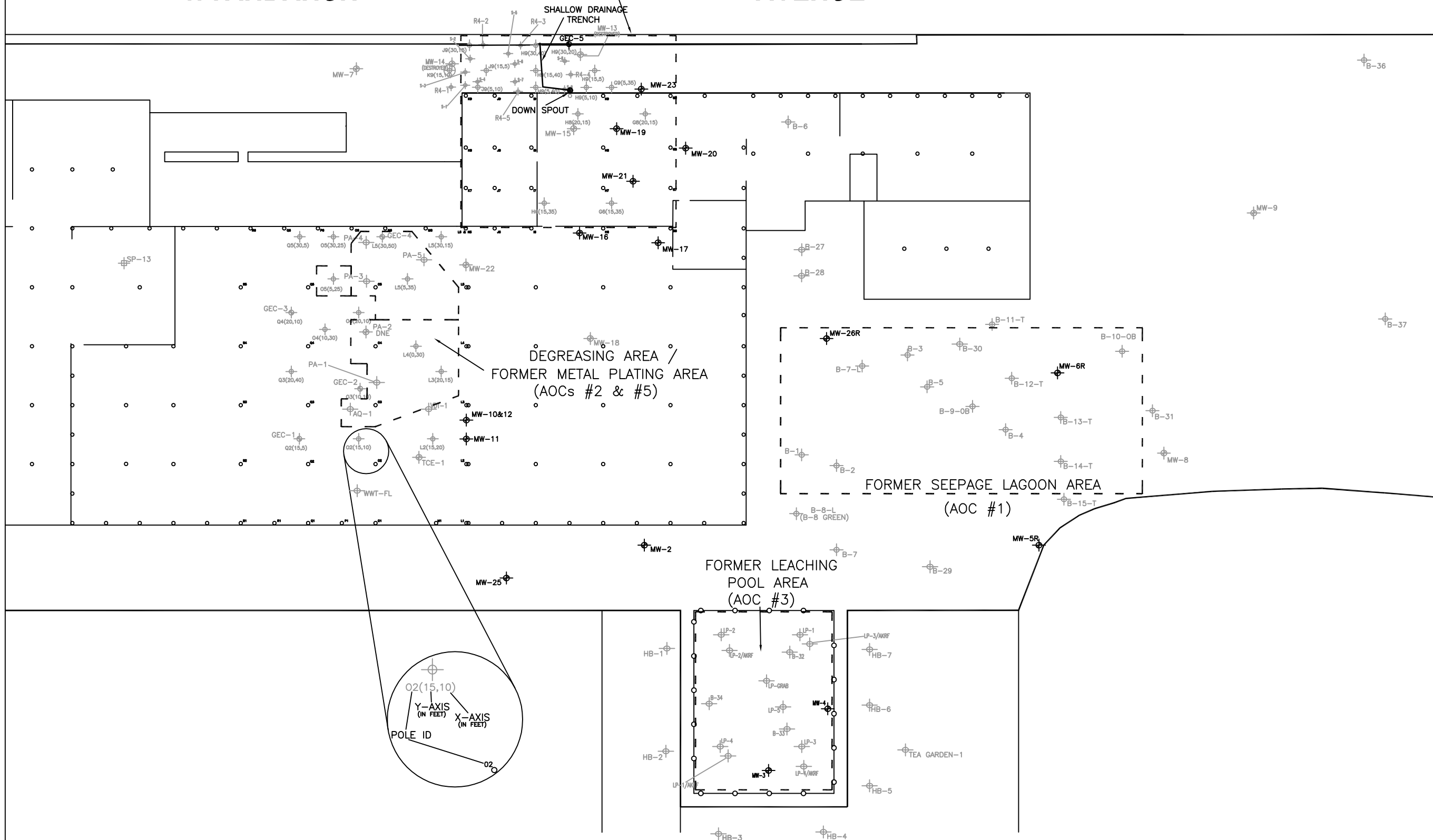
### Figure 1

Scale  
1 : 25,000





CUTTING OIL RELEASE AREA  
(AOC #4)

***AVENUE***

### Legend

-  Site Boundary  
 Areas of Concern  
 Monitoring Well  
 Boring Location  
 Support Column

## Special Notes

- 1.) This drawing is a graphical representation only and should not be used as a survey.
- 2.) Basemap taken from Suffolk County Tax Map Dist. 100 Sect. 82 Block 2 Lot 73.1.
- 3.) Support Columns based on plan by John Schimenti P.C. Architect, A.I.A. number 8864, A1, dated 1-12-99.
- 4.) MW-10 Deep well (97') next to MW-12 shallow well (15').

## Revisions

[illegible]

### Scale

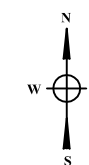


1 : 30'

### Site Plan of Remediation Areas & Sample Locations

at  
Former Jameco Facility  
248 Wyandanch Avenue  
Wyandanch, New York

Watts  
GEC Project Number 444-408H



2

Figure No.

## **TABLES**



**TABLE 1:**  
**GROUNDWATER MONITORING PLAN**

248 Wyandanch, Ave  
West Babylon, New York

| Monitoring Well | Associated AOC | Screen Depth | Chromium, Copper, Nickel (6010C) | Nickel (6010C) | Semi-VOCs (8270C) |
|-----------------|----------------|--------------|----------------------------------|----------------|-------------------|
| MW-2            | AOC-2          | 6-16         |                                  | X              |                   |
| MW-3            | AOC-3          | 10-20        |                                  | X              |                   |
| MW-4            | AOC-3          | 10-20        |                                  | X              |                   |
| MW-5R           | AOC-1          | 6-16         |                                  | X              |                   |
| MW-10           | AOC-2 and 5    | 87-97        | X                                |                |                   |
| MW-12           | AOC-2 and 5    | 5-15         | X                                |                |                   |
| MW-19           | AOC-4          | 5-25         |                                  |                | X                 |
| MW-20           | AOC-4          | 5-25         |                                  |                | X                 |
| MW-21           | AOC-4          | 5-25         |                                  |                | X                 |
| MW-23           | AOC-4          | 2-20         |                                  |                | X                 |
| MW-26R          | AOC-1 and 4    | 10-20        | X                                |                |                   |
| MS              |                |              | X                                |                | X                 |
| MS-DUP          |                |              | X                                |                | X                 |
| <b>Total</b>    |                |              | 5                                | 4              | 6                 |

TABLE 2  
SUMMARY OF GROUNDWATER ANALYTICAL DATA:  
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)  
248 Wyandanch Avenue, Wyandanch, New York  
(unit, parts per billion [ppb] µg/L)

| Sample Identification | Sample Date  | Analytical Method                                       | Acenaphthene<br>SQL | Anthracene<br>SQL | Benzo (a)<br>anthracene<br>SQL | Benzyl<br>alcohol<br>SQL | 4-Chloroaniline<br>SQL | Chrysene<br>SQL | 3,3-Dichloro<br>benzidine<br>SQL | 2,4-Dichlorophenol<br>SQL | Di-n-butyl<br>phthalate<br>SQL |
|-----------------------|--------------|---------------------------------------------------------|---------------------|-------------------|--------------------------------|--------------------------|------------------------|-----------------|----------------------------------|---------------------------|--------------------------------|
| MW-2                  | 12/4/2007    | 8270                                                    | ND 5                | ND 5              | ND 5                           |                          |                        | ND 5            |                                  | ND 5                      |                                |
| MW-3<br>(AOC #3)      | 1/25/2007    | 8270                                                    | ND 10               | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | ND 5                      | ND 5                           |
|                       | 12/4/2007*** | Well not sampled, destroyed during soil excavation      |                     |                   |                                |                          |                        |                 |                                  |                           |                                |
|                       | 4/16/2008*** | Well destroyed during soil remediation, to be replaced. |                     |                   |                                |                          |                        |                 |                                  |                           |                                |
|                       | 9/11/2008*** | 8270M(SIM)                                              | ND 0.5              | ND 0.5            | ND                             | ND 0.1                   | ND                     | ND 0.02         | ND                               | NA ---                    | ND 0.02                        |
|                       | 9/28/2009*** | 8270C                                                   | ND 0.93             | ND 0.84           | ND 1.03                        | ND                       | ND                     | ND 0.95         | ND                               | ND 0.98                   | ND 0.95                        |
| MW-4<br>(AOC #3)      | 12/4/2007*** | 8270                                                    | ND 5                | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | ND 5                      | ND 5                           |
|                       | 4/16/2008*** | Well destroyed during soil remediation, to be replaced. |                     |                   |                                |                          |                        |                 |                                  |                           |                                |
|                       | 3/30/2009*** | 8270                                                    | ND 1.02             | ND 0.84           | ND 1.03                        | ND                       | ND                     | ND 0.95         | ND                               | ND 0.98                   | ND 0.95                        |
| MW-5R<br>(AOC #1)     | 12/15/2003   | 8270                                                    | ND 5                | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | ND 5                      | ND 5                           |
|                       | 4/6/2006     | 8270                                                    | ND 0.30             | ND 0.20           | ND 0.05                        | ND                       | ND                     | ND 0.20         | ND                               | ND 1                      | ND 0.20                        |
|                       | 1/29/2007*** | 8270                                                    | ND 5                | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | 13 5                      | ND 5                           |
|                       | 12/4/2007*** | 8270                                                    | ND 5                | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | ND 5                      | ND 5                           |
|                       | 4/16/2008*** | 8270                                                    | ND 5                | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | ND 5                      | ND 5                           |
|                       | 9/11/2008*** | 8270M(SIM)                                              | ND 0.5              | ND 0.5            | ND 0.1                         | ND                       | ND                     | ND 0.02         | ND                               | NA ---                    | ND 0.02                        |
|                       | 3/30/2009*** | 8270                                                    | ND 1.02             | ND 0.84           | ND 1.03                        | ND                       | ND                     | ND 0.95         | ND                               | ND 0.98                   | ND 0.95                        |
|                       | 9/28/2009*** | 8270C                                                   | ND 1.13             | ND 0.93           | ND 1.14                        | ND                       | ND                     | ND 1.06         | ND                               | ND 1.09                   | ND 1.06                        |
|                       | 12/4/2007*** | 8270                                                    | ND 5                | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | ND 5                      | ND 5                           |
|                       | 4/16/2008*** | 8270                                                    | ND 0.5              | ND 0.5            | ND 0.1                         | ND                       | ND                     | ND 0.02         | ND                               | NA ---                    | ND 0.02                        |
| MW-10<br>(AOC # 2/5)  | 1/24/2007*** | 8270                                                    | ND 5                | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | ND 5                      | ND 5                           |
|                       | 4/16/2008*** | 8270                                                    | ND 5                | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | ND 5                      | ND 5                           |
|                       | 9/11/2008*** | Sample container broken in transit to laboratory        |                     |                   |                                |                          |                        |                 |                                  |                           |                                |
|                       | 3/30/2009*** | 8270                                                    | ND 1.02             | ND 0.84           | ND 1.03                        | ND                       | ND                     | ND 0.95         | ND                               | ND 0.98                   | ND 0.95                        |
|                       | 9/28/2009*** | 8270C                                                   | ND 1.07             | ND 0.88           | ND 1.08                        | ND                       | ND                     | ND 1.00         | ND                               | ND 1.03                   | ND 1.00                        |
| MW-11<br>(AOC # 2/5)  | 1/29/2007*** | 8270                                                    | ND 5                | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | ND 5                      | ND 5                           |
|                       | 12/4/2007*** | 8270                                                    | ND 5                | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | ND 5                      | ND 5                           |
|                       | 4/16/2008*** | 8270                                                    | ND 5                | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | ND 5                      | ND 5                           |
|                       | 9/11/2008*** | 8270M(SIM)                                              | ND 0.5              | ND 0.5            | ND 0.1                         | ND                       | ND                     | ND 0.02         | ND                               | NA ---                    | ND 0.02                        |
|                       | 3/30/2009*** | 8270                                                    | ND 1.02             | ND 0.84           | ND 1.03                        | ND                       | ND                     | ND 0.95         | ND                               | ND 0.98                   | ND 0.95                        |
|                       | 9/28/2009*** | 8270C                                                   | ND 1.02             | ND 0.84           | ND 1.03                        | ND                       | ND                     | ND 0.95         | ND                               | ND 0.98                   | ND 0.95                        |
| MW-12<br>(AOC # 2/5)  | 1/24/2007*** | 8270                                                    | ND 5                | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | ND 5                      | ND 5                           |
|                       | 4/16/2008*** | 8270                                                    | ND 5                | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | ND 5                      | ND 5                           |
|                       | 9/11/2008*** | 8270M(SIM)                                              | ND 0.5              | ND 0.5            | ND 0.1                         | ND                       | ND                     | ND 0.02         | ND                               | NA ---                    | ND 0.02                        |
|                       | 3/30/2009*** | 8270                                                    | ND 1.02             | ND 0.84           | ND 1.03                        | ND                       | ND                     | ND 0.95         | ND                               | ND 0.98                   | ND 0.95                        |
|                       | 9/28/2009*** | 8270C                                                   | ND 1.13             | ND 0.93           | ND 1.14                        | ND                       | ND                     | ND 1.06         | ND                               | ND 1.09                   | ND 1.06                        |
|                       |              |                                                         |                     |                   |                                | ND                       | ND                     |                 | ND                               |                           |                                |
| MW-16<br>(AOC #4)     | 4/6/1999     | 8270                                                    | ND 10               | ND 10             | ND 10                          | ND                       | ND                     | ND 10           | ND                               | ND 10                     | ND 10                          |
|                       | 12/15/2003   | 8270                                                    | ND 5                | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | ND 5                      | ND 5                           |
|                       | 4/6/2006     | 8270                                                    | ND 0.3              | ND 0.2            | ND 0.05                        | ND                       | ND                     | ND 0.2          | ND                               | ND 1                      | ND 0.2                         |
|                       | 1/25/2007*** | 8270                                                    | ND 5                | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | ND 5                      | ND 5                           |
|                       | 12/4/2007*** | 8270                                                    | ND 5                | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | ND 5                      | ND 5                           |
|                       | 4/16/2008*** | 8270                                                    | ND 5                | ND 5              | ND 5                           | ND                       | ND                     | ND 5            | ND                               | ND 5                      | ND 5                           |
|                       | 9/11/2008*** | Sample container broken in transit to laboratory        |                     |                   |                                | ---                      | ND                     | ---             | ND                               | ---                       | ---                            |
|                       | 3/30/2009*** | 8270                                                    | ND 1.02             | ND 0.84           | ND 1.03                        | ND                       | ND                     | ND 0.95         | ND                               | ND 0.98                   | ND 0.95                        |
|                       | 9/28/2009*** | 8270C                                                   | ND 1.02             | ND 0.84           | ND 1.03                        | ND                       | ND                     | ND 0.95         | ND                               | ND 0.98                   | ND 0.95                        |

TABLE 2  
SUMMARY OF GROUNDWATER ANALYTICAL DATA:  
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)  
248 Wyandanch Avenue, Wyandanch, New York  
(unit, parts per billion [ppb] µg/L)

| Sample Identification | Sample Date  | Analytical Method | Diethyl phthalate | SQL  | Fluoranthene | SQL  | Fluorene | SQL  | 2-Methyl naphthalene | SQL  | Naphthalene | SQL  | 3-Nitroaniline | SQL | 4-Nitroaniline | SQL | Phenanthrene | SQL  | Pyrene | SQL  | Pyridine | SQL | bis(2-Ethylhexyl) phthalate | SQL  |
|-----------------------|--------------|-------------------|-------------------|------|--------------|------|----------|------|----------------------|------|-------------|------|----------------|-----|----------------|-----|--------------|------|--------|------|----------|-----|-----------------------------|------|
| MW-2                  | 12/4/2007    | 8270              |                   |      | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    |                |     |                |     | ND           | 5    | ND     | 5    |          |     |                             |      |
| MW-3<br>(AOC #3)      | 1/25/2007    | 8270              |                   |      | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 12/4/2007*** | Well not sampled  |                   |      |              |      |          |      |                      |      |             |      |                |     |                |     |              |      |        |      |          |     |                             |      |
|                       | 4/16/2008*** | Well destroyed    |                   |      |              |      |          |      |                      |      |             |      |                |     |                |     |              |      |        |      |          |     |                             |      |
|                       | 9/11/2008*** | 8270M(SIM)        | NS                |      | ND           | 0.5  | ND       | 0.5  | ND                   | 0.5  | ND          | 0.5  | ND             |     | ND             |     | ND           | 0.5  | ND     | 0.5  | ND       |     | ND                          | 0.5  |
|                       | 9/28/2009*** | 8270C             | ND                | 1.07 | ND           | 0.86 | ND       | 0.91 | ND                   | 0.82 | ND          | 0.87 | ND             |     | ND             |     | ND           | 0.90 | ND     | 1.0  | ND       |     | ND                          | 1.0  |
| MW-4<br>(AOC #3)      | 12/4/2007*** | 8270              | ND                | 5    | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 4/16/2008*** | Well destroyed    |                   |      |              |      |          |      |                      |      |             |      |                |     |                |     |              |      |        |      |          |     |                             |      |
|                       | 3/30/2009*** | 8270              | ND                | 1.07 | ND           | 0.86 | ND       | 0.91 | ND                   | 0.82 | ND          | 0.87 | ND             |     | ND             |     | ND           | 0.90 | ND     | 1.01 | ND       |     | ND                          | 1.01 |
| MW-5R<br>(AOC #1)     | 12/15/2003   | 8270              |                   |      | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 4/6/2006     | 8270              |                   |      | ND           | 0.5  | ND       | 1    | ND                   | 1    | ND          | 1    | ND             |     | ND             |     | ND           | 0.1  | ND     | 1    | ND       |     | ND                          | 1    |
|                       | 1/29/2007*** | 8270              |                   |      | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 12/4/2007*** | 8270              | ND                | 5    | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 4/16/2008*** | 8270              | ND                | 5    | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 9/11/2008*** | 8270M(SIM)        | NS                |      | ND           | 0.5  | ND       | 0.5  | ND                   | 0.5  | ND          | 0.5  | ND             |     | ND             |     | ND           | 0.5  | ND     | 0.5  | ND       |     | ND                          | 0.5  |
|                       | 3/30/2009*** | 8270              | ND                | 1.07 | ND           | 0.86 | ND       | 0.91 | ND                   | 0.82 | ND          | 0.87 | ND             |     | ND             |     | ND           | 0.90 | ND     | 1.01 | ND       |     | ND                          | 1.01 |
|                       | 9/28/2009*** | 8270C             | ND                | 1.19 | ND           | 0.96 | ND       | 1.01 | ND                   | 0.91 | ND          | 0.97 | ND             |     | ND             |     | ND           | 1.00 | ND     | 1.12 | ND       |     | ND                          | 1.12 |
|                       | 12/4/2007*** | 8270              |                   |      | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 4/16/2008*** | 8270              |                   |      | ND           | 0.5  | ND       | 0.5  | ND                   | 0.5  | ND          | 0.5  | ND             |     | ND             |     | ND           | 0.5  | ND     | 0.5  | ND       |     | ND                          | 0.5  |
| MW-10<br>(AOC # 2/5)  | 1/24/2007*** | 8270              |                   |      | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 4/16/2008*** | 8270              | ND                | 5    | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 9/11/2008*** | Sample contained  |                   |      |              |      |          |      |                      |      |             |      |                |     |                |     |              |      |        |      |          |     |                             |      |
|                       | 3/30/2009*** | 8270              | ND                | 1.07 | ND           | 0.86 | ND       | 0.91 | ND                   | 0.82 | ND          | 0.87 | ND             |     | ND             |     | ND           | 0.90 | ND     | 1.01 | ND       |     | ND                          | 1.01 |
|                       | 9/28/2009*** | 8270C             | 1.23              | 1.13 | ND           | 0.91 | ND       | 0.96 | ND                   | 0.86 | ND          | 0.92 | ND             |     | ND             |     | ND           | 0.95 | ND     | 1.06 | ND       |     | ND                          | 1.06 |
| MW-11<br>(AOC # 2/5)  | 1/29/2007*** | 8270              |                   |      | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 12/4/2007*** | 8270              | ND                | 5    | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 4/16/2008*** | 8270              | ND                | 5    | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 9/11/2008*** | 8270M(SIM)        | NS                |      | ND           | 0.5  | ND       | 0.5  | ND                   | 0.5  | ND          | 0.5  | ND             |     | ND             |     | ND           | 0.5  | ND     | 0.5  | ND       |     | ND                          | 0.5  |
|                       | 3/30/2009*** | 8270              | ND                | 1.07 | ND           | 0.86 | ND       | 0.91 | ND                   | 0.82 | ND          | 0.87 | ND             |     | ND             |     | ND           | 0.90 | ND     | 1.01 | ND       |     | ND                          | 1.01 |
|                       | 9/28/2009*** | 8270C             | ND                | 1.07 | ND           | 0.86 | ND       | 0.91 | ND                   | 0.82 | ND          | 0.87 | ND             |     | ND             |     | ND           | 0.90 | ND     | 1.01 | ND       |     | ND                          | 1.01 |
| MW-12<br>(AOC # 2/5)  | 1/24/2007*** | 8270              |                   |      | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 4/16/2008*** | 8270              | ND                | 5    | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 9/11/2008*** | 8270M(SIM)        | NS                |      | ND           | 0.5  | ND       | 0.5  | ND                   | 0.5  | ND          | 0.5  | ND             |     | ND             |     | ND           | 0.5  | ND     | 0.5  | ND       |     | ND                          | 0.5  |
|                       | 3/30/2009*** | 8270              | ND                | 1.07 | ND           | 0.86 | ND       | 0.91 | ND                   | 0.82 | ND          | 0.87 | ND             |     | ND             |     | ND           | 0.90 | ND     | 1.01 | ND       |     | ND                          | 1.01 |
|                       | 9/28/2009*** | 8270C             | ND                | 1.19 | ND           | 0.96 | ND       | 1.01 | ND                   | 0.91 | ND          | 0.97 | ND             |     | ND             |     | ND           | 1.00 | ND     | 1.12 | ND       |     | ND                          | 1.12 |
|                       |              |                   |                   |      |              |      |          |      |                      |      |             |      | ND             |     | ND             |     |              |      |        |      | ND       |     |                             |      |
| MW-16<br>(AOC #4)     | 4/6/1999     | 8270              |                   |      | ND           | 10   | ND       | 10   | ND                   | 10   | ND          | 10   | ND             |     | ND             |     | ND           | 10   | ND     | 10   | ND       |     | ND                          | 10   |
|                       | 12/15/2003   | 8270              |                   |      | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 4/6/2006     | 8270              |                   |      | ND           | 0.5  | ND       | 1    | ND                   | 1    | ND          | 1    | ND             |     | ND             |     | ND           | 0.1  | ND     | 1    | ND       |     | ND                          | 1    |
|                       | 1/25/2007*** | 8270              |                   |      | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 12/4/2007*** | 8270              | ND                | 5    | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 4/16/2008*** | 8270              | ND                | 5    | ND           | 5    | ND       | 5    | ND                   | 5    | ND          | 5    | ND             |     | ND             |     | ND           | 5    | ND     | 5    | ND       |     | ND                          | 5    |
|                       | 9/11/2008*** | Sample contained  | ---               |      | ---          |      | ---      |      | ---                  |      | ---         |      | ND             |     | ND             |     | ---          |      | ---    |      | ND       |     | ---                         |      |
|                       | 3/30/2009*** | 8270              | ND                | 1.07 | ND           | 0.86 | ND       | 0.91 | ND                   | 0.82 | ND          | 0.87 | ND             |     | ND             |     | ND           | 0.90 | ND     | 1.01 | ND       |     | ND                          | 1.01 |
|                       | 9/28/2009*** | 8270C             | ND                | 1.07 | ND           | 0.86 | ND       | 0.91 | ND                   | 0.82 | ND          | 0.87 | ND             |     | ND             |     | ND           | 0.90 | ND     | 1.01 | ND       |     | ND                          | 1.01 |







TABLE 2  
SUMMARY OF GROUNDWATER ANALYTICAL DATA:  
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)  
248 Wyandanch Avenue, Wyandanch, New York  
(unit, parts per billion [ppb] µg/L)

| Sample Identification        | Sample Date                    | Analytical Method                                | Acenaphthene |      | Anthracene |      | Benzo (a) anthracene |      | Benzyl alcohol |      | 4-Chloroaniline | Chrysene |      | 3,3-Dichloro benzidine |      | 2,4-Dichlorophenol |      | Di-n-butyl phthalate |       |      |      |
|------------------------------|--------------------------------|--------------------------------------------------|--------------|------|------------|------|----------------------|------|----------------|------|-----------------|----------|------|------------------------|------|--------------------|------|----------------------|-------|------|------|
|                              |                                |                                                  | SQL          |      | SQL        |      | SQL                  |      | SQL            |      | SQL             | SQL      |      | SQL                    | SQL  |                    | SQL  |                      | SQL   |      |      |
| MW-23<br>(AOC #4)            | 4/6/1999                       | 8270                                             | ND           | 10   | ND         | 10   | ND                   | 10   | ND             |      | ND              | ND       | 10   | ND                     | ND   | 10                 | ND   |                      |       |      |      |
|                              | 12/15/2003                     | 8270                                             | ND           | 5    | ND         | 5    | ND                   | 5    | ND             |      | ND              | ND       | 5    | ND                     | ND   | 5                  | ND   |                      |       |      |      |
|                              | 4/6/2006                       | 8270                                             | ND           | 0.3  | ND         | 0.2  | ND                   | 0.5  | ND             |      | ND              | ND       | 0.2  | ND                     | ND   | 1                  | ND   |                      |       |      |      |
|                              | 1/25/2007***                   | 8270                                             | ND           | 5    | ND         | 5    | ND                   | 5    | ND             |      | ND              | ND       | 5    | ND                     | ND   | 5                  | ND   |                      |       |      |      |
|                              | 12/4/2007***                   | 8270                                             | ND           | 5    | ND         | 5    | ND                   | 5    | ND             |      | ND              | ND       | 5    | ND                     | ND   | 5                  | ND   |                      |       |      |      |
|                              | 4/16/2008***                   | 8270                                             | ND           | 5    | ND         | 5    | ND                   | 5    | ND             |      | ND              | ND       | 5    | ND                     | ND   | 5                  | ND   |                      |       |      |      |
|                              | 9/11/2008***                   | 8270M(SIM)                                       | ND           | 0.5  | ND         | 0.5  | ND                   | 0.1  | ND             |      | ND              | 0.02     | 0.02 | ND                     | NA   | - - -              | ND   |                      |       |      |      |
|                              | 3/30/2009***                   |                                                  | 8270         | ND   | 1.02       | ND   | 0.84                 | ND   | 1.03           | ND   |                 | ND       | 0.95 | ND                     | ND   | 0.98               | ND   | 0.97                 |       |      |      |
|                              | 9/28/2009***                   | 8270C                                            | ND           | 1.02 | ND         | 0.84 | ND                   | 1.03 | ND             |      | ND              | 0.95     | ND   | ND                     | 0.98 | ND                 | 0.97 |                      |       |      |      |
|                              | 3/24/2010***                   | 8270C                                            | ND           | 1.02 | ND         | 0.84 | ND                   | 1.03 | ND             |      | ND              | 0.95     | ND   | ND                     | 0.98 | ND                 | 0.97 |                      |       |      |      |
|                              | 3/23/2011***                   | 8270C                                            | ND           | 1.02 | ND         | 0.84 | ND                   | 1.03 | ND             |      | ND              | 0.95     | ND   | ND                     | 0.98 | 80.3               | B    | 0.97                 |       |      |      |
|                              | 9/21/2011***                   | 8270C                                            | ND           | 1.13 | ND         | 0.93 | ND                   | 1.14 | ND             | 0.53 | ND              | 0.52     | ND   | 1.06                   | ND   | 0.76               | ND   | 1.09                 | 1.08  |      |      |
|                              | 4/2/2012***                    | 8270C                                            | ND           | 1.02 | ND         | 0.84 | ND                   | 1.03 | ND             | 0.48 | ND              | 0.47     | ND   | 0.95                   | ND   | 0.68               | ND   | 0.98                 | ND    | 0.97 |      |
|                              | 9/18/2012***                   | 8270C                                            | ND           | 1.02 | ND         | 0.84 | ND                   | 1.03 | ND             | 0.48 | ND              | 0.47     | ND   | 0.95                   | ND   | 0.68               | ND   | 0.98                 | ND    | 0.97 |      |
|                              | 3/27/2013***                   | 8270C                                            | ND           | 0.77 | ND         | 0.88 | ND                   | 0.96 | ND             | 0.41 | ND              | 0.42     | ND   | 1.00                   | ND   | 1.33               | ND   | 0.72                 | ND    | 1.08 |      |
|                              | 9/17/2013***                   | 8270D                                            | ND           | 0.77 | ND         | 0.88 | ND                   | 0.96 | ND             | 0.41 | ND              | 0.42     | ND   | 1.00                   | ND   | 1.33               | ND   | 0.72                 | ND    | 1.08 |      |
|                              | 3/11/2014***                   | 8270C                                            | ND           | 0.77 | ND         | 0.88 | ND                   | 0.96 | ND             | 0.41 | ND              | 0.42     | ND   | 1.00                   | ND   | 1.33               | ND   | 0.72                 | ND    | 1.08 |      |
|                              | 9/17/2014***                   | 8270D                                            | ND           | 1.10 | ND         | 1.26 | ND                   | 1.37 | ND             | 0.59 | ND              | 0.60     | ND   | 1.43                   | ND   | 1.90               | ND   | 1.03                 | ND    | 1.54 |      |
|                              | 4/21/2015***                   | 8270D                                            | ND           | 0.96 | ND         | 1.10 | ND                   | 1.02 | ND             | 0.51 | ND              | 0.52     | ND   | 1.25                   | ND   | 1.66               | ND   | 0.90                 | 2.74  | 1.35 |      |
|                              | 4/20/2016***                   | 8270D                                            | ND           | 3.85 | ND         | 4.40 | ND                   | 4.80 | ND             | 2.05 | ND              | 2.10     | ND   | 5.00                   | ND   | 6.65               | ND   | 3.65                 | ND    | 5.40 |      |
|                              | 4/10/2017***                   | 8270D                                            | ND           | 0.77 | ND         | 0.88 | ND                   | 0.96 | ND             | 0.41 | ND              | 0.42     | ND   | 1.00                   | ND   | 1.33               | ND   | 0.72                 | 10.07 | B    | 1.08 |
|                              | 4/23/2018***                   | 8270D                                            | ND           | 5.1  | ND         | 5.1  | ND                   | 5.1  | NR             |      | ND              | 10       | ND   | 5.1                    | ND   | 10                 | ND   | 10                   | ND    | 10   |      |
|                              | 5/6/2019***                    | 8270D                                            | ND           | 5.0  | ND         | 5.0  | ND                   | 5.0  | NR             |      | ND              | 10       | ND   | 5.0                    | ND   | 10                 | ND   | 10                   | ND    | 10   |      |
| MW-26R<br>(AOC #1)           | 12/15/2003                     | 8270                                             | ND           | 5    | ND         | 5    | ND                   | 5    | ND             |      | ND              | ND       | 5    | ND                     | ND   | 5                  | ND   | 5                    |       |      |      |
|                              | 4/6/2006                       | 8270                                             | ND           | 0.3  | ND         | 0.2  | ND                   | 0.05 | ND             |      | ND              | ND       | 0.2  | ND                     | ND   | 1                  | ND   | 0.2                  |       |      |      |
|                              | 1/25/2007***                   | 8270                                             | ND           | 5    | ND         | 5    | ND                   | 5    | ND             |      | ND              | ND       | 5    | ND                     | ND   | 5                  | ND   | 5                    |       |      |      |
|                              | 12/4/2007***                   | 8270                                             | ND           | 10   | ND         | 10   | ND                   | 10   | ND             |      | ND              | ND       | 10   | ND                     | ND   | 10                 | ND   | 10                   |       |      |      |
|                              | 4/16/2008***                   | 8270                                             | ND           | 5    | ND         | 5    | ND                   | 5    | ND             |      | ND              | ND       | 5    | ND                     | ND   | 5                  | ND   | 5                    |       |      |      |
|                              | 9/10/2008***                   | 8270M(SIM)                                       | ND           | 0.5  | ND         | 0.5  | ND                   | 0.1  | ND             |      | ND              | ND       | 0.02 | ND                     | NA   | - - -              | ND   | 0.02                 |       |      |      |
|                              | 3/30/2009***                   |                                                  | 8270         | ND   | 1.02       | ND   | 0.84                 | ND   | 1.03           | ND   |                 | ND       | 0.95 | ND                     | ND   | 0.98               | ND   | 0.95                 |       |      |      |
|                              | 9/28/2009***                   | 8270C                                            | ND           | 1.13 | ND         | 0.93 | ND                   | 1.14 | ND             |      | ND              | ND       | 1.06 | ND                     | ND   | 1.09               | ND   | 1.06                 |       |      |      |
|                              | GEC-5 <sup>+</sup><br>(AOC #4) | 12/15/2003                                       | 8270         | ND   | 5          | ND   | 5                    | ND   | 5              | ND   |                 | ND       | ND   | 5                      | ND   | ND                 | 5    | ND                   | 5     |      |      |
| 4/6/2006                     |                                | 8270                                             | ND           | 0.3  | ND         | 0.2  | ND                   | 0.05 | ND             |      | ND              | ND       | 0.2  | ND                     | ND   | 1                  | ND   | 0.2                  |       |      |      |
| 4/16/2008***                 |                                | 8270                                             | ND           | 5    | ND         | 5    | ND                   | 5    | ND             |      | ND              | ND       | 5    | ND                     | ND   | 5                  | ND   | 5                    |       |      |      |
| 9/11/2008***                 |                                | Sample container broken in transit to laboratory |              |      |            |      |                      |      |                |      |                 |          |      |                        |      |                    |      |                      |       |      |      |
| 3/30/2009***                 |                                | 8270                                             | ND           | 1.02 | ND         | 0.84 | ND                   | 1.03 | ND             |      | ND              | ND       | 0.95 | ND                     | ND   | 0.98               | ND   | 0.95                 |       |      |      |
| 9/28/2009***                 |                                | 8270C                                            | ND           | 1.13 | ND         | 0.93 | ND                   | 1.14 | ND             |      | ND              | ND       | 1.06 | ND                     | ND   | 1.09               | ND   | 1.06                 |       |      |      |
| Standard and Guidance Values |                                |                                                  | 20.0         |      | NV         |      | NV                   |      | NV             |      | 5.0             |          | NV   |                        | 5.0  |                    | 0.3  |                      | 50    |      |      |

Notes:

1) Ambient Water Quality Standards and Guidance Values provided in the New York State and Technical Operational Guidance Series (TOGS 1.1.1). For Class GA Groundwater, developed in support of 6 NY CRR Part 700-705 (current to January 2018).  
<https://govt.westlaw.com/nycrr/Document/I4ed90418cd1711dd9432a117e6e0945?viewType=FullText&originatorContext=document&transitionType=CategoryPageItem&contextData=fs.Default>

2) Analytical data for method blank is grouped with appropriate laboratory sample batch. Dates provided for method blanks represent the data of laboratory analysis.

3) Phenol was detected in sample MW-20 on 12/11/02 but not a significant amount, results is less than RL but greater than or equal to MDL.

4) Detections are likely a result of using spray paint to label wells during sampling on 9/21/11.

SQL= Sample Quantitation Limit

GEC-5<sup>+</sup> = Replaces MW-7 in groundwater sampling plan. MW-7 previously paved over.

ND= Not Detected above SQL

NV= No standard or guidance value available as of January 2018.

J= Compound analyzed for and determined to be present in sample. Mass spectrum of meets identification criteria for method. Concentration listed as estimated value, le contract required detection limit but greater than instrument detection limit.

\*\*\* = Samples collected after completion of remedial action.

NR= Not Reported

8270= USEPA Method 8270 B= The method blank associated with these samples contain

Prepared By: PCS/EAF  
Reviewed By: SMB  
Revised: 6/18/2019

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TABLE 2  
SUMMARY OF GROUNDWATER ANALYTICAL DATA:  
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)  
248 Wyandanch Avenue, Wyandanch, New York  
(unit, parts per billion [ppb] µg/L)

| Sample Identification          | Sample Date  | Analytical Method | Diethyl phthalate | SQL  | Fluoranthene | SQL  | Fluorene | SQL  | 2-Methyl naphthalene | SQL    | Naphthalene | SQL     | 3-Nitroaniline | SQL  | 4-Nitroaniline | SQL  | Phenanthrene | SQL  | Pyrene | SQL  | Pyridine | SQL  | bis(2-Ethylhexyl) phthalate | SQL    |
|--------------------------------|--------------|-------------------|-------------------|------|--------------|------|----------|------|----------------------|--------|-------------|---------|----------------|------|----------------|------|--------------|------|--------|------|----------|------|-----------------------------|--------|
| MW-23<br>(AOC #4)              | 4/6/1999     | 8270              |                   |      | ND           | 10   | ND       | 10   | ND                   | 10     | ND          | 10      | ND             |      | ND             |      | ND           | 10   | ND     | 10   | ND       |      | ND                          |        |
|                                | 12/15/2003   | 8270              |                   |      | ND           | 5    | ND       | 5    | ND                   | 5      | ND          | 5       | ND             |      | ND             |      | ND           | 5    | ND     | 5    | ND       |      | ND                          |        |
|                                | 4/6/2006     | 8270              |                   |      | ND           | 0.5  | ND       | 1    | ND                   | 1      | ND          | 1       | ND             |      | ND             |      | ND           | 0.1  | ND     | 1    | ND       |      | ND                          |        |
|                                | 1/25/2007*** | 8270              |                   |      | ND           | 5    | ND       | 5    | ND                   | 5      | ND          | 5       | ND             |      | ND             |      | ND           | 5    | ND     | 5    | ND       |      | ND                          |        |
|                                | 12/4/2007*** | 8270              | ND                | 5    | ND           | 5    | ND       | 5    | ND                   | 5      | ND          | 5       | ND             |      | ND             |      | ND           | 5    | ND     | 5    | ND       |      | ND                          |        |
|                                | 4/16/2008*** | 8270              | ND                | 5    | ND           | 5    | ND       | 5    | ND                   | 5      | ND          | 5       | ND             |      | ND             |      | ND           | 5    | ND     | 5    | ND       |      | ND                          |        |
|                                | 9/11/2008*** | 8270M(SIM)        | NS                |      | ND           | 0.5  | ND       | 0.5  | ND                   | 0.5    | ND          | 0.5     | ND             |      | ND             |      | ND           | 0.5  | ND     | 0.5  | ND       |      | ND                          |        |
|                                | 3/30/2009*** | 8270              | ND                | 1.07 | ND           | 0.86 | ND       | 0.91 | ND                   | 0.82   | ND          | 0.87    | ND             |      | ND             |      | ND           | 0.90 | ND     | 1.01 | ND       |      | ND                          | 1.44   |
|                                | 9/28/2009*** | 8270C             | 1.23              | 1.07 | ND           | 0.86 | ND       | 0.91 | ND                   | 0.82   | ND          | 0.87    | ND             |      | ND             |      | ND           | 0.90 | ND     | 1.01 | ND       |      | ND                          | 1.44   |
|                                | 3/24/2010*** | 8270C             | 1.23              | 1.07 | ND           | 0.86 | ND       | 0.91 | ND                   | 0.82   | ND          | 0.87    | ND             |      | ND             |      | ND           | 0.90 | ND     | 1.01 | ND       |      | ND                          | 1.44   |
|                                | 3/23/2011*** | 8270C             | ND                | 1.07 | ND           | 0.86 | ND       | 0.91 | 5.04                 | B 0.82 | 3.65        | B 0.87  | ND             |      | ND             |      | ND           | 0.90 | ND     | 1.01 | ND       |      | 5.76                        | B 1.44 |
|                                | 9/21/2011*** | 8270C             | ND                | 1.19 | ND           | 0.96 | ND       | 1.01 | 0.96                 | J 0.91 | 1.37        | BJ 0.97 | ND             | 0.67 | ND             | 1.19 | ND           | 1.00 | ND     | 1.12 | ND       | 0.41 | 2.19                        | J 1.60 |
|                                | 4/2/2012***  | 8270C             | ND                | 1.07 | ND           | 0.86 | ND       | 0.91 | ND                   | 0.82   | ND          | 0.87    | ND             | 0.60 | ND             | 1.07 | ND           | 0.90 | ND     | 1.01 | ND       | 0.37 | ND                          | 1.44   |
|                                | 9/18/2012*** | 8270C             | ND                | 1.07 | ND           | 0.86 | ND       | 0.91 | ND                   | 0.82   | ND          | 0.87    | ND             | 0.60 | ND             | 1.07 | ND           | 0.90 | ND     | 1.01 | ND       | 0.37 | ND                          | 1.44   |
|                                | 3/27/2013*** | 8270C             | ND                | 1.00 | ND           | 0.96 | ND       | 0.82 | ND                   | 0.74   | ND          | 0.78    | ND             | 0.34 | ND             | 0.52 | ND           | 0.95 | ND     | 0.85 | ND       | 0.37 | ND                          | 1.26   |
|                                | 9/17/2013*** | 8270D             | ND                | 1.00 | ND           | 0.96 | ND       | 0.82 | ND                   | 0.74   | ND          | 0.78    | ND             | 0.34 | ND             | 0.52 | ND           | 0.95 | ND     | 0.85 | ND       | 0.37 | ND                          | 1.26   |
|                                | 3/11/2014*** | 8270C             | ND                | 1.00 | ND           | 0.96 | ND       | 0.82 | ND                   | 0.74   | ND          | 0.78    | ND             | 0.34 | ND             | 0.52 | ND           | 0.95 | ND     | 0.85 | ND       | 0.37 | ND                          | 1.26   |
|                                | 9/17/2014*** | 8270D             | ND                | 1.43 | ND           | 1.37 | ND       | 1.17 | ND                   | 1.06   | ND          | 1.11    | ND             | 0.49 | ND             | 0.74 | ND           | 1.36 | ND     | 1.21 | ND       | 0.53 | ND                          | 1.80   |
|                                | 4/21/2015*** | 8270D             | ND                | 1.25 | ND           | 1.20 | ND       | 1.02 | ND                   | 0.93   | ND          | 0.98    | ND             | 0.43 | ND             | 0.43 | ND           | 1.19 | ND     | 1.06 | ND       | 0.46 | ND                          | 1.58   |
|                                | 4/20/2016*** | 8270D             | ND                | 5.00 | ND           | 5.80 | ND       | 4.10 | ND                   | 3.70   | ND          | 3.90    | ND             | 1.70 | ND             | 2.60 | ND           | 4.75 | ND     | 4.25 | ND       | 1.85 | ND                          | 6.30   |
|                                | 4/10/2017*** | 8270D             | ND                | 1.00 | ND           | 0.96 | ND       | 0.82 | ND                   | 0.74   | ND          | 0.78    | ND             | 0.34 | ND             | 0.52 | ND           | 0.95 | ND     | 0.85 | ND       | 0.37 | ND                          | 1.26   |
|                                | 4/23/2018*** | 8270D             | ND                | 10   | ND           | 5.1  | ND       | 5.1  | ND                   | 5.1    | ND          | 5.1     | ND             | 5.1  | ND             | 10   | ND           | 5.1  | ND     | 5.1  | ND       | 5.1  | ND                          | 10     |
|                                | 5/6/2019***  | 8270D             | ND                | 10   | ND           | 5.0  | ND       | 5.0  | ND                   | 5.0    | ND          | 5.0     | ND             | 5.0  | ND             | 10   | ND           | 5.0  | ND     | 5.0  | ND       | 5.0  | ND                          | 10     |
| MW-26R<br>(AOC #1)             | 12/15/2003   | 8270              |                   |      | ND           | 5    | ND       | 5    | ND                   | 5      | ND          | 5       | ND             |      | ND             |      | ND           | 5    | ND     | 5    | ND       |      | ND                          | 5      |
|                                | 4/6/2006     | 8270              |                   |      | ND           | 0.5  | ND       | 1    | ND                   | 1      | ND          | 1       | ND             |      | ND             |      | ND           | 0.1  | ND     | 1    | ND       |      | ND                          | 1      |
|                                | 1/25/2007*** | 8270              |                   |      | ND           | 5    | ND       | 5    | ND                   | 5      | ND          | 5       | ND             |      | ND             |      | ND           | 5    | ND     | 5    | ND       |      | ND                          | 5      |
|                                | 12/4/2007*** | 8270              | ND                | 10   | ND           | 10   | ND       | 10   | ND                   | 10     | ND          | 10      | ND             |      | ND             |      | ND           | 10   | ND     | 10   | ND       |      | ND                          | 10     |
|                                | 4/16/2008*** | 8270              | ND                | 5    | ND           | 5    | ND       | 5    | ND                   | 5      | ND          | 5       | ND             |      | ND             |      | ND           | 5    | ND     | 5    | ND       |      | ND                          | 5      |
|                                | 9/10/2008*** | 8270M(SIM)        | NS                |      | ND           | 0.5  | ND       | 0.5  | ND                   | 0.5    | ND          | 0.5     | ND             |      | ND             |      | ND           | 0.5  | ND     | 0.5  | ND       |      | ND                          | 0.5    |
|                                | 3/30/2009*** | 8270              | ND                | 1.07 | ND           | 0.86 | ND       | 0.91 | ND                   | 0.82   | ND          | 0.87    | ND             |      | ND             |      | ND           | 0.90 | ND     | 1.01 | ND       |      | ND                          | 1.01   |
|                                | 9/28/2009*** | 8270C             | ND                | 1.19 | ND           | 0.96 | ND       | 1.01 | ND                   | 0.91   | ND          | 0.97    | ND             |      | ND             |      | ND           | 1.00 | ND     | 1.12 | ND       |      | ND                          | 1.12   |
| GEC-5 <sup>+</sup><br>(AOC #4) | 12/15/2003   | 8270              |                   |      | ND           | 5    | ND       | 5    | ND                   | 5      | ND          | 5       | ND             |      | ND             |      | ND           | 5    | ND     | 5    | ND       |      | ND                          | 5      |
|                                | 4/6/2006     | 8270              |                   |      | ND           | 0.5  | ND       | 1    | ND                   | 1      | ND          | 1       | ND             |      | ND             |      | ND           | 0.1  | ND     | 1    | ND       |      | ND                          | 1      |
|                                | 4/16/2008*** | 8270              | ND                | 5    | ND           | 5    | ND       | 5    | ND                   | 5      | ND          | 5       | ND             |      | ND             |      | ND           | 5    | ND     | 5    | ND       |      | ND                          | 5      |
|                                | 9/11/2008*** | Sample contained  |                   |      |              |      |          |      |                      |        |             |         |                |      |                |      |              |      |        |      |          |      |                             |        |
|                                | 3/30/2009*** | 8270              | ND                | 1.07 | ND           | 0.86 | ND       | 0.91 | ND                   | 0.82   | ND          | 0.87    | ND             |      | ND             |      | ND           | 0.90 | ND     | 1.01 | ND       |      | ND                          | 1.01   |
| Standard and Guidance Values   |              |                   | NV                |      | NV           |      | NV       |      | NV                   |        | 10          |         | 5.0            |      | 5.0            |      | NV           |      | NV     |      | NV       |      | 5.0                         |        |

- Notes:
- 1) Ambient Water Quality Standard and Technical Operational Groundwater, developed in sup. compound <https://good.westlaw.com/nycm/Documents/14ee90418c0155?th=an>
  - 2) Analytical data for method blank batch. Dates provided for method
  - 3) Phenol was detected in sample but results are less than RL but greater
  - 4) Detections are likely a result of related compounds detected at an unknown concentration

SQL = Sample Quantitation Limit  
GEC-5<sup>+</sup> = Replaces MW-7 in groundwater







**ATTACHMENT 1:**

Periodic Review Report Certification Statement and IC/EC Certification Forms

## Enclosure 1

### Certification Instructions

#### I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

#### II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

#### III. IC/EC Certification by Signature (Box 6 and Box 7):

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.
- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.





Enclosure 2  
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
Site Management Periodic Review Report Notice  
Institutional and Engineering Controls Certification Form



|                                                                                                                                                             |                     |                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------|
| <b>Site No.</b> 152006                                                                                                                                      | <b>Site Details</b> | <b>Box 1</b>                                                 |
| <b>Site Name</b> Jameco Industries, Inc.                                                                                                                    |                     |                                                              |
| Site Address: 248 Wyandanch Avenue      Zip Code: 11798                                                                                                     |                     |                                                              |
| City/Town: Wyandanch                                                                                                                                        |                     |                                                              |
| County: Suffolk                                                                                                                                             |                     |                                                              |
| Site Acreage: 9.360                                                                                                                                         |                     |                                                              |
| Reporting Period: May 31, 2018 to May 31, 2019                                                                                                              |                     |                                                              |
|                                                                                                                                                             |                     | YES    NO                                                    |
| 1. Is the information above correct?                                                                                                                        |                     | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| If NO, include handwritten above or on a separate sheet.                                                                                                    |                     |                                                              |
| 2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?                       |                     | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?                                                      |                     | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| 4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?               |                     | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form. |                     |                                                              |
| 5. Is the site currently undergoing development?                                                                                                            |                     | <input type="checkbox"/> <input checked="" type="checkbox"/> |

|                                                                                   |  |                                                              |
|-----------------------------------------------------------------------------------|--|--------------------------------------------------------------|
|                                                                                   |  | <b>Box 2</b>                                                 |
|                                                                                   |  | YES    NO                                                    |
| 6. Is the current site use consistent with the use(s) listed below?<br>Industrial |  | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 7. Are all ICs/ECs in place and functioning as designed?                          |  | <input checked="" type="checkbox"/> <input type="checkbox"/> |

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and  
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

\_\_\_\_\_  
Signature of Owner, Remedial Party or Designated Representative

\_\_\_\_\_  
Date

## Description of Institutional Controls

ParcelOwnerInstitutional Control

82-2-37.6

Linzer Products Corp.

Site Management Plan

Ground Water Use Restriction  
 Soil Management Plan  
 Landuse Restriction  
 Monitoring Plan  
 O&M Plan  
 IC/EC Plan

An environmental easement is in place which restricts land use, restricts the use of on-site groundwater and provides for the implementation of the Department approved site management plan.

82-2-73.1

Linzer Products Corp.

Ground Water Use Restriction  
 Soil Management Plan  
 Landuse Restriction  
 Monitoring Plan  
 Site Management Plan  
 IC/EC Plan

An environmental easement is in place which restricts land use, restricts the use of on-site groundwater and provides for the implementation of the Department approved site management plan.

## Description of Engineering Controls

ParcelEngineering Control

82-2-37.6

Cover System  
 Fencing/Access Control

Subsurface soils which were contaminated with metals from discharges of plating solutions were excavated and disposed of off-site at a permitted disposal facility. Those areas were backfilled with certified clean fill material. Residual metals in subsurface soil were treated in-situ via solidification/stabilization. Residual SVOCs in soil and groundwater were treated in-situ via chemical oxidation. Access to the site is restricted by perimeter fencing.

82-2-73.1

Cover System  
 Fencing/Access Control

Subsurface soils which were contaminated with metals from discharges of plating solutions were excavated and disposed of off-site at a permitted disposal facility. Those areas were backfilled with certified clean fill material. Residual metals in subsurface soil were treated in-situ via solidification/stabilization. Residual SVOCs in soil and groundwater were treated in-situ via chemical oxidation. Access to the site is restricted by perimeter fencing.

**Periodic Review Report (PRR) Certification Statements**

1. I certify by checking "YES" below that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO



2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

- (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO



**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and  
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

\_\_\_\_\_  
Signature of Owner, Remedial Party or Designated Representative

\_\_\_\_\_  
Date

IC CERTIFICATIONS  
SITE NO. 152006

Box 6

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I LEONARD ZICHLIN at 248 Wyandanch Ave. West Babylon, NY 11704  
print name print business address

am certifying as EXEC V.P. (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Leonard Zichlin  
Signature of Owner, Remedial Party, or Designated Representative  
Rendering Certification

6/18/19  
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

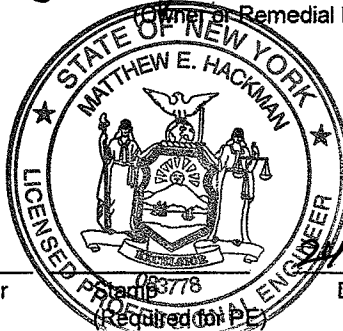
I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Matthew E. Hackman at 97 Asylum Rd, Warwick RI 02886  
print name print business address

am certifying as a Professional Engineer for the Linger Corporation  
(Owner or Remedial Party)

Matthew E. Hackman

Signature of Professional Engineer, for the Owner or  
Remedial Party, Rendering Certification



24 JUN 2009  
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

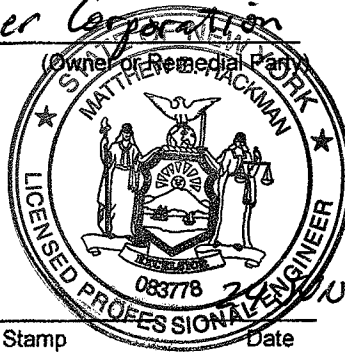
I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

Matthew E. Hackman at 97 Asylum Rd, Warwick RI 02886-8001  
print name print business address

am certifying as a Professional Engineer for the Linzee Corporation  
(Owner or Remedial Party)

Matthew E. Hackman

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification



Stamp  
(Required for PE)

Date

**ATTACHMENT 2:**

Inspection Photographs, IE/EC Inspection Forms, and May 6, 2019 Monitoring well Purge Data  
Evaluation

**Former Jameco Facility  
Site Inspection Photos: 10-15-2018**

**Photo 1:** (10-15-2018) AOC 3. View looking west from southwest corner of AOC-1.





**Former Jameco Facility  
Site Inspection Photos: 10-15-2018**

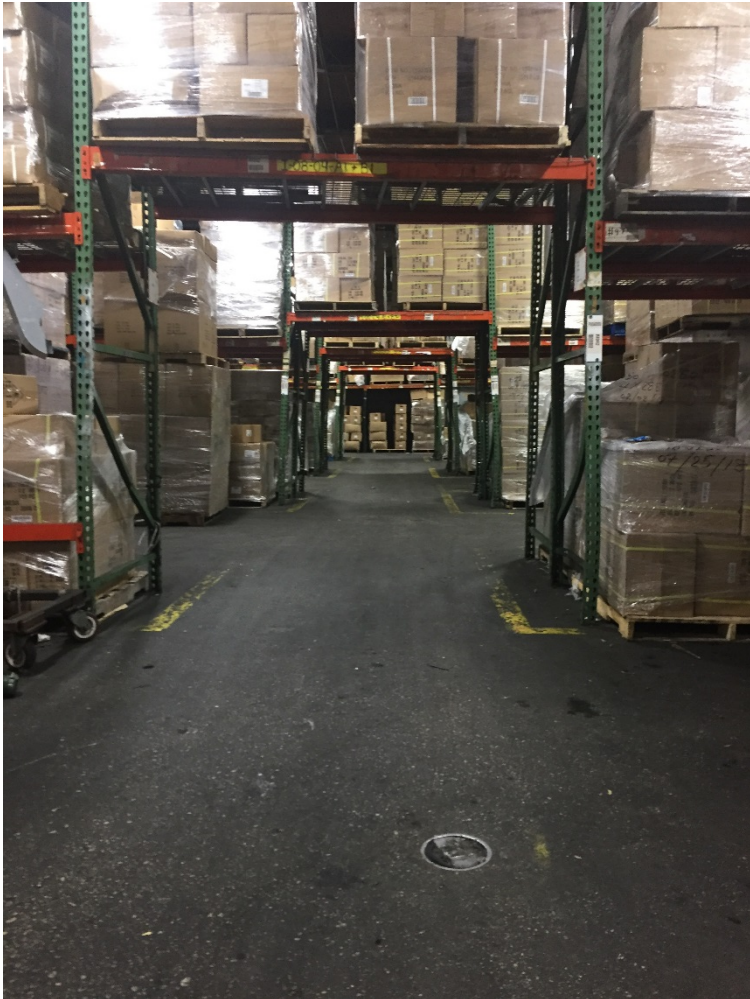
**Photo 2:** (10-15-2018) AOC 1. Taken from south side of AOC 1 looking north.





**Former Jameco Facility**  
**Site Inspection Photos: 10-15-2018**

**Photo 3** (10-15-2018) AOC 4. Interior portion of AOC 4 located in Warehouse area. Looking west.



**Photo 4:** (10-15-2018) AOC 4. Exterior portion of AOC 4. On north side of Site building. Looking west.





**Former Jameco Facility  
Site Inspection Photos: 10-15-2018**



**Photo 5:** (10-15-2018) AOC 2&5. View from southeast corner of AOC 2 and 5. Production area to north.

**Semi-annual Site Inspection**  
**And Groundwater Sampling**  
**Former Jameco Facility, Wyandanch, NY**

Inspector 1: Andrew Foley \_\_\_\_\_  
Inspector 2: \_\_\_\_\_

Dates on Site: 10-15-2018  
Start time: 10:20 Finish time: 2:40

**Groundwater Sampling**

**-Site Management plan has been amended to include only one annual round of groundwater monitoring. The NYSDEC had officially approved this change in a letter dated 3-31-2016. GEC received verbal approval to make this change during the summer of 2015. Groundwater monitoring will take place in April annually.**

**Site Inspection**

Each AOC to be inspected is briefly described below but GEC inspectors should refer to the Nelson & Pope survey plan of the Site for accurate AOC locations.

**AOC-1**, parking area east of loading dock

Date and time of inspection 10-15-2018

Condition of surface integrity. No changes - OK

Any observed apparent subsurface work in AOC? NO

If yes, describe. \_\_\_\_\_

Any work proposed or anticipated by plant personnel? None planned in this area.

Describe Work is in the permitting process to expand the building to the east. New pavement may be laid on top of a small portion of AOC-1, but no subsurface work is expected.

**AOCs-2&5**, Plant interior enclosed by columns P6, L6K6, L2 and Q2

Date and time of inspection 10-15-2018

Condition of surface integrity. No changes - OK

Any observed apparent subsurface work in AOC? NO

If yes, describe. \_\_\_\_\_

Any work proposed or anticipated by plant personnel? None planned in this area.

Describe \_\_\_\_\_

**AOC-4**, Area of plant including stockroom and outside lawn out to sidewalk.

Date and time of inspection 10-15-2018

Condition of surface integrity. No changes - OK

---

Any observed apparent subsurface work in AOC? NO

If yes, describe. \_\_\_\_\_

---

Any work proposed or anticipated by plant personnel? None planned in this area.

Describe \_\_\_\_\_

---

**AOC-3**, Square parcel extending south of south property line and enclosed by chainlink fence.

Date and time of inspection 10-15-2018

Condition of surface integrity. No changes - OK

---

Any observed apparent subsurface work in AOC? NO

If yes, describe. \_\_\_\_\_

---

Any work proposed or anticipated by plant personnel? None planned in this area.

Describe \_\_\_\_\_

---

**Interviews:**

Briefly discuss with knowledgeable plant personnel (**Len Zichlin** (comptroller)).

Describe below.

Subsurface construction or utility work: Possible plans to expand Site building to east – not affecting any AOC

Exploration for or use of groundwater under property for process or potable purposes:

None Planned

---

Anticipated subsurface work within soil or groundwater beneath Site property: Possible plans to expand Site building to east – not affecting any AOC



**Former Jameco Facility  
Site Inspection Photos: 5-6-2019**

**Photo 1:** (5-6-2019) AOC 3. View looking west from southwest corner of AOC-1.





**Former Jameco Facility  
Site Inspection Photos: 5-6-2019**

**Photo 2:** (5-6-2019) AOC 1. Taken from south side of AOC 1 looking north.





## Former Jameco Facility Site Inspection Photos: 5-6-2019

**Photo 3** (5-6-2019) AOC 4. Interior portion of AOC 4 located in Warehouse area. Looking west.

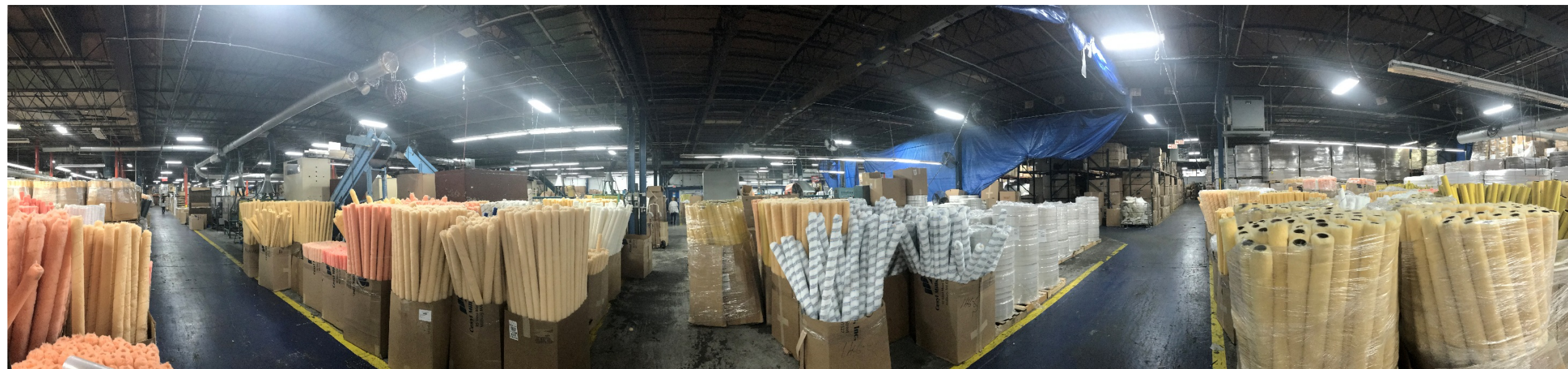


**Photo 4:** (5-6-2019) AOC 4. Exterior portion of AOC 4. On north side of Site building. Looking west.





**Former Jameco Facility  
Site Inspection Photos: 5-6-2019**



**Photo 5:** (5-6-2019) AOC 2&5. View from south side of AOC 2 and 5. Production area to north.

**Semi-annual Site Inspection**  
**And Groundwater Sampling**  
**Former Jameco Facility, Wyandanch, NY**

Inspector 1: Andrew Foley  
Inspector 2: \_\_\_\_\_

Dates on Site: 5-6&7-2018  
Start time: 11:45 Finish time: 12:00

**Groundwater Sampling**

**-Site Management plan has been amended to include only one annual round of groundwater monitoring. The NYSDEC had officially approved this change in a letter dated 3-31-2016. GEC received verbal approval to make this change during the summer of 2015. Groundwater monitoring will take place in April annually.**

**Site Inspection**

Each AOC to be inspected is briefly described below but GEC inspectors should refer to the Nelson & Pope survey plan of the Site for accurate AOC locations.

**AOC-1**, parking area east of loading dock

Date and time of inspection 5-6-2019

Condition of surface integrity. Good

Any observed apparent subsurface work in AOC? None

If yes, describe. \_\_\_\_\_

Any work proposed or anticipated by plant personnel? None

Describe \_\_\_\_\_

**AOCs-2&5**, Plant interior enclosed by columns P6, L6K6, L2 and Q2

Date and time of inspection 5-6-2019

Condition of surface integrity. \_\_\_\_\_

Any observed apparent subsurface work in AOC? None

If yes, describe. \_\_\_\_\_

Any work proposed or anticipated by plant personnel? None

Describe \_\_\_\_\_

**AOC-4**, Area of plant including stockroom and outside lawn out to sidewalk.

Date and time of inspection None

Condition of surface integrity. Good

Any observed apparent subsurface work in AOC? None

If yes, describe. \_\_\_\_\_

Any work proposed or anticipated by plant personnel? None

Describe \_\_\_\_\_

**AOC-3**, Square parcel extending south of south property line and enclosed by chainlink fence.

Date and time of inspection 5-6-2019

Condition of surface integrity. Good, gravel with some vegetation

Any observed apparent subsurface work in AOC? None

If yes, describe. \_\_\_\_\_

Any work proposed or anticipated by plant personnel? None

Describe \_\_\_\_\_

### **Interviews:**

Briefly discuss with knowledgeable plant personnel (**Len Zichlin** (comptroller).  
Describe below.

Subsurface construction or utility work: None has occurred over 2018-2019

Exploration for or use of groundwater under property for process or potable purposes:  
No exploration for either process or potable water

Anticipated subsurface work within soil or groundwater beneath Site property: \_\_\_\_\_  
A building extension is proposed and currently under review by the Town of Wyandanch. The foot print of this building and any associated utilities will not impact any of the AOC's at this Site

# Monitoring Well Purge Data Evaluation

Annual GW Sampling 5-6,7-2019

Former Jameco Facility

West Babylon, New York

| <b>MW-2</b> DTW = 7.77 <b>5/6/2019</b>              |           |                             |                         |      |       |                 |
|-----------------------------------------------------|-----------|-----------------------------|-------------------------|------|-------|-----------------|
| Start Purge @ 1345                                  |           |                             |                         |      |       |                 |
| Time                                                | Temp (°C) | Specific Conductivity us/cm | Dissolved Oxygen (mg/L) | pH   | ORP   | Turbidity (NTU) |
| 1353                                                | 15.84     | 100                         | 0.19                    | 6.6  | 54    |                 |
| 1356                                                | 15.76     | 100                         | 0.13                    | 6.4  | 60    |                 |
| 1359                                                | 15.79     | 100                         | 0.11                    | 6.3  | 62    |                 |
| 1402                                                | 15.75     | 99                          | 0.11                    | 6.3  | 63    | 1.93            |
| 1405                                                | 15.76     | 99                          | 0.11                    | 6.3  | 65    | 1.53            |
| 0% 0% 0% 0% 3%                                      |           |                             |                         |      |       |                 |
| Collect Sample @ 1410 DTW at end of sampling= 7.78  |           |                             |                         |      |       |                 |
| For Total Nickel                                    |           |                             |                         |      |       |                 |
| No odor or sheen                                    |           |                             |                         |      |       |                 |
| <b>MW-3</b> DTW=10.52' <b>5/6/2019</b>              |           |                             |                         |      |       |                 |
| Start Purge @ 1255                                  |           |                             |                         |      |       |                 |
| Time                                                | Temp (°C) | Specific Conductivity us/cm | Dissolved Oxygen (mg/L) | pH   | ORP   | Turbidity       |
| 1304                                                | 11.53     | 163                         | 1.16                    | 6.17 | 177   |                 |
| 1309                                                | 11.62     | 159                         | 0.90                    | 5.92 | 182   |                 |
| 1313                                                | 11.66     | 159                         | 0.89                    | 5.68 | 194   |                 |
| 1320                                                | 11.87     | 161                         | 0.91                    | 5.87 | 184   |                 |
| 1323                                                | 11.82     | 161                         | 0.95                    | 5.9  | 182   | 0.66            |
| 1326                                                | 11.79     | 161                         | 0.9                     | 5.91 | 182   | 0.69            |
| 0% 0% -5% 0% 0%                                     |           |                             |                         |      |       |                 |
| Collect Sample @ 1327 DTW at end of sampling= 10.55 |           |                             |                         |      |       |                 |
| For Total Nickel                                    |           |                             |                         |      |       |                 |
| No odor or sheen                                    |           |                             |                         |      |       |                 |
| <b>MW-4</b> DTW=8.76 <b>5/6/2019</b>                |           |                             |                         |      |       |                 |
| Start Purge @ 1247                                  |           |                             |                         |      |       |                 |
| Time                                                | Temp (°C) | Specific Conductivity us/cm | Dissolved Oxygen (mg/L) | pH   | ORP   | Turbidity (NTU) |
| 1257                                                | 12.12     | 153                         | 1.37                    | 7.4  | 53    |                 |
| 1300                                                | 11.65     | 144                         | 0.40                    | 7.07 | 45    |                 |
| 1303                                                | 11.91     | 141                         | 0.36                    | 6.95 | 46    |                 |
| 1308                                                | 11.95     | 137                         | 0.39                    | 6.83 | 50    |                 |
| 1311                                                | 11.98     | 136                         | 0.44                    | 6.78 | 53    | 3.36            |
| 1315                                                | 11.91     | 132                         | 0.42                    | 6.74 | 56    | 3.02            |
| 1% 3% 5% 1% -6%                                     |           |                             |                         |      |       |                 |
| Collect Sample @ 1316 DTW at end of sampling= 10.55 |           |                             |                         |      |       |                 |
| For Total Nickel                                    |           |                             |                         |      |       |                 |
| No odor or sheen                                    |           |                             |                         |      |       |                 |
| <b>MW-5R</b> DTW =8.01 <b>5/6/2019</b>              |           |                             |                         |      |       |                 |
| Start Purge @ 1048                                  |           |                             |                         |      |       |                 |
| Time                                                | Temp (°C) | Specific Conductivity us/cm | Dissolved Oxygen (mg/L) | pH   | ORP   | Turbidity (NTU) |
| 1208                                                | 12.22     | 484                         | 3.1                     | 6.76 | 148   |                 |
| 1211                                                | 12.21     | 454                         | 2.5                     | 6.6  | 146   |                 |
| 1214                                                | 12.09     | 425                         | 2.1                     | 6.47 | 146.0 |                 |
| 1217                                                | 12.02     | 416                         | 1.81                    | 6.29 | 151   |                 |
| 1220                                                | 12.01     | 403                         | 1.79                    | 6.24 | 149   | 9.94            |
| 1223                                                | 12.04     | 400                         | 1.65                    | 6.25 | 145   | 5.64            |
| 0% -1% -8% 0% -3%                                   |           |                             |                         |      |       |                 |
| Collect Sample @ 1229 DTW at end of sampling= 7.1   |           |                             |                         |      |       |                 |
| For Total Nickel                                    |           |                             |                         |      |       |                 |
| No odor or sheen                                    |           |                             |                         |      |       |                 |

## EPA Low flow stabilization

Turbidity <SNTU or 10%  
 DO <0.5 mg/L or 10%  
 Specific Conductivity 3%  
 Temp 3%  
 pH 0.1  
 ORP +/-10milivolts

## GEC SOP

3 consecutive readings within 20% for all parameters

## West Babylon, New York

| <b>MW-10 (deep)</b>                                                                     |           | DTW =7.46'                  |                         | 5/6/2019 |     |                 |
|-----------------------------------------------------------------------------------------|-----------|-----------------------------|-------------------------|----------|-----|-----------------|
| Start Purge @ 1515                                                                      |           |                             |                         |          |     |                 |
| Time                                                                                    | Temp (°C) | Specific Conductivity us/cm | Dissolved Oxygen (mg/L) | pH       | ORP | Turbidity (NTU) |
| 1526                                                                                    | 15.98     | 318                         | 0.19                    | 6        | 119 |                 |
| 1529                                                                                    | 15.93     | 315                         | 0.16                    | 5.91     | 120 |                 |
| 1532                                                                                    | 15.82     | 310                         | 0.15                    | 5.86     | 120 |                 |
| 1535                                                                                    | 15.84     | 307                         | 0.15                    | 5.85     | 118 | 1.51            |
| 1538                                                                                    | 15.77     | 305                         | 0.14                    | 5.83     | 119 |                 |
| 1541                                                                                    | 15.75     | 303                         | 0.14                    | 5.82     | 120 | 1.36            |
|                                                                                         |           | -1%                         | -1%                     | -7%      | -1% | 2%              |
| Collect Sample @ 1740 DTW at end of sampling= 7.45                                      |           |                             |                         |          |     |                 |
| For Total Copper, Chromium and Nickel MS and MSD                                        |           |                             |                         |          |     |                 |
| Water clear w/ no sheen or distinctive odor                                             |           |                             |                         |          |     |                 |
| <b>MW-12 (shallow)</b>                                                                  |           | DTW =7.49'                  |                         | 5/6/2019 |     |                 |
| Start Purge @ 1517                                                                      |           |                             |                         |          |     |                 |
| Time                                                                                    | Temp (°C) | Specific Conductivity us/cm | Dissolved Oxygen (mg/L) | pH       | ORP | Turbidity (NTU) |
| 1527                                                                                    | 15.98     | 125                         | 0.51                    | 6.14     | 127 |                 |
| 1530                                                                                    | 15.93     | 121                         | 0.57                    | 6.04     | 133 |                 |
| 1533                                                                                    | 15.82     | 121                         | 0.45                    | 5.94     | 141 |                 |
| 1536                                                                                    | 15.84     | 123                         | 0.31                    | 5.86     | 148 |                 |
| 1539                                                                                    | 15.77     | 123                         | 0.27                    | 5.83     | 148 |                 |
| 1542                                                                                    | 15.75     | 122                         | 0.22                    | 5.82     | 148 | 12.2            |
|                                                                                         |           | 0%                          | -1%                     | -23%     | 0%  | 0%              |
| Collect Sample @ 1610 DTW at end of sampling= 7.50                                      |           |                             |                         |          |     |                 |
| For Total Copper, Chromium and Nickel                                                   |           |                             |                         |          |     |                 |
| No sheen or odor detected                                                               |           |                             |                         |          |     |                 |
| <b>MW-19</b>                                                                            |           | LNAPL Thickness = 0.02'     |                         | 5/7/2019 |     |                 |
| <b>Not sampled due to the presence of LNAPL</b>                                         |           |                             |                         |          |     |                 |
| Attempted pump down transmissivity test, product never returned to measurable thickness |           |                             |                         |          |     |                 |
| <b>MW-20</b>                                                                            |           | DTW =7.59'                  |                         | 5/7/2019 |     |                 |
| Start Purge @ 0845                                                                      |           |                             |                         |          |     |                 |
| Time                                                                                    | Temp (°C) | Specific Conductivity us/cm | Dissolved Oxygen (mg/L) | pH       | ORP | Turbidity (NTU) |
| 852                                                                                     | 13.93     | 73                          | 1.17                    | 5.98     | 173 |                 |
| 855                                                                                     | 13.92     | 73                          | 0.65                    | 5.81     | 169 |                 |
| 859                                                                                     | 13.87     | 73                          | 0.36                    | 5.74     | 167 |                 |
| 903                                                                                     | 13.87     | 75                          | 0.29                    | 5.74     | 167 |                 |
| 906                                                                                     | 13.84     | 75                          | 0.24                    | 5.73     | 168 | 0.77            |
|                                                                                         |           | 0%                          | 0%                      | -21%     | 0%  | 1%              |
| Collect Sample @ 0910 DTW at end of sampling= 7.6                                       |           |                             |                         |          |     |                 |
| For PAHs (8270C)                                                                        |           |                             |                         |          |     |                 |
| Water clear w/ no sheen or distinctive odor                                             |           |                             |                         |          |     |                 |



## West Babylon, New York

| MW-21              |              | DTW =7.53                         |                               |      |     |                    | 5/7/2015 |
|--------------------|--------------|-----------------------------------|-------------------------------|------|-----|--------------------|----------|
| Start Purge @ 0954 |              |                                   |                               |      |     |                    |          |
| Time               | Temp<br>(°C) | Specific<br>Conductivity<br>us/cm | Dissolved<br>Oxygen<br>(mg/L) | pH   | ORP | Turbidity<br>(NTU) |          |
| 1004               | 13.98        | 242                               | 0.17                          | 6.25 | 49  | NA                 |          |
| 1007               | 13.99        | 241                               | 0.17                          | 6.26 | 46  |                    |          |
| 1010               | 14.02        | 239                               | 0.17                          | 6.27 | 43  | 1.09               |          |
| 1013               | 14.02        | 237                               | 0.17                          | 6.27 | 41  |                    |          |
| 1016               | 14.04        | 236                               | 0.17                          | 6.27 | 41  | 0.99               |          |

|                                                                    |    |    |    |    |      |
|--------------------------------------------------------------------|----|----|----|----|------|
|                                                                    | 0% | 0% | 0% | 0% | 0%   |
| Collect Sample @ 01017 DTW at end of sampling=<br>For PAHs (8270C) |    |    |    |    | 7.55 |
| Water clear w/ no sheen, slight burnt oil odor                     |    |    |    |    |      |

| MW-23              |           | DTW = 7.43                  |                         |      |     |                 | 5/6/2019 |
|--------------------|-----------|-----------------------------|-------------------------|------|-----|-----------------|----------|
| Start Purge @ 1650 |           |                             |                         |      |     |                 |          |
| Time               | Temp (°C) | Specific Conductivity us/cm | Dissolved Oxygen (mg/L) | pH   | ORP | Turbidity (NTU) |          |
| 1700               | 12.07     | 183                         | 2.30                    | 5.56 | 104 |                 |          |
| 1704               | 12.29     | 180                         | 0.59                    | 5.39 | 106 |                 |          |
| 1709               | 12.18     | 179                         | 0.40                    | 5.37 | 103 |                 |          |
| 1712               | 12.12     | 178                         | 0.36                    | 5.36 | 102 |                 |          |
| 1715               | 12.25     | 178                         | 0.32                    | 5.35 | 102 |                 |          |
| 1718               | 12.17     | 177                         | 0.3                     | 5.34 | 100 |                 |          |
| 1721               | 12.12     | 176                         | 0.27                    | 5.33 | 97  | 11              |          |

0%      -1%      -11%      0%      -3%

Collect Sample @ 1643      DTW at end of sampling= Not measured

For PAHs (8270C)

MS and MS Dup for 8270C

purge 1.5 G

Water clear w/ no sheen or distinctive odor

| MW-26R             |           | DTW = 7.96'                 |                         |      |     | 5/6/2015        |  |
|--------------------|-----------|-----------------------------|-------------------------|------|-----|-----------------|--|
| Start Purge @ 1427 |           |                             |                         |      |     |                 |  |
| Time               | Temp (°C) | Specific Conductivity us/cm | Dissolved Oxygen (mg/L) | pH   | ORP | Turbidity (NTU) |  |
| 1437               | 17.6      | 356                         | 0.3                     | 6.18 | 75  |                 |  |
| 1440               | 17.99     | 352                         | 0.29                    | 6.24 | 46  |                 |  |
| 1443               | 18.03     | 352                         | 0.29                    | 6.24 | 43  |                 |  |
| 1446               | 18.15     | 353                         | 0.27                    | 6.26 | 40  | 3               |  |
| 1449               | 17.88     | 351                         | 0.26                    | 6.26 | 38  |                 |  |
| 1452               | 17.76     | 350                         | 0.25                    | 6.25 | 37  | 3.14            |  |

|                                            | -1% | 0% | -4% | 0% | -3%  |
|--------------------------------------------|-----|----|-----|----|------|
| Collect Sample @ 1453                      |     |    |     |    |      |
| DTW at end of sampling=                    |     |    |     |    | 7.98 |
| For Nickel, Copper and Chormium            |     |    |     |    |      |
|                                            |     |    |     |    |      |
|                                            |     |    |     |    |      |
| Water clear w/ no sheen or distintive odor |     |    |     |    |      |

**ATTACHMENT 3:**

Laboratory Certificate of Analysis

June 13, 2019

Cassidy Way  
Goldman Environmental  
60 Brooks Drive  
Braintree, MA 02184

Project Location: Linzer  
Client Job Number:  
Project Number: 1744-Linzer  
Laboratory Work Order Number: 19E0458

Enclosed are results of analyses for samples received by the laboratory on May 8, 2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "R J McCarthy", is displayed on a light gray rectangular background.

Raymond J. McCarthy  
Project Manager

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332Goldman Environmental  
60 Brooks Drive  
Braintree, MA 02184  
ATTN: Cassidy Way

REPORT DATE: 6/13/2019

PURCHASE ORDER NUMBER: 1744-7090

PROJECT NUMBER: 1744-Linzer

**ANALYTICAL SUMMARY**

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WORK ORDER NUMBER: 19E0458

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Linzer

| FIELD SAMPLE # | LAB ID:    | MATRIX       | SAMPLE DESCRIPTION | TEST         | SUB LAB |
|----------------|------------|--------------|--------------------|--------------|---------|
| MW-2           | 19E0458-01 | Ground Water |                    | SW-846 6010D |         |
| MW-4           | 19E0458-02 | Ground Water |                    | SW-846 6010D |         |
| MW-3           | 19E0458-03 | Ground Water |                    | SW-846 6010D |         |
| MW-5R          | 19E0458-04 | Ground Water |                    | SW-846 6010D |         |
| MW-10          | 19E0458-05 | Ground Water |                    | SW-846 6010D |         |
| MW-12          | 19E0458-06 | Ground Water |                    | SW-846 6010D |         |
| MW-20          | 19E0458-07 | Ground Water |                    | SW-846 8270D |         |
| MW-21          | 19E0458-08 | Ground Water |                    | SW-846 8270D |         |
| MW-23          | 19E0458-09 | Ground Water |                    | SW-846 8270D |         |
| MW-26R         | 19E0458-10 | Ground Water |                    | SW-846 6010D |         |

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#### **CASE NARRATIVE SUMMARY**

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

REVISED REPORT - 6/13/19 - Per client samples -02 & -03 were switched. IDs revised for -02 to MW-4 and -03 MW-3 per clients request.



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332  
SW-846 8270D

**Qualifications:****MS-09**

Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

**Analyte & Samples(s) Qualified:****3,3-Dichlorobenzidine**

19E0458-09[MW-23], B230464-MS1, B230464-MSD1

**Benzidine**

19E0458-09[MW-23], B230464-MS1, B230464-MSD1

**Benzoic Acid**

19E0458-09[MW-23], B230464-MS1, B230464-MSD1

**Phenol**

19E0458-09[MW-23], B230464-MS1, B230464-MSD1

**Pyridine**

19E0458-09[MW-23], B230464-MS1, B230464-MSD1

**MS-22**

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

**Analyte & Samples(s) Qualified:****N-Nitrosodimethylamine**

B230464-MSD1

**R-06**

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

**Analyte & Samples(s) Qualified:****Pyridine**

19E0458-09[MW-23], B230464-MS1, B230464-MSD1

**V-05**

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

**Analyte & Samples(s) Qualified:****2-Methylphenol**

19E0458-07[MW-20], 19E0458-08[MW-21], 19E0458-09[MW-23], B230464-BLK1, B230464-BS1, B230464-BSD1, B230464-MS1, B230464-MSD1, S035746-CCV1

**Benzidine**

19E0458-07[MW-20], 19E0458-08[MW-21], 19E0458-09[MW-23], B230464-BLK1, B230464-BS1, B230464-BSD1, B230464-MS1, B230464-MSD1, S035746-CCV1

**Hexachlorocyclopentadiene**

19E0458-07[MW-20], 19E0458-08[MW-21], 19E0458-09[MW-23], B230464-BLK1, B230464-BS1, B230464-BSD1, B230464-MS1, B230464-MSD1, S035746-CCV1

**V-06**

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.

**Analyte & Samples(s) Qualified:****Bis(2-Ethylhexyl)phthalate**

B230464-MS1, B230464-MSD1

**V-20**

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

**Analyte & Samples(s) Qualified:****Bis(2-Ethylhexyl)phthalate**

19E0458-07[MW-20], 19E0458-08[MW-21], 19E0458-09[MW-23]

**V-34**

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

**Analyte & Samples(s) Qualified:****3,3-Dichlorobenzidine**

19E0458-07[MW-20], 19E0458-08[MW-21], 19E0458-09[MW-23], B230464-BLK1, B230464-BS1, B230464-BSD1, B230464-MS1, B230464-MSD1, S035746-CCV1

**4-Chloroaniline**

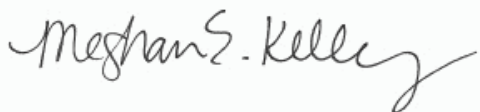
19E0458-07[MW-20], 19E0458-08[MW-21], 19E0458-09[MW-23], B230464-BLK1, B230464-BS1, B230464-BSD1, B230464-MS1, B230464-MSD1, S035746-CCV1

**Aniline**

19E0458-07[MW-20], 19E0458-08[MW-21], 19E0458-09[MW-23], B230464-BLK1, B230464-BS1, B230464-BSD1, B230464-MS1, B230464-MSD1, S035746-CCV1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink, reading "Meghan E. Kelley". The signature is written in a cursive, flowing style.

Meghan E. Kelley  
Project Manager

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Linzer

Sample Description:

Work Order: 19E0458

Date Received: 5/8/2019

Field Sample #: MW-2

Sampled: 5/6/2019 14:10

Sample ID: 19E0458-01

Sample Matrix: Ground Water

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**Metals Analyses (Dissolved)**

| Analyte | Results | RL    | Units | Dilution | Flag/Qual | Method       | Date<br>Prepared | Date/Time<br>Analyzed | Analyst |
|---------|---------|-------|-------|----------|-----------|--------------|------------------|-----------------------|---------|
| Nickel  | 0.34    | 0.010 | mg/L  | 1        |           | SW-846 6010D | 5/14/19          | 5/15/19 5:05          | EJB     |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Linzer

Sample Description:

Work Order: 19E0458

Date Received: 5/8/2019

Field Sample #: MW-4

Sampled: 5/6/2019 13:27

Sample ID: 19E0458-02

Sample Matrix: Ground Water

**Metals Analyses (Dissolved)**

| Analyte | Results | RL    | Units | Dilution | Flag/Qual | Method       | Date<br>Prepared | Date/Time<br>Analyzed | Analyst |
|---------|---------|-------|-------|----------|-----------|--------------|------------------|-----------------------|---------|
| Nickel  | 0.41    | 0.010 | mg/L  | 1        |           | SW-846 6010D | 5/14/19          | 5/15/19 5:12          | EJB     |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Linzer

Sample Description:

Work Order: 19E0458

Date Received: 5/8/2019

Field Sample #: MW-3

Sampled: 5/6/2019 13:16

Sample ID: 19E0458-03

Sample Matrix: Ground Water

**Metals Analyses (Dissolved)**

| Analyte | Results | RL    | Units | Dilution | Flag/Qual | Method       | Date<br>Prepared | Date/Time<br>Analyzed | Analyst |
|---------|---------|-------|-------|----------|-----------|--------------|------------------|-----------------------|---------|
| Nickel  | 0.078   | 0.010 | mg/L  | 1        |           | SW-846 6010D | 5/14/19          | 5/15/19 5:20          | EJB     |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Linzer

Sample Description:

Work Order: 19E0458

Date Received: 5/8/2019

Field Sample #: MW-5R

Sampled: 5/6/2019 12:29

Sample ID: 19E0458-04

Sample Matrix: Ground Water

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**Metals Analyses (Dissolved)**

| Analyte | Results | RL    | Units | Dilution | Flag/Qual | Method       | Date<br>Prepared | Date/Time<br>Analyzed | Analyst |
|---------|---------|-------|-------|----------|-----------|--------------|------------------|-----------------------|---------|
| Nickel  | 0.20    | 0.010 | mg/L  | 1        |           | SW-846 6010D | 5/14/19          | 5/15/19 5:27          | EJB     |



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Project Location: Linzer

Sample Description:

Work Order: 19E0458

Date Received: 5/8/2019

Field Sample #: MW-10

Sampled: 5/6/2019 15:43

Sample ID: 19E0458-05

Sample Matrix: Ground Water

**Metals Analyses (Dissolved)**

| Analyte  | Results | RL    | Units | Dilution | Flag/Qual | Method       | Date Prepared | Date/Time Analyzed | Analyst |
|----------|---------|-------|-------|----------|-----------|--------------|---------------|--------------------|---------|
| Chromium | ND      | 0.010 | mg/L  | 1        |           | SW-846 6010D | 5/14/19       | 5/15/19 4:58       | EJB     |
| Copper   | ND      | 0.010 | mg/L  | 1        |           | SW-846 6010D | 5/14/19       | 5/15/19 4:58       | EJB     |
| Nickel   | ND      | 0.010 | mg/L  | 1        |           | SW-846 6010D | 5/14/19       | 5/15/19 4:58       | EJB     |

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Project Location: Linzer

Sample Description:

Work Order: 19E0458

Date Received: 5/8/2019

Field Sample #: MW-12

Sampled: 5/6/2019 16:10

Sample ID: 19E0458-06

Sample Matrix: Ground Water

**Metals Analyses (Dissolved)**

| Analyte  | Results | RL    | Units | Dilution | Flag/Qual | Method       | Date Prepared | Date/Time Analyzed | Analyst |
|----------|---------|-------|-------|----------|-----------|--------------|---------------|--------------------|---------|
| Chromium | 0.013   | 0.010 | mg/L  | 1        |           | SW-846 6010D | 5/14/19       | 5/15/19 5:34       | EJB     |
| Copper   | 0.86    | 0.010 | mg/L  | 1        |           | SW-846 6010D | 5/14/19       | 5/15/19 5:34       | EJB     |
| Nickel   | 0.072   | 0.010 | mg/L  | 1        |           | SW-846 6010D | 5/14/19       | 5/15/19 5:34       | EJB     |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Linzer

Sample Description:

Work Order: 19E0458

Date Received: 5/8/2019

Field Sample #: MW-20

Sampled: 5/7/2019 09:10

Sample ID: 19E0458-07

Sample Matrix: Ground Water

## Semivolatile Organic Compounds by GC/MS

| Analyte                          | Results | RL  | Units | Dilution | Flag/Qual | Method       | Date Prepared | Date/Time Analyzed | Analyst |
|----------------------------------|---------|-----|-------|----------|-----------|--------------|---------------|--------------------|---------|
| Acenaphthene                     | ND      | 5.1 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Acenaphthylene                   | ND      | 5.1 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Acetophenone                     | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Aniline                          | ND      | 5.1 | µg/L  | 1        | V-34      | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Anthracene                       | ND      | 5.1 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Benzidine                        | ND      | 20  | µg/L  | 1        | V-05      | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Benzo(a)anthracene               | ND      | 5.1 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Benzo(a)pyrene                   | ND      | 5.1 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Benzo(b)fluoranthene             | ND      | 5.1 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Benzo(g,h,i)perylene             | ND      | 5.1 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Benzo(k)fluoranthene             | ND      | 5.1 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Benzoic Acid                     | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Bis(2-chloroethoxy)methane       | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Bis(2-chloroethyl)ether          | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Bis(2-chloroisopropyl)ether      | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Bis(2-Ethylhexyl)phthalate       | ND      | 10  | µg/L  | 1        | V-20      | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 4-Bromophenylphenylether         | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Butylbenzylphthalate             | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Carbazole                        | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 4-Chloroaniline                  | ND      | 10  | µg/L  | 1        | V-34      | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 4-Chloro-3-methylphenol          | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 2-Chloronaphthalene              | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 2-Chlorophenol                   | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 4-Chlorophenylphenylether        | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Chrysene                         | ND      | 5.1 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Dibenz(a,h)anthracene            | ND      | 5.1 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Dibenzofuran                     | ND      | 5.1 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Di-n-butylphthalate              | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 1,2-Dichlorobenzene              | ND      | 5.1 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 1,3-Dichlorobenzene              | ND      | 5.1 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 1,4-Dichlorobenzene              | ND      | 5.1 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 3,3-Dichlorobenzidine            | ND      | 10  | µg/L  | 1        | V-34      | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 2,4-Dichlorophenol               | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Diethylphthalate                 | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 2,4-Dimethylphenol               | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Dimethylphthalate                | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 4,6-Dinitro-2-methylphenol       | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 2,4-Dinitrophenol                | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 2,4-Dinitrotoluene               | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 2,6-Dinitrotoluene               | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Di-n-octylphthalate              | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 1,2-Diphenylhydrazine/Azobenzene | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Fluoranthene                     | ND      | 5.1 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Fluorene                         | ND      | 5.1 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Linzer

Sample Description:

Work Order: 19E0458

Date Received: 5/8/2019

Field Sample #: MW-20

Sampled: 5/7/2019 09:10

Sample ID: 19E0458-07

Sample Matrix: Ground Water

## Semivolatile Organic Compounds by GC/MS

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method       | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|--------------|---------------|--------------------|---------|
| Hexachlorobenzene                    | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Hexachlorobutadiene                  | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Hexachlorocyclopentadiene            | ND         | 10              | µg/L      | 1        | V-05      | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Hexachloroethane                     | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Indeno(1,2,3-cd)pyrene               | ND         | 5.1             | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Isophorone                           | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 1-Methylnaphthalene                  | ND         | 5.1             | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 2-Methylnaphthalene                  | ND         | 5.1             | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 2-Methylphenol                       | ND         | 10              | µg/L      | 1        | V-05      | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 3/4-Methylphenol                     | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Naphthalene                          | ND         | 5.1             | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 2-Nitroaniline                       | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 3-Nitroaniline                       | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 4-Nitroaniline                       | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Nitrobenzene                         | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 2-Nitrophenol                        | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 4-Nitrophenol                        | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| N-Nitrosodimethylamine               | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| N-Nitrosodiphenylamine/Diphenylamine | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| N-Nitrosodi-n-propylamine            | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Pentachloronitrobenzene              | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Pentachlorophenol                    | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Phenanthrene                         | ND         | 5.1             | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Phenol                               | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Pyrene                               | ND         | 5.1             | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Pyridine                             | ND         | 5.1             | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 1,2,4,5-Tetrachlorobenzene           | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 1,2,4-Trichlorobenzene               | ND         | 5.1             | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 2,4,5-Trichlorophenol                | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| 2,4,6-Trichlorophenol                | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 14:46      | CDT     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |              |               |                    |         |
| 2-Fluorophenol                       | 31.6       | 15-110          |           |          |           |              |               |                    |         |
| Phenol-d6                            | 21.1       | 15-110          |           |          |           |              |               |                    |         |
| Nitrobenzene-d5                      | 66.8       | 30-130          |           |          |           |              |               |                    |         |
| 2-Fluorobiphenyl                     | 74.5       | 30-130          |           |          |           |              |               |                    |         |
| 2,4,6-Tribromophenol                 | 88.8       | 15-110          |           |          |           |              |               |                    |         |
| p-Terphenyl-d14                      | 91.4       | 30-130          |           |          |           |              |               |                    |         |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Linzer

Sample Description:

Work Order: 19E0458

Date Received: 5/8/2019

Field Sample #: MW-21

Sampled: 5/7/2019 10:17

Sample ID: 19E0458-08

Sample Matrix: Ground Water

## Semivolatile Organic Compounds by GC/MS

| Analyte                          | Results | RL  | Units | Dilution | Flag/Qual | Method       | Date Prepared | Date/Time Analyzed | Analyst |
|----------------------------------|---------|-----|-------|----------|-----------|--------------|---------------|--------------------|---------|
| Acenaphthene                     | ND      | 5.0 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Acenaphthylene                   | ND      | 5.0 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Acetophenone                     | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Aniline                          | ND      | 5.0 | µg/L  | 1        | V-34      | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Anthracene                       | ND      | 5.0 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Benzidine                        | ND      | 20  | µg/L  | 1        | V-05      | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Benzo(a)anthracene               | ND      | 5.0 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Benzo(a)pyrene                   | ND      | 5.0 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Benzo(b)fluoranthene             | ND      | 5.0 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Benzo(g,h,i)perylene             | ND      | 5.0 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Benzo(k)fluoranthene             | ND      | 5.0 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Benzoic Acid                     | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Bis(2-chloroethoxy)methane       | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Bis(2-chloroethyl)ether          | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Bis(2-chloroisopropyl)ether      | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Bis(2-Ethylhexyl)phthalate       | ND      | 10  | µg/L  | 1        | V-20      | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 4-Bromophenylphenylether         | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Butylbenzylphthalate             | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Carbazole                        | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 4-Chloroaniline                  | ND      | 10  | µg/L  | 1        | V-34      | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 4-Chloro-3-methylphenol          | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 2-Chloronaphthalene              | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 2-Chlorophenol                   | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 4-Chlorophenylphenylether        | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Chrysene                         | ND      | 5.0 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Dibenz(a,h)anthracene            | ND      | 5.0 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Dibenzofuran                     | ND      | 5.0 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Di-n-butylphthalate              | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 1,2-Dichlorobenzene              | ND      | 5.0 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 1,3-Dichlorobenzene              | ND      | 5.0 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 1,4-Dichlorobenzene              | ND      | 5.0 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 3,3-Dichlorobenzidine            | ND      | 10  | µg/L  | 1        | V-34      | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 2,4-Dichlorophenol               | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Diethylphthalate                 | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 2,4-Dimethylphenol               | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Dimethylphthalate                | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 4,6-Dinitro-2-methylphenol       | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 2,4-Dinitrophenol                | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 2,4-Dinitrotoluene               | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 2,6-Dinitrotoluene               | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Di-n-octylphthalate              | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 1,2-Diphenylhydrazine/Azobenzene | ND      | 10  | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Fluoranthene                     | ND      | 5.0 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Fluorene                         | ND      | 5.0 | µg/L  | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Linzer

Sample Description:

Work Order: 19E0458

Date Received: 5/8/2019

Field Sample #: MW-21

Sampled: 5/7/2019 10:17

Sample ID: 19E0458-08

Sample Matrix: Ground Water

## Semivolatile Organic Compounds by GC/MS

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual | Method       | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-----------|--------------|---------------|--------------------|---------|
| Hexachlorobenzene                    | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Hexachlorobutadiene                  | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Hexachlorocyclopentadiene            | ND         | 10              | µg/L      | 1        | V-05      | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Hexachloroethane                     | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Indeno(1,2,3-cd)pyrene               | ND         | 5.0             | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Isophorone                           | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 1-Methylnaphthalene                  | ND         | 5.0             | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 2-Methylnaphthalene                  | ND         | 5.0             | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 2-Methylphenol                       | ND         | 10              | µg/L      | 1        | V-05      | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 3/4-Methylphenol                     | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Naphthalene                          | ND         | 5.0             | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 2-Nitroaniline                       | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 3-Nitroaniline                       | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 4-Nitroaniline                       | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Nitrobenzene                         | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 2-Nitrophenol                        | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 4-Nitrophenol                        | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| N-Nitrosodimethylamine               | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| N-Nitrosodiphenylamine/Diphenylamine | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| N-Nitrosodi-n-propylamine            | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Pentachloronitrobenzene              | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Pentachlorophenol                    | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Phenanthrene                         | ND         | 5.0             | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Phenol                               | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Pyrene                               | ND         | 5.0             | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Pyridine                             | ND         | 5.0             | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 1,2,4,5-Tetrachlorobenzene           | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 1,2,4-Trichlorobenzene               | ND         | 5.0             | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 2,4,5-Trichlorophenol                | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| 2,4,6-Trichlorophenol                | ND         | 10              | µg/L      | 1        |           | SW-846 8270D | 5/11/19       | 5/14/19 15:08      | CDT     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |           |              |               |                    |         |
| 2-Fluorophenol                       | 34.5       | 15-110          |           |          |           |              |               |                    |         |
| Phenol-d6                            | 22.8       | 15-110          |           |          |           |              |               |                    |         |
| Nitrobenzene-d5                      | 76.1       | 30-130          |           |          |           |              |               |                    |         |
| 2-Fluorobiphenyl                     | 86.0       | 30-130          |           |          |           |              |               |                    |         |
| 2,4,6-Tribromophenol                 | 96.4       | 15-110          |           |          |           |              |               |                    |         |
| p-Terphenyl-d14                      | 101        | 30-130          |           |          |           |              |               |                    |         |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Linzer

Sample Description:

Work Order: 19E0458

Date Received: 5/8/2019

Field Sample #: MW-23

Sampled: 5/6/2019 17:25

Sample ID: 19E0458-09

Sample Matrix: Ground Water

## Semivolatile Organic Compounds by GC/MS

| Analyte                          | Results | RL  | Units | Dilution | Flag/Qual   | Method       | Date Prepared | Date/Time Analyzed | Analyst |
|----------------------------------|---------|-----|-------|----------|-------------|--------------|---------------|--------------------|---------|
| Acenaphthene                     | ND      | 5.0 | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Acenaphthylene                   | ND      | 5.0 | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Acetophenone                     | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Aniline                          | ND      | 5.0 | µg/L  | 1        | V-34        | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Anthracene                       | ND      | 5.0 | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Benzidine                        | ND      | 20  | µg/L  | 1        | MS-09, V-05 | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Benzo(a)anthracene               | ND      | 5.0 | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Benzo(a)pyrene                   | ND      | 5.0 | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Benzo(b)fluoranthene             | ND      | 5.0 | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Benzo(g,h,i)perylene             | ND      | 5.0 | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Benzo(k)fluoranthene             | ND      | 5.0 | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Benzoic Acid                     | ND      | 10  | µg/L  | 1        | MS-09       | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Bis(2-chloroethoxy)methane       | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Bis(2-chloroethyl)ether          | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Bis(2-chloroisopropyl)ether      | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Bis(2-Ethylhexyl)phthalate       | ND      | 10  | µg/L  | 1        | V-20        | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 4-Bromophenylphenylether         | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Butylbenzylphthalate             | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Carbazole                        | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 4-Chloroaniline                  | ND      | 10  | µg/L  | 1        | V-34        | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 4-Chloro-3-methylphenol          | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 2-Chloronaphthalene              | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 2-Chlorophenol                   | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 4-Chlorophenylphenylether        | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Chrysene                         | ND      | 5.0 | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Dibenz(a,h)anthracene            | ND      | 5.0 | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Dibenzofuran                     | ND      | 5.0 | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Di-n-butylphthalate              | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 1,2-Dichlorobenzene              | ND      | 5.0 | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 1,3-Dichlorobenzene              | ND      | 5.0 | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 1,4-Dichlorobenzene              | ND      | 5.0 | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 3,3-Dichlorobenzidine            | ND      | 10  | µg/L  | 1        | MS-09, V-34 | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 2,4-Dichlorophenol               | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Diethylphthalate                 | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 2,4-Dimethylphenol               | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Dimethylphthalate                | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 4,6-Dinitro-2-methylphenol       | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 2,4-Dinitrophenol                | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 2,4-Dinitrotoluene               | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 2,6-Dinitrotoluene               | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Di-n-octylphthalate              | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 1,2-Diphenylhydrazine/Azobenzene | ND      | 10  | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Fluoranthene                     | ND      | 5.0 | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Fluorene                         | ND      | 5.0 | µg/L  | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |



39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Linzer

Sample Description:

Work Order: 19E0458

Date Received: 5/8/2019

Field Sample #: MW-23

Sampled: 5/6/2019 17:25

Sample ID: 19E0458-09

Sample Matrix: Ground Water

## Semivolatile Organic Compounds by GC/MS

| Analyte                              | Results    | RL              | Units     | Dilution | Flag/Qual   | Method       | Date Prepared | Date/Time Analyzed | Analyst |
|--------------------------------------|------------|-----------------|-----------|----------|-------------|--------------|---------------|--------------------|---------|
| Hexachlorobenzene                    | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Hexachlorobutadiene                  | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Hexachlorocyclopentadiene            | ND         | 10              | µg/L      | 1        | V-05        | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Hexachloroethane                     | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Indeno(1,2,3-cd)pyrene               | ND         | 5.0             | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Isophorone                           | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 1-Methylnaphthalene                  | ND         | 5.0             | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 2-Methylnaphthalene                  | ND         | 5.0             | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 2-Methylphenol                       | ND         | 10              | µg/L      | 1        | V-05        | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 3/4-Methylphenol                     | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Naphthalene                          | ND         | 5.0             | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 2-Nitroaniline                       | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 3-Nitroaniline                       | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 4-Nitroaniline                       | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Nitrobenzene                         | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 2-Nitrophenol                        | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 4-Nitrophenol                        | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| N-Nitrosodimethylamine               | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| N-Nitrosodiphenylamine/Diphenylamine | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| N-Nitrosodi-n-propylamine            | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Pentachloronitrobenzene              | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Pentachlorophenol                    | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Phenanthrene                         | ND         | 5.0             | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Phenol                               | ND         | 10              | µg/L      | 1        | MS-09       | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Pyrene                               | ND         | 5.0             | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Pyridine                             | ND         | 5.0             | µg/L      | 1        | MS-09, R-06 | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 1,2,4,5-Tetrachlorobenzene           | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 1,2,4-Trichlorobenzene               | ND         | 5.0             | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 2,4,5-Trichlorophenol                | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| 2,4,6-Trichlorophenol                | ND         | 10              | µg/L      | 1        |             | SW-846 8270D | 5/11/19       | 5/14/19 15:30      | CDT     |
| Surrogates                           | % Recovery | Recovery Limits | Flag/Qual |          |             |              |               |                    |         |
| 2-Fluorophenol                       | 33.7       | 15-110          |           |          |             |              |               | 5/14/19 15:30      |         |
| Phenol-d6                            | 22.3       | 15-110          |           |          |             |              |               | 5/14/19 15:30      |         |
| Nitrobenzene-d5                      | 75.7       | 30-130          |           |          |             |              |               | 5/14/19 15:30      |         |
| 2-Fluorobiphenyl                     | 83.2       | 30-130          |           |          |             |              |               | 5/14/19 15:30      |         |
| 2,4,6-Tribromophenol                 | 93.8       | 15-110          |           |          |             |              |               | 5/14/19 15:30      |         |
| p-Terphenyl-d14                      | 94.6       | 30-130          |           |          |             |              |               | 5/14/19 15:30      |         |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

Project Location: Linzer

Sample Description:

Work Order: 19E0458

Date Received: 5/8/2019

Field Sample #: MW-26R

Sampled: 5/6/2019 14:53

Sample ID: 19E0458-10

Sample Matrix: Ground Water

#### Metals Analyses (Dissolved)

| Analyte  | Results | RL    | Units | Dilution | Flag/Qual | Method       | Date Prepared | Date/Time Analyzed | Analyst |
|----------|---------|-------|-------|----------|-----------|--------------|---------------|--------------------|---------|
| Chromium | ND      | 0.010 | mg/L  | 1        |           | SW-846 6010D | 5/14/19       | 5/15/19 5:59       | EJB     |
| Copper   | 0.019   | 0.010 | mg/L  | 1        |           | SW-846 6010D | 5/14/19       | 5/15/19 5:59       | EJB     |
| Nickel   | ND      | 0.010 | mg/L  | 1        |           | SW-846 6010D | 5/14/19       | 5/15/19 5:59       | EJB     |

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332**Sample Extraction Data****Prep Method: SW-846 3005A Dissolved-SW-846 6010D**

| Lab Number [Field ID] | Batch   | Initial [mL] | Final [mL] | Date     |
|-----------------------|---------|--------------|------------|----------|
| 19E0458-01 [MW-2]     | B230663 | 5.00         | 5.00       | 05/14/19 |
| 19E0458-02 [MW-4]     | B230663 | 5.00         | 5.00       | 05/14/19 |
| 19E0458-03 [MW-3]     | B230663 | 5.00         | 5.00       | 05/14/19 |
| 19E0458-04 [MW-5R]    | B230663 | 5.00         | 5.00       | 05/14/19 |
| 19E0458-05 [MW-10]    | B230663 | 5.00         | 5.00       | 05/14/19 |
| 19E0458-06 [MW-12]    | B230663 | 5.00         | 5.00       | 05/14/19 |
| 19E0458-10 [MW-26R]   | B230663 | 5.00         | 5.00       | 05/14/19 |

**Prep Method: SW-846 3510C-SW-846 8270D**

| Lab Number [Field ID] | Batch   | Initial [mL] | Final [mL] | Date     |
|-----------------------|---------|--------------|------------|----------|
| 19E0458-07 [MW-20]    | B230464 | 980          | 1.00       | 05/11/19 |
| 19E0458-08 [MW-21]    | B230464 | 1000         | 1.00       | 05/11/19 |
| 19E0458-09 [MW-23]    | B230464 | 1000         | 1.00       | 05/11/19 |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

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

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

**Batch B230464 - SW-846 3510C**
**Blank (B230464-BLK1)**

Prepared: 05/11/19 Analyzed: 05/13/19

|                                  |    |     |      |  |  |  |  |  |  |      |
|----------------------------------|----|-----|------|--|--|--|--|--|--|------|
| Acenaphthene                     | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| Acenaphthylene                   | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| Acetophenone                     | ND | 10  | µg/L |  |  |  |  |  |  |      |
| Aniline                          | ND | 5.0 | µg/L |  |  |  |  |  |  | V-34 |
| Anthracene                       | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| Benzidine                        | ND | 20  | µg/L |  |  |  |  |  |  | V-05 |
| Benzo(a)anthracene               | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| Benzo(a)pyrene                   | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| Benzo(b)fluoranthene             | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| Benzo(g,h,i)perylene             | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| Benzo(k)fluoranthene             | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| Benzoic Acid                     | ND | 10  | µg/L |  |  |  |  |  |  |      |
| Bis(2-chloroethoxy)methane       | ND | 10  | µg/L |  |  |  |  |  |  |      |
| Bis(2-chloroethyl)ether          | ND | 10  | µg/L |  |  |  |  |  |  |      |
| Bis(2-chloroisopropyl)ether      | ND | 10  | µg/L |  |  |  |  |  |  |      |
| Bis(2-Ethylhexyl)phthalate       | ND | 10  | µg/L |  |  |  |  |  |  |      |
| 4-Bromophenylphenylether         | ND | 10  | µg/L |  |  |  |  |  |  |      |
| Butylbenzylphthalate             | ND | 10  | µg/L |  |  |  |  |  |  |      |
| Carbazole                        | ND | 10  | µg/L |  |  |  |  |  |  |      |
| 4-Chloroaniline                  | ND | 10  | µg/L |  |  |  |  |  |  | V-34 |
| 4-Chloro-3-methylphenol          | ND | 10  | µg/L |  |  |  |  |  |  |      |
| 2-Chloronaphthalene              | ND | 10  | µg/L |  |  |  |  |  |  |      |
| 2-Chlorophenol                   | ND | 10  | µg/L |  |  |  |  |  |  |      |
| 4-Chlorophenylphenylether        | ND | 10  | µg/L |  |  |  |  |  |  |      |
| Chrysene                         | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| Dibenz(a,h)anthracene            | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| Dibenzofuran                     | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| Di-n-butylphthalate              | ND | 10  | µg/L |  |  |  |  |  |  |      |
| 1,2-Dichlorobenzene              | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| 1,3-Dichlorobenzene              | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| 1,4-Dichlorobenzene              | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| 3,3-Dichlorobenzidine            | ND | 10  | µg/L |  |  |  |  |  |  | V-34 |
| 2,4-Dichlorophenol               | ND | 10  | µg/L |  |  |  |  |  |  |      |
| Diethylphthalate                 | ND | 10  | µg/L |  |  |  |  |  |  |      |
| 2,4-Dimethylphenol               | ND | 10  | µg/L |  |  |  |  |  |  |      |
| Dimethylphthalate                | ND | 10  | µg/L |  |  |  |  |  |  |      |
| 4,6-Dinitro-2-methylphenol       | ND | 10  | µg/L |  |  |  |  |  |  |      |
| 2,4-Dinitrophenol                | ND | 10  | µg/L |  |  |  |  |  |  |      |
| 2,4-Dinitrotoluene               | ND | 10  | µg/L |  |  |  |  |  |  |      |
| 2,6-Dinitrotoluene               | ND | 10  | µg/L |  |  |  |  |  |  |      |
| Di-n-octylphthalate              | ND | 10  | µg/L |  |  |  |  |  |  |      |
| 1,2-Diphenylhydrazine/Azobenzene | ND | 10  | µg/L |  |  |  |  |  |  |      |
| Fluoranthene                     | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| Fluorene                         | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| Hexachlorobenzene                | ND | 10  | µg/L |  |  |  |  |  |  |      |
| Hexachlorobutadiene              | ND | 10  | µg/L |  |  |  |  |  |  |      |
| Hexachlorocyclopentadiene        | ND | 10  | µg/L |  |  |  |  |  |  | V-05 |
| Hexachloroethane                 | ND | 10  | µg/L |  |  |  |  |  |  |      |
| Indeno(1,2,3-cd)pyrene           | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| Isophorone                       | ND | 10  | µg/L |  |  |  |  |  |  |      |
| 1-Methylnaphthalene              | ND | 5.0 | µg/L |  |  |  |  |  |  |      |
| 2-Methylnaphthalene              | ND | 5.0 | µg/L |  |  |  |  |  |  |      |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

## QUALITY CONTROL

## Semivolatile Organic Compounds by GC/MS - Quality Control

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

## Batch B230464 - SW-846 3510C

## Blank (B230464-BLK1)

Prepared: 05/11/19 Analyzed: 05/13/19

|                                      |      |     |      |     |  |      |        |  |  |      |
|--------------------------------------|------|-----|------|-----|--|------|--------|--|--|------|
| 2-Methylphenol                       | ND   | 10  | µg/L |     |  |      |        |  |  | V-05 |
| 3/4-Methylphenol                     | ND   | 10  | µg/L |     |  |      |        |  |  |      |
| Naphthalene                          | ND   | 5.0 | µg/L |     |  |      |        |  |  |      |
| 2-Nitroaniline                       | ND   | 10  | µg/L |     |  |      |        |  |  |      |
| 3-Nitroaniline                       | ND   | 10  | µg/L |     |  |      |        |  |  |      |
| 4-Nitroaniline                       | ND   | 10  | µg/L |     |  |      |        |  |  |      |
| Nitrobenzene                         | ND   | 10  | µg/L |     |  |      |        |  |  |      |
| 2-Nitrophenol                        | ND   | 10  | µg/L |     |  |      |        |  |  |      |
| 4-Nitrophenol                        | ND   | 10  | µg/L |     |  |      |        |  |  |      |
| N-Nitrosodimethylamine               | ND   | 10  | µg/L |     |  |      |        |  |  |      |
| N-Nitrosodiphenylamine/Diphenylamine | ND   | 10  | µg/L |     |  |      |        |  |  |      |
| N-Nitrosodi-n-propylamine            | ND   | 10  | µg/L |     |  |      |        |  |  |      |
| Pentachloronitrobenzene              | ND   | 10  | µg/L |     |  |      |        |  |  |      |
| Pentachlorophenol                    | ND   | 10  | µg/L |     |  |      |        |  |  |      |
| Phenanthrene                         | ND   | 5.0 | µg/L |     |  |      |        |  |  |      |
| Phenol                               | ND   | 10  | µg/L |     |  |      |        |  |  |      |
| Pyrene                               | ND   | 5.0 | µg/L |     |  |      |        |  |  |      |
| Pyridine                             | ND   | 5.0 | µg/L |     |  |      |        |  |  |      |
| 1,2,4,5-Tetrachlorobenzene           | ND   | 10  | µg/L |     |  |      |        |  |  |      |
| 1,2,4-Trichlorobenzene               | ND   | 5.0 | µg/L |     |  |      |        |  |  |      |
| 2,4,5-Trichlorophenol                | ND   | 10  | µg/L |     |  |      |        |  |  |      |
| 2,4,6-Trichlorophenol                | ND   | 10  | µg/L |     |  |      |        |  |  |      |
| Surrogate: 2-Fluorophenol            | 95.0 |     | µg/L | 200 |  | 47.5 | 15-110 |  |  |      |
| Surrogate: Phenol-d6                 | 68.8 |     | µg/L | 200 |  | 34.4 | 15-110 |  |  |      |
| Surrogate: Nitrobenzene-d5           | 83.1 |     | µg/L | 100 |  | 83.1 | 30-130 |  |  |      |
| Surrogate: 2-Fluorobiphenyl          | 93.6 |     | µg/L | 100 |  | 93.6 | 30-130 |  |  |      |
| Surrogate: 2,4,6-Tribromophenol      | 199  |     | µg/L | 200 |  | 99.6 | 15-110 |  |  |      |
| Surrogate: p-Terphenyl-d14           | 112  |     | µg/L | 100 |  | 112  | 30-130 |  |  |      |

## LCS (B230464-BS1)

Prepared: 05/11/19 Analyzed: 05/13/19

|                             |      |     |      |      |  |      |        |  |  |      |
|-----------------------------|------|-----|------|------|--|------|--------|--|--|------|
| Acenaphthene                | 43.3 | 5.0 | µg/L | 50.0 |  | 86.6 | 40-140 |  |  |      |
| Acenaphthylene              | 46.8 | 5.0 | µg/L | 50.0 |  | 93.7 | 40-140 |  |  |      |
| Acetophenone                | 44.9 | 10  | µg/L | 50.0 |  | 89.8 | 40-140 |  |  |      |
| Aniline                     | 40.2 | 5.0 | µg/L | 50.0 |  | 80.5 | 40-140 |  |  | V-34 |
| Anthracene                  | 49.9 | 5.0 | µg/L | 50.0 |  | 99.9 | 40-140 |  |  |      |
| Benzidine                   | 58.1 | 20  | µg/L | 50.0 |  | 116  | 40-140 |  |  | V-05 |
| Benzo(a)anthracene          | 53.0 | 5.0 | µg/L | 50.0 |  | 106  | 40-140 |  |  |      |
| Benzo(a)pyrene              | 52.2 | 5.0 | µg/L | 50.0 |  | 104  | 40-140 |  |  |      |
| Benzo(b)fluoranthene        | 48.9 | 5.0 | µg/L | 50.0 |  | 97.8 | 40-140 |  |  |      |
| Benzo(g,h,i)perylene        | 46.7 | 5.0 | µg/L | 50.0 |  | 93.5 | 40-140 |  |  |      |
| Benzo(k)fluoranthene        | 50.8 | 5.0 | µg/L | 50.0 |  | 102  | 40-140 |  |  |      |
| Benzoic Acid                | 14.6 | 10  | µg/L | 50.0 |  | 29.2 | 10-130 |  |  | †    |
| Bis(2-chloroethoxy)methane  | 54.6 | 10  | µg/L | 50.0 |  | 109  | 40-140 |  |  |      |
| Bis(2-chloroethyl)ether     | 47.3 | 10  | µg/L | 50.0 |  | 94.7 | 40-140 |  |  |      |
| Bis(2-chloroisopropyl)ether | 52.4 | 10  | µg/L | 50.0 |  | 105  | 40-140 |  |  |      |
| Bis(2-Ethylhexyl)phthalate  | 57.0 | 10  | µg/L | 50.0 |  | 114  | 40-140 |  |  |      |
| 4-Bromophenylphenylether    | 52.2 | 10  | µg/L | 50.0 |  | 104  | 40-140 |  |  |      |
| Butylbenzylphthalate        | 54.3 | 10  | µg/L | 50.0 |  | 109  | 40-140 |  |  |      |
| Carbazole                   | 49.0 | 10  | µg/L | 50.0 |  | 98.0 | 40-140 |  |  |      |
| 4-Chloroaniline             | 46.6 | 10  | µg/L | 50.0 |  | 93.2 | 40-140 |  |  | V-34 |
| 4-Chloro-3-methylphenol     | 46.8 | 10  | µg/L | 50.0 |  | 93.6 | 30-130 |  |  |      |
| 2-Chloronaphthalene         | 43.2 | 10  | µg/L | 50.0 |  | 86.4 | 40-140 |  |  |      |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

## QUALITY CONTROL

## Semivolatile Organic Compounds by GC/MS - Quality Control

| Analyte                               | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes  |
|---------------------------------------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|--------|
| <b>Batch B230464 - SW-846 3510C</b>   |        |                 |       |             |               |      |             |     |           |        |
| <b>LCS (B230464-BS1)</b>              |        |                 |       |             |               |      |             |     |           |        |
| Prepared: 05/11/19 Analyzed: 05/13/19 |        |                 |       |             |               |      |             |     |           |        |
| 2-Chlorophenol                        | 44.8   | 10              | µg/L  | 50.0        |               | 89.6 | 30-130      |     |           |        |
| 4-Chlorophenylphenylether             | 50.2   | 10              | µg/L  | 50.0        |               | 100  | 40-140      |     |           |        |
| Chrysene                              | 53.1   | 5.0             | µg/L  | 50.0        |               | 106  | 40-140      |     |           |        |
| Dibenz(a,h)anthracene                 | 46.2   | 5.0             | µg/L  | 50.0        |               | 92.4 | 40-140      |     |           |        |
| Dibenzofuran                          | 46.6   | 5.0             | µg/L  | 50.0        |               | 93.2 | 40-140      |     |           |        |
| Di-n-butylphthalate                   | 52.8   | 10              | µg/L  | 50.0        |               | 106  | 40-140      |     |           |        |
| 1,2-Dichlorobenzene                   | 42.2   | 5.0             | µg/L  | 50.0        |               | 84.3 | 40-140      |     |           |        |
| 1,3-Dichlorobenzene                   | 40.6   | 5.0             | µg/L  | 50.0        |               | 81.1 | 40-140      |     |           |        |
| 1,4-Dichlorobenzene                   | 40.7   | 5.0             | µg/L  | 50.0        |               | 81.5 | 40-140      |     |           |        |
| 3,3-Dichlorobenzidine                 | 62.5   | 10              | µg/L  | 50.0        |               | 125  | 40-140      |     |           | V-34   |
| 2,4-Dichlorophenol                    | 49.2   | 10              | µg/L  | 50.0        |               | 98.5 | 30-130      |     |           |        |
| Diethylphthalate                      | 48.8   | 10              | µg/L  | 50.0        |               | 97.7 | 40-140      |     |           |        |
| 2,4-Dimethylphenol                    | 41.3   | 10              | µg/L  | 50.0        |               | 82.6 | 30-130      |     |           |        |
| Dimethylphthalate                     | 49.2   | 10              | µg/L  | 50.0        |               | 98.3 | 40-140      |     |           |        |
| 4,6-Dinitro-2-methylphenol            | 52.5   | 10              | µg/L  | 50.0        |               | 105  | 30-130      |     |           |        |
| 2,4-Dinitrophenol                     | 44.1   | 10              | µg/L  | 50.0        |               | 88.3 | 30-130      |     |           |        |
| 2,4-Dinitrotoluene                    | 47.8   | 10              | µg/L  | 50.0        |               | 95.5 | 40-140      |     |           |        |
| 2,6-Dinitrotoluene                    | 50.1   | 10              | µg/L  | 50.0        |               | 100  | 40-140      |     |           |        |
| Di-n-octylphthalate                   | 52.5   | 10              | µg/L  | 50.0        |               | 105  | 40-140      |     |           |        |
| 1,2-Diphenylhydrazine/Azobenzene      | 45.8   | 10              | µg/L  | 50.0        |               | 91.6 | 40-140      |     |           |        |
| Fluoranthene                          | 52.3   | 5.0             | µg/L  | 50.0        |               | 105  | 40-140      |     |           |        |
| Fluorene                              | 48.2   | 5.0             | µg/L  | 50.0        |               | 96.3 | 40-140      |     |           |        |
| Hexachlorobenzene                     | 49.2   | 10              | µg/L  | 50.0        |               | 98.3 | 40-140      |     |           |        |
| Hexachlorobutadiene                   | 45.9   | 10              | µg/L  | 50.0        |               | 91.7 | 40-140      |     |           |        |
| Hexachlorocyclopentadiene             | 31.4   | 10              | µg/L  | 50.0        |               | 62.9 | 30-140      |     |           | V-05 † |
| Hexachloroethane                      | 42.5   | 10              | µg/L  | 50.0        |               | 85.0 | 40-140      |     |           |        |
| Indeno(1,2,3-cd)pyrene                | 47.6   | 5.0             | µg/L  | 50.0        |               | 95.2 | 40-140      |     |           |        |
| Isophorone                            | 48.3   | 10              | µg/L  | 50.0        |               | 96.5 | 40-140      |     |           |        |
| 1-Methylnaphthalene                   | 42.3   | 5.0             | µg/L  | 50.0        |               | 84.7 | 40-140      |     |           |        |
| 2-Methylnaphthalene                   | 48.9   | 5.0             | µg/L  | 50.0        |               | 97.8 | 40-140      |     |           |        |
| 2-Methylphenol                        | 30.8   | 10              | µg/L  | 50.0        |               | 61.5 | 30-130      |     |           | V-05   |
| 3/4-Methylphenol                      | 34.9   | 10              | µg/L  | 50.0        |               | 69.8 | 30-130      |     |           |        |
| Naphthalene                           | 45.6   | 5.0             | µg/L  | 50.0        |               | 91.1 | 40-140      |     |           |        |
| 2-Nitroaniline                        | 43.3   | 10              | µg/L  | 50.0        |               | 86.6 | 40-140      |     |           |        |
| 3-Nitroaniline                        | 45.5   | 10              | µg/L  | 50.0        |               | 91.0 | 40-140      |     |           |        |
| 4-Nitroaniline                        | 47.9   | 10              | µg/L  | 50.0        |               | 95.8 | 40-140      |     |           |        |
| Nitrobenzene                          | 42.9   | 10              | µg/L  | 50.0        |               | 85.8 | 40-140      |     |           |        |
| 2-Nitrophenol                         | 51.2   | 10              | µg/L  | 50.0        |               | 102  | 30-130      |     |           |        |
| 4-Nitrophenol                         | 25.8   | 10              | µg/L  | 50.0        |               | 51.7 | 10-130      |     |           | †      |
| N-Nitrosodimethylamine                | 26.8   | 10              | µg/L  | 50.0        |               | 53.5 | 40-140      |     |           |        |
| N-Nitrosodiphenylamine/Diphenylamine  | 52.9   | 10              | µg/L  | 50.0        |               | 106  | 40-140      |     |           |        |
| N-Nitrosodi-n-propylamine             | 46.4   | 10              | µg/L  | 50.0        |               | 92.7 | 40-140      |     |           |        |
| Pentachloronitrobenzene               | 47.9   | 10              | µg/L  | 50.0        |               | 95.8 | 40-140      |     |           |        |
| Pentachlorophenol                     | 40.5   | 10              | µg/L  | 50.0        |               | 81.0 | 30-130      |     |           |        |
| Phenanthrene                          | 49.9   | 5.0             | µg/L  | 50.0        |               | 99.9 | 40-140      |     |           |        |
| Phenol                                | 23.9   | 10              | µg/L  | 50.0        |               | 47.7 | 20-130      |     |           | †      |
| Pyrene                                | 52.2   | 5.0             | µg/L  | 50.0        |               | 104  | 40-140      |     |           |        |
| Pyridine                              | 15.8   | 5.0             | µg/L  | 50.0        |               | 31.6 | 10-140      |     |           | †      |
| 1,2,4,5-Tetrachlorobenzene            | 47.5   | 10              | µg/L  | 50.0        |               | 95.0 | 40-140      |     |           |        |
| 1,2,4-Trichlorobenzene                | 45.4   | 5.0             | µg/L  | 50.0        |               | 90.9 | 40-140      |     |           |        |
| 2,4,5-Trichlorophenol                 | 48.2   | 10              | µg/L  | 50.0        |               | 96.4 | 30-130      |     |           |        |
| 2,4,6-Trichlorophenol                 | 50.4   | 10              | µg/L  | 50.0        |               | 101  | 30-130      |     |           |        |

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

| Analyte                             | Result | Reporting Limit | Units | Spike Level                           | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Notes  |
|-------------------------------------|--------|-----------------|-------|---------------------------------------|---------------|------|-------------|------|-----------|--------|
| <b>Batch B230464 - SW-846 3510C</b> |        |                 |       |                                       |               |      |             |      |           |        |
| <b>LCS (B230464-BS1)</b>            |        |                 |       | Prepared: 05/11/19 Analyzed: 05/13/19 |               |      |             |      |           |        |
| Surrogate: 2-Fluorophenol           | 116    |                 | µg/L  | 200                                   |               | 58.0 | 15-110      |      |           |        |
| Surrogate: Phenol-d6                | 83.3   |                 | µg/L  | 200                                   |               | 41.7 | 15-110      |      |           |        |
| Surrogate: Nitrobenzene-d5          | 92.3   |                 | µg/L  | 100                                   |               | 92.3 | 30-130      |      |           |        |
| Surrogate: 2-Fluorobiphenyl         | 102    |                 | µg/L  | 100                                   |               | 102  | 30-130      |      |           |        |
| Surrogate: 2,4,6-Tribromophenol     | 217    |                 | µg/L  | 200                                   |               | 108  | 15-110      |      |           |        |
| Surrogate: p-Terphenyl-d14          | 114    |                 | µg/L  | 100                                   |               | 114  | 30-130      |      |           |        |
| <b>LCS Dup (B230464-BSD1)</b>       |        |                 |       | Prepared: 05/11/19 Analyzed: 05/13/19 |               |      |             |      |           |        |
| Acenaphthene                        | 40.0   | 5.0             | µg/L  | 50.0                                  |               | 80.0 | 40-140      | 7.97 | 20        |        |
| Acenaphthylene                      | 43.3   | 5.0             | µg/L  | 50.0                                  |               | 86.6 | 40-140      | 7.79 | 20        |        |
| Acetophenone                        | 41.8   | 10              | µg/L  | 50.0                                  |               | 83.5 | 40-140      | 7.29 | 20        |        |
| Aniline                             | 37.4   | 5.0             | µg/L  | 50.0                                  |               | 74.8 | 40-140      | 7.31 | 50        | V-34 ‡ |
| Anthracene                          | 45.5   | 5.0             | µg/L  | 50.0                                  |               | 91.0 | 40-140      | 9.35 | 20        |        |
| Benzidine                           | 54.1   | 20              | µg/L  | 50.0                                  |               | 108  | 40-140      | 7.22 | 20        | V-05   |
| Benzo(a)anthracene                  | 48.3   | 5.0             | µg/L  | 50.0                                  |               | 96.5 | 40-140      | 9.36 | 20        |        |
| Benzo(a)pyrene                      | 47.8   | 5.0             | µg/L  | 50.0                                  |               | 95.6 | 40-140      | 8.16 | 20        |        |
| Benzo(b)fluoranthene                | 45.0   | 5.0             | µg/L  | 50.0                                  |               | 90.1 | 40-140      | 8.16 | 20        |        |
| Benzo(g,h,i)perylene                | 40.6   | 5.0             | µg/L  | 50.0                                  |               | 81.2 | 40-140      | 14.0 | 20        |        |
| Benzo(k)fluoranthene                | 46.9   | 5.0             | µg/L  | 50.0                                  |               | 93.7 | 40-140      | 7.99 | 20        |        |
| Benzoic Acid                        | 15.8   | 10              | µg/L  | 50.0                                  |               | 31.6 | 10-130      | 7.70 | 50        | † ‡    |
| Bis(2-chloroethoxy)methane          | 52.1   | 10              | µg/L  | 50.0                                  |               | 104  | 40-140      | 4.63 | 20        |        |
| Bis(2-chloroethyl)ether             | 44.2   | 10              | µg/L  | 50.0                                  |               | 88.4 | 40-140      | 6.88 | 20        |        |
| Bis(2-chloroisopropyl)ether         | 49.0   | 10              | µg/L  | 50.0                                  |               | 98.0 | 40-140      | 6.67 | 20        |        |
| Bis(2-Ethylhexyl)phthalate          | 53.3   | 10              | µg/L  | 50.0                                  |               | 107  | 40-140      | 6.87 | 20        |        |
| 4-Bromophenylphenylether            | 46.7   | 10              | µg/L  | 50.0                                  |               | 93.5 | 40-140      | 11.1 | 20        |        |
| Butylbenzylphthalate                | 50.0   | 10              | µg/L  | 50.0                                  |               | 100  | 40-140      | 8.28 | 20        |        |
| Carbazole                           | 45.1   | 10              | µg/L  | 50.0                                  |               | 90.1 | 40-140      | 8.38 | 20        |        |
| 4-Chloroaniline                     | 44.6   | 10              | µg/L  | 50.0                                  |               | 89.2 | 40-140      | 4.34 | 20        | V-34   |
| 4-Chloro-3-methylphenol             | 44.5   | 10              | µg/L  | 50.0                                  |               | 89.0 | 30-130      | 5.02 | 20        |        |
| 2-Chloronaphthalene                 | 40.6   | 10              | µg/L  | 50.0                                  |               | 81.2 | 40-140      | 6.25 | 20        |        |
| 2-Chlorophenol                      | 42.1   | 10              | µg/L  | 50.0                                  |               | 84.2 | 30-130      | 6.21 | 20        |        |
| 4-Chlorophenylphenylether           | 47.8   | 10              | µg/L  | 50.0                                  |               | 95.6 | 40-140      | 4.78 | 20        |        |
| Chrysene                            | 48.7   | 5.0             | µg/L  | 50.0                                  |               | 97.4 | 40-140      | 8.76 | 20        |        |
| Dibenz(a,h)anthracene               | 41.9   | 5.0             | µg/L  | 50.0                                  |               | 83.8 | 40-140      | 9.74 | 20        |        |
| Dibenzofuran                        | 44.2   | 5.0             | µg/L  | 50.0                                  |               | 88.5 | 40-140      | 5.22 | 20        |        |
| Di-n-butylphthalate                 | 49.1   | 10              | µg/L  | 50.0                                  |               | 98.2 | 40-140      | 7.22 | 20        |        |
| 1,2-Dichlorobenzene                 | 39.7   | 5.0             | µg/L  | 50.0                                  |               | 79.4 | 40-140      | 6.08 | 20        |        |
| 1,3-Dichlorobenzene                 | 38.3   | 5.0             | µg/L  | 50.0                                  |               | 76.6 | 40-140      | 5.71 | 20        |        |
| 1,4-Dichlorobenzene                 | 38.3   | 5.0             | µg/L  | 50.0                                  |               | 76.7 | 40-140      | 6.05 | 20        |        |
| 3,3-Dichlorobenzidine               | 56.7   | 10              | µg/L  | 50.0                                  |               | 113  | 40-140      | 9.73 | 20        | V-34   |
| 2,4-Dichlorophenol                  | 46.9   | 10              | µg/L  | 50.0                                  |               | 93.8 | 30-130      | 4.85 | 20        |        |
| Diethylphthalate                    | 46.6   | 10              | µg/L  | 50.0                                  |               | 93.3 | 40-140      | 4.59 | 20        |        |
| 2,4-Dimethylphenol                  | 43.2   | 10              | µg/L  | 50.0                                  |               | 86.3 | 30-130      | 4.48 | 20        |        |
| Dimethylphthalate                   | 46.0   | 10              | µg/L  | 50.0                                  |               | 92.0 | 40-140      | 6.68 | 50        | ‡      |
| 4,6-Dinitro-2-methylphenol          | 46.8   | 10              | µg/L  | 50.0                                  |               | 93.7 | 30-130      | 11.4 | 50        | ‡      |
| 2,4-Dinitrophenol                   | 42.1   | 10              | µg/L  | 50.0                                  |               | 84.3 | 30-130      | 4.66 | 50        | ‡      |
| 2,4-Dinitrotoluene                  | 45.7   | 10              | µg/L  | 50.0                                  |               | 91.3 | 40-140      | 4.45 | 20        |        |
| 2,6-Dinitrotoluene                  | 46.4   | 10              | µg/L  | 50.0                                  |               | 92.9 | 40-140      | 7.68 | 20        |        |
| Di-n-octylphthalate                 | 49.2   | 10              | µg/L  | 50.0                                  |               | 98.4 | 40-140      | 6.55 | 20        |        |
| 1,2-Diphenylhydrazine/Azobenzene    | 40.5   | 10              | µg/L  | 50.0                                  |               | 81.0 | 40-140      | 12.2 | 20        |        |
| Fluoranthene                        | 48.4   | 5.0             | µg/L  | 50.0                                  |               | 96.8 | 40-140      | 7.76 | 20        |        |
| Fluorene                            | 45.7   | 5.0             | µg/L  | 50.0                                  |               | 91.5 | 40-140      | 5.13 | 20        |        |



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## QUALITY CONTROL

## Semivolatile Organic Compounds by GC/MS - Quality Control

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

## Batch B230464 - SW-846 3510C

## LCS Dup (B230464-BSD1)

Prepared: 05/11/19 Analyzed: 05/13/19

|                                      |      |     |      |      |  |      |        |      |    |          |
|--------------------------------------|------|-----|------|------|--|------|--------|------|----|----------|
| Hexachlorobenzene                    | 45.2 | 10  | µg/L | 50.0 |  | 90.4 | 40-140 | 8.35 | 20 |          |
| Hexachlorobutadiene                  | 42.8 | 10  | µg/L | 50.0 |  | 85.6 | 40-140 | 6.92 | 20 |          |
| Hexachlorocyclopentadiene            | 28.7 | 10  | µg/L | 50.0 |  | 57.4 | 30-140 | 9.12 | 50 | V-05 † ‡ |
| Hexachloroethane                     | 40.0 | 10  | µg/L | 50.0 |  | 79.9 | 40-140 | 6.14 | 50 | ‡        |
| Indeno(1,2,3-cd)pyrene               | 42.3 | 5.0 | µg/L | 50.0 |  | 84.6 | 40-140 | 11.7 | 50 | ‡        |
| Isophorone                           | 45.6 | 10  | µg/L | 50.0 |  | 91.3 | 40-140 | 5.60 | 20 |          |
| 1-Methylnaphthalene                  | 39.5 | 5.0 | µg/L | 50.0 |  | 79.0 | 40-140 | 6.97 | 20 |          |
| 2-Methylnaphthalene                  | 46.8 | 5.0 | µg/L | 50.0 |  | 93.5 | 40-140 | 4.43 | 20 |          |
| 2-Methylphenol                       | 29.0 | 10  | µg/L | 50.0 |  | 58.0 | 30-130 | 5.92 | 20 | V-05     |
| 3/4-Methylphenol                     | 33.0 | 10  | µg/L | 50.0 |  | 66.0 | 30-130 | 5.51 | 20 |          |
| Naphthalene                          | 43.0 | 5.0 | µg/L | 50.0 |  | 86.1 | 40-140 | 5.69 | 20 |          |
| 2-Nitroaniline                       | 40.6 | 10  | µg/L | 50.0 |  | 81.2 | 40-140 | 6.49 | 20 |          |
| 3-Nitroaniline                       | 43.2 | 10  | µg/L | 50.0 |  | 86.4 | 40-140 | 5.18 | 20 |          |
| 4-Nitroaniline                       | 46.0 | 10  | µg/L | 50.0 |  | 92.1 | 40-140 | 3.96 | 20 |          |
| Nitrobenzene                         | 40.4 | 10  | µg/L | 50.0 |  | 80.8 | 40-140 | 6.05 | 20 |          |
| 2-Nitrophenol                        | 48.5 | 10  | µg/L | 50.0 |  | 97.0 | 30-130 | 5.42 | 20 |          |
| 4-Nitrophenol                        | 24.0 | 10  | µg/L | 50.0 |  | 48.0 | 10-130 | 7.30 | 50 | † ‡      |
| N-Nitrosodimethylamine               | 24.3 | 10  | µg/L | 50.0 |  | 48.6 | 40-140 | 9.56 | 20 |          |
| N-Nitrosodiphenylamine/Diphenylamine | 47.2 | 10  | µg/L | 50.0 |  | 94.3 | 40-140 | 11.5 | 20 |          |
| N-Nitrosodi-n-propylamine            | 43.5 | 10  | µg/L | 50.0 |  | 86.9 | 40-140 | 6.43 | 20 |          |
| Pentachloronitrobenzene              | 44.6 | 10  | µg/L | 50.0 |  | 89.3 | 40-140 | 7.11 | 20 |          |
| Pentachlorophenol                    | 37.2 | 10  | µg/L | 50.0 |  | 74.3 | 30-130 | 8.58 | 50 | ‡        |
| Phenanthrene                         | 44.8 | 5.0 | µg/L | 50.0 |  | 89.5 | 40-140 | 10.9 | 20 |          |
| Phenol                               | 22.2 | 10  | µg/L | 50.0 |  | 44.4 | 20-130 | 7.21 | 20 | †        |
| Pyrene                               | 48.4 | 5.0 | µg/L | 50.0 |  | 96.8 | 40-140 | 7.59 | 20 |          |
| Pyridine                             | 14.8 | 5.0 | µg/L | 50.0 |  | 29.7 | 10-140 | 6.20 | 50 | † ‡      |
| 1,2,4,5-Tetrachlorobenzene           | 43.2 | 10  | µg/L | 50.0 |  | 86.3 | 40-140 | 9.55 | 20 |          |
| 1,2,4-Trichlorobenzene               | 43.0 | 5.0 | µg/L | 50.0 |  | 86.1 | 40-140 | 5.38 | 20 |          |
| 2,4,5-Trichlorophenol                | 44.0 | 10  | µg/L | 50.0 |  | 88.1 | 30-130 | 8.98 | 20 |          |
| 2,4,6-Trichlorophenol                | 47.3 | 10  | µg/L | 50.0 |  | 94.7 | 30-130 | 6.26 | 50 | ‡        |
| Surrogate: 2-Fluorophenol            | 106  |     | µg/L | 200  |  | 53.1 | 15-110 |      |    |          |
| Surrogate: Phenol-d6                 | 77.2 |     | µg/L | 200  |  | 38.6 | 15-110 |      |    |          |
| Surrogate: Nitrobenzene-d5           | 85.4 |     | µg/L | 100  |  | 85.4 | 30-130 |      |    |          |
| Surrogate: 2-Fluorobiphenyl          | 91.1 |     | µg/L | 100  |  | 91.1 | 30-130 |      |    |          |
| Surrogate: 2,4,6-Tribromophenol      | 205  |     | µg/L | 200  |  | 102  | 15-110 |      |    |          |
| Surrogate: p-Terphenyl-d14           | 106  |     | µg/L | 100  |  | 106  | 30-130 |      |    |          |

## Matrix Spike (B230464-MS1)

Source: 19E0458-09

Prepared: 05/11/19 Analyzed: 05/14/19

|                            |      |     |      |      |    |             |        |        |  |             |
|----------------------------|------|-----|------|------|----|-------------|--------|--------|--|-------------|
| Acenaphthene               | 40.0 | 5.1 | µg/L | 51.0 | ND | 78.4        | 40-140 |        |  |             |
| Acenaphthylene             | 43.3 | 5.1 | µg/L | 51.0 | ND | 84.9        | 40-140 |        |  |             |
| Acetophenone               | 39.9 | 10  | µg/L | 51.0 | ND | 78.2        | 40-140 |        |  |             |
| Aniline                    | 28.2 | 5.1 | µg/L | 51.0 | ND | 55.3        | 40-140 |        |  | V-34        |
| Anthracene                 | 47.4 | 5.1 | µg/L | 51.0 | ND | 92.9        | 40-140 |        |  |             |
| <b>Benzidine</b>           | ND   | 20  | µg/L | 51.0 | ND | *           | 40-140 |        |  | MS-09, V-05 |
| Benzo(a)anthracene         | 50.2 | 5.1 | µg/L | 51.0 | ND | 98.5        | 40-140 |        |  |             |
| Benzo(a)pyrene             | 49.9 | 5.1 | µg/L | 51.0 | ND | 97.8        | 40-140 |        |  |             |
| Benzo(b)fluoranthene       | 50.0 | 5.1 | µg/L | 51.0 | ND | 98.0        | 40-140 |        |  |             |
| Benzo(g,h,i)perylene       | 43.1 | 5.1 | µg/L | 51.0 | ND | 84.5        | 40-140 |        |  |             |
| Benzo(k)fluoranthene       | 52.3 | 5.1 | µg/L | 51.0 | ND | 103         | 40-140 |        |  |             |
| <b>Benzoic Acid</b>        | 14.3 | 10  | µg/L | 51.0 | ND | <b>28.0</b> | *      | 40-140 |  | MS-09       |
| Bis(2-chloroethoxy)methane | 51.3 | 10  | µg/L | 51.0 | ND | 100         | 40-140 |        |  |             |
| Bis(2-chloroethyl)ether    | 44.1 | 10  | µg/L | 51.0 | ND | 86.5        | 40-140 |        |  |             |

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## QUALITY CONTROL

## Semivolatile Organic Compounds by GC/MS - Quality Control

| Analyte                              | Result                    | Reporting Limit | Units | Spike Level                           | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes       |
|--------------------------------------|---------------------------|-----------------|-------|---------------------------------------|---------------|------|-------------|-----|-----------|-------------|
| <b>Batch B230464 - SW-846 3510C</b>  |                           |                 |       |                                       |               |      |             |     |           |             |
| <b>Matrix Spike (B230464-MS1)</b>    | <b>Source: 19E0458-09</b> |                 |       | Prepared: 05/11/19 Analyzed: 05/14/19 |               |      |             |     |           |             |
| Bis(2-chloroisopropyl)ether          | 49.7                      | 10              | µg/L  | 51.0                                  | ND            | 97.5 | 40-140      |     |           |             |
| Bis(2-Ethylhexyl)phthalate           | 58.3                      | 10              | µg/L  | 51.0                                  | ND            | 114  | 40-140      |     |           | V-06        |
| 4-Bromophenylphenylether             | 45.7                      | 10              | µg/L  | 51.0                                  | ND            | 89.5 | 40-140      |     |           |             |
| Butylbenzylphthalate                 | 54.6                      | 10              | µg/L  | 51.0                                  | ND            | 107  | 40-140      |     |           |             |
| Carbazole                            | 47.6                      | 10              | µg/L  | 51.0                                  | ND            | 93.4 | 40-140      |     |           |             |
| 4-Chloroaniline                      | 25.1                      | 10              | µg/L  | 51.0                                  | ND            | 49.1 | 40-140      |     |           | V-34        |
| 4-Chloro-3-methylphenol              | 42.2                      | 10              | µg/L  | 51.0                                  | ND            | 82.7 | 30-130      |     |           |             |
| 2-Chloronaphthalene                  | 40.9                      | 10              | µg/L  | 51.0                                  | ND            | 80.2 | 40-140      |     |           |             |
| 2-Chlorophenol                       | 36.8                      | 10              | µg/L  | 51.0                                  | ND            | 72.1 | 30-130      |     |           |             |
| 4-Chlorophenylphenylether            | 46.5                      | 10              | µg/L  | 51.0                                  | ND            | 91.1 | 40-140      |     |           |             |
| Chrysene                             | 50.4                      | 5.1             | µg/L  | 51.0                                  | ND            | 98.8 | 40-140      |     |           |             |
| Dibenz(a,h)anthracene                | 42.0                      | 5.1             | µg/L  | 51.0                                  | ND            | 82.2 | 40-140      |     |           |             |
| Dibenzofuran                         | 43.9                      | 5.1             | µg/L  | 51.0                                  | ND            | 86.0 | 40-140      |     |           |             |
| Di-n-butylphthalate                  | 51.1                      | 10              | µg/L  | 51.0                                  | ND            | 100  | 40-140      |     |           |             |
| 1,2-Dichlorobenzene                  | 35.9                      | 5.1             | µg/L  | 51.0                                  | ND            | 70.4 | 40-140      |     |           |             |
| 1,3-Dichlorobenzene                  | 35.1                      | 5.1             | µg/L  | 51.0                                  | ND            | 68.7 | 40-140      |     |           |             |
| 1,4-Dichlorobenzene                  | 35.9                      | 5.1             | µg/L  | 51.0                                  | ND            | 70.4 | 40-140      |     |           |             |
| <b>3,3-Dichlorobenzidine</b>         | ND                        | 10              | µg/L  | 51.0                                  | ND            | *    | 40-140      |     |           | MS-09, V-34 |
| 2,4-Dichlorophenol                   | 44.4                      | 10              | µg/L  | 51.0                                  | ND            | 87.0 | 30-130      |     |           |             |
| Diethylphthalate                     | 46.9                      | 10              | µg/L  | 51.0                                  | ND            | 91.9 | 40-140      |     |           |             |
| 2,4-Dimethylphenol                   | 37.1                      | 10              | µg/L  | 51.0                                  | ND            | 72.7 | 30-130      |     |           |             |
| Dimethylphthalate                    | 46.4                      | 10              | µg/L  | 51.0                                  | ND            | 91.0 | 40-140      |     |           |             |
| 4,6-Dinitro-2-methylphenol           | 50.6                      | 10              | µg/L  | 51.0                                  | ND            | 99.2 | 30-130      |     |           |             |
| 2,4-Dinitrophenol                    | 45.8                      | 10              | µg/L  | 51.0                                  | ND            | 89.7 | 30-130      |     |           |             |
| 2,4-Dinitrotoluene                   | 46.2                      | 10              | µg/L  | 51.0                                  | ND            | 90.6 | 40-140      |     |           |             |
| 2,6-Dinitrotoluene                   | 46.4                      | 10              | µg/L  | 51.0                                  | ND            | 91.0 | 40-140      |     |           |             |
| Di-n-octylphthalate                  | 64.6                      | 10              | µg/L  | 51.0                                  | ND            | 127  | 40-140      |     |           |             |
| 1,2-Diphenylhydrazine/Azobenzene     | 43.4                      | 10              | µg/L  | 51.0                                  | ND            | 85.1 | 40-140      |     |           |             |
| Fluoranthene                         | 48.5                      | 5.1             | µg/L  | 51.0                                  | ND            | 95.0 | 40-140      |     |           |             |
| Fluorene                             | 46.0                      | 5.1             | µg/L  | 51.0                                  | ND            | 90.2 | 40-140      |     |           |             |
| Hexachlorobenzene                    | 43.3                      | 10              | µg/L  | 51.0                                  | ND            | 84.8 | 40-140      |     |           |             |
| Hexachlorobutadiene                  | 39.5                      | 10              | µg/L  | 51.0                                  | ND            | 77.4 | 40-140      |     |           |             |
| Hexachlorocyclopentadiene            | 29.2                      | 10              | µg/L  | 51.0                                  | ND            | 57.2 | 30-130      |     |           | V-05        |
| Hexachloroethane                     | 37.3                      | 10              | µg/L  | 51.0                                  | ND            | 73.1 | 40-140      |     |           |             |
| Indeno(1,2,3-cd)pyrene               | 41.9                      | 5.1             | µg/L  | 51.0                                  | ND            | 82.1 | 40-140      |     |           |             |
| Isophorone                           | 45.3                      | 10              | µg/L  | 51.0                                  | ND            | 88.9 | 40-140      |     |           |             |
| 1-Methylnaphthalene                  | 37.5                      | 5.1             | µg/L  | 51.0                                  | ND            | 73.4 | 40-140      |     |           |             |
| 2-Methylnaphthalene                  | 44.0                      | 5.1             | µg/L  | 51.0                                  | ND            | 86.2 | 40-140      |     |           |             |
| 2-Methylphenol                       | 24.5                      | 10              | µg/L  | 51.0                                  | ND            | 48.1 | 30-130      |     |           | V-05        |
| 3/4-Methylphenol                     | 26.6                      | 10              | µg/L  | 51.0                                  | ND            | 52.2 | 30-130      |     |           |             |
| Naphthalene                          | 41.5                      | 5.1             | µg/L  | 51.0                                  | ND            | 81.4 | 40-140      |     |           |             |
| 2-Nitroaniline                       | 45.3                      | 10              | µg/L  | 51.0                                  | ND            | 88.7 | 40-140      |     |           |             |
| 3-Nitroaniline                       | 29.5                      | 10              | µg/L  | 51.0                                  | ND            | 57.8 | 40-140      |     |           |             |
| 4-Nitroaniline                       | 39.5                      | 10              | µg/L  | 51.0                                  | ND            | 77.5 | 40-140      |     |           |             |
| Nitrobenzene                         | 41.1                      | 10              | µg/L  | 51.0                                  | ND            | 80.6 | 40-140      |     |           |             |
| 2-Nitrophenol                        | 45.5                      | 10              | µg/L  | 51.0                                  | ND            | 89.1 | 30-130      |     |           |             |
| 4-Nitrophenol                        | 23.6                      | 10              | µg/L  | 51.0                                  | ND            | 46.3 | 30-130      |     |           |             |
| N-Nitrosodimethylamine               | 21.0                      | 10              | µg/L  | 51.0                                  | ND            | 41.2 | 40-140      |     |           |             |
| N-Nitrosodiphenylamine/Diphenylamine | 49.2                      | 10              | µg/L  | 51.0                                  | ND            | 96.4 | 40-140      |     |           |             |
| N-Nitrosodi-n-propylamine            | 42.4                      | 10              | µg/L  | 51.0                                  | ND            | 83.1 | 40-140      |     |           |             |
| Pentachloronitrobenzene              | 43.5                      | 10              | µg/L  | 51.0                                  | ND            | 85.3 | 40-140      |     |           |             |
| Pentachlorophenol                    | 46.4                      | 10              | µg/L  | 51.0                                  | ND            | 90.9 | 30-130      |     |           |             |

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## QUALITY CONTROL

## Semivolatile Organic Compounds by GC/MS - Quality Control

| Analyte                                | Result                    | Reporting Limit | Units | Spike Level                           | Source Result | %REC          | %REC Limits | RPD   | RPD Limit | Notes       |
|----------------------------------------|---------------------------|-----------------|-------|---------------------------------------|---------------|---------------|-------------|-------|-----------|-------------|
| <b>Batch B230464 - SW-846 3510C</b>    |                           |                 |       |                                       |               |               |             |       |           |             |
| <b>Matrix Spike (B230464-MS1)</b>      | <b>Source: 19E0458-09</b> |                 |       | Prepared: 05/11/19 Analyzed: 05/14/19 |               |               |             |       |           |             |
| Phenanthrene                           | 46.8                      | 5.1             | µg/L  | 51.0                                  | ND            | 91.8          | 40-140      |       |           |             |
| <b>Phenol</b>                          | 13.7                      | 10              | µg/L  | 51.0                                  | ND            | <b>26.9</b> * | 30-130      |       |           | MS-09       |
| Pyrene                                 | 50.6                      | 5.1             | µg/L  | 51.0                                  | ND            | 99.1          | 40-140      |       |           |             |
| <b>Pyridine</b>                        | 13.3                      | 5.1             | µg/L  | 51.0                                  | ND            | <b>26.1</b> * | 40-140      |       |           | MS-09, R-06 |
| 1,2,4,5-Tetrachlorobenzene             | 41.8                      | 10              | µg/L  | 51.0                                  | ND            | 81.8          | 40-140      |       |           |             |
| 1,2,4-Trichlorobenzene                 | 39.9                      | 5.1             | µg/L  | 51.0                                  | ND            | 78.2          | 40-140      |       |           |             |
| 2,4,5-Trichlorophenol                  | 44.7                      | 10              | µg/L  | 51.0                                  | ND            | 87.7          | 30-130      |       |           |             |
| 2,4,6-Trichlorophenol                  | 46.2                      | 10              | µg/L  | 51.0                                  | ND            | 90.6          | 30-130      |       |           |             |
| Surrogate: 2-Fluorophenol              | 77.4                      |                 | µg/L  | 204                                   |               | 37.9          | 15-110      |       |           |             |
| Surrogate: Phenol-d6                   | 53.8                      |                 | µg/L  | 204                                   |               | 26.4          | 15-110      |       |           |             |
| Surrogate: Nitrobenzene-d5             | 86.9                      |                 | µg/L  | 102                                   |               | 85.1          | 30-130      |       |           |             |
| Surrogate: 2-Fluorobiphenyl            | 91.8                      |                 | µg/L  | 102                                   |               | 90.0          | 30-130      |       |           |             |
| Surrogate: 2,4,6-Tribromophenol        | 199                       |                 | µg/L  | 204                                   |               | 97.4          | 15-110      |       |           |             |
| Surrogate: p-Terphenyl-d14             | 107                       |                 | µg/L  | 102                                   |               | 105           | 30-130      |       |           |             |
| <b>Matrix Spike Dup (B230464-MSD1)</b> | <b>Source: 19E0458-09</b> |                 |       | Prepared: 05/11/19 Analyzed: 05/14/19 |               |               |             |       |           |             |
| Acenaphthene                           | 37.3                      | 5.1             | µg/L  | 51.0                                  | ND            | 73.0          | 40-140      | 7.13  | 30        |             |
| Acenaphthylene                         | 39.2                      | 5.1             | µg/L  | 51.0                                  | ND            | 76.7          | 40-140      | 10.1  | 30        |             |
| Acetophenone                           | 36.7                      | 10              | µg/L  | 51.0                                  | ND            | 71.9          | 40-140      | 8.42  | 30        |             |
| Aniline                                | 22.5                      | 5.1             | µg/L  | 51.0                                  | ND            | 44.0          | 40-140      | 22.7  | 30        | V-34        |
| Anthracene                             | 43.1                      | 5.1             | µg/L  | 51.0                                  | ND            | 84.4          | 40-140      | 9.56  | 30        |             |
| <b>Benzidine</b>                       | ND                        | 20              | µg/L  | 51.0                                  | ND            | *             | 40-140      | NC    | 30        | MS-09, V-05 |
| Benzo(a)anthracene                     | 45.8                      | 5.1             | µg/L  | 51.0                                  | ND            | 89.7          | 40-140      | 9.35  | 30        |             |
| Benzo(a)pyrene                         | 45.2                      | 5.1             | µg/L  | 51.0                                  | ND            | 88.5          | 40-140      | 9.94  | 30        |             |
| Benzo(b)fluoranthene                   | 46.3                      | 5.1             | µg/L  | 51.0                                  | ND            | 90.8          | 40-140      | 7.56  | 30        |             |
| Benzo(g,h,i)perylene                   | 42.7                      | 5.1             | µg/L  | 51.0                                  | ND            | 83.8          | 40-140      | 0.808 | 30        |             |
| Benzo(k)fluoranthene                   | 48.2                      | 5.1             | µg/L  | 51.0                                  | ND            | 94.4          | 40-140      | 8.25  | 30        |             |
| <b>Benzoic Acid</b>                    | 12.9                      | 10              | µg/L  | 51.0                                  | ND            | <b>25.2</b> * | 40-140      | 10.4  | 30        | MS-09       |
| Bis(2-chloroethoxy)methane             | 46.9                      | 10              | µg/L  | 51.0                                  | ND            | 91.9          | 40-140      | 8.96  | 30        |             |
| Bis(2-chloroethyl)ether                | 40.2                      | 10              | µg/L  | 51.0                                  | ND            | 78.9          | 40-140      | 9.22  | 30        |             |
| Bis(2-chloroisopropyl)ether            | 44.7                      | 10              | µg/L  | 51.0                                  | ND            | 87.6          | 40-140      | 10.7  | 30        |             |
| Bis(2-Ethylhexyl)phthalate             | 53.6                      | 10              | µg/L  | 51.0                                  | ND            | 105           | 40-140      | 8.37  | 30        | V-06        |
| 4-Bromophenylphenylether               | 43.4                      | 10              | µg/L  | 51.0                                  | ND            | 85.0          | 40-140      | 5.18  | 30        |             |
| Butylbenzylphthalate                   | 49.9                      | 10              | µg/L  | 51.0                                  | ND            | 97.7          | 40-140      | 9.06  | 30        |             |
| Carbazole                              | 42.7                      | 10              | µg/L  | 51.0                                  | ND            | 83.8          | 40-140      | 10.9  | 30        |             |
| 4-Chloroaniline                        | 22.5                      | 10              | µg/L  | 51.0                                  | ND            | 44.1          | 40-140      | 10.8  | 30        | V-34        |
| 4-Chloro-3-methylphenol                | 39.1                      | 10              | µg/L  | 51.0                                  | ND            | 76.5          | 30-130      | 7.69  | 30        |             |
| 2-Chloronaphthalene                    | 38.7                      | 10              | µg/L  | 51.0                                  | ND            | 75.8          | 40-140      | 5.69  | 30        |             |
| 2-Chlorophenol                         | 35.0                      | 10              | µg/L  | 51.0                                  | ND            | 68.6          | 30-130      | 4.98  | 30        |             |
| 4-Chlorophenylphenylether              | 43.5                      | 10              | µg/L  | 51.0                                  | ND            | 85.2          | 40-140      | 6.67  | 30        |             |
| Chrysene                               | 45.8                      | 5.1             | µg/L  | 51.0                                  | ND            | 89.9          | 40-140      | 9.50  | 30        |             |
| Dibenz(a,h)anthracene                  | 39.0                      | 5.1             | µg/L  | 51.0                                  | ND            | 76.4          | 40-140      | 7.36  | 30        |             |
| Dibenzofuran                           | 40.2                      | 5.1             | µg/L  | 51.0                                  | ND            | 78.9          | 40-140      | 8.71  | 30        |             |
| Di-n-butylphthalate                    | 45.7                      | 10              | µg/L  | 51.0                                  | ND            | 89.7          | 40-140      | 11.0  | 30        |             |
| 1,2-Dichlorobenzene                    | 34.3                      | 5.1             | µg/L  | 51.0                                  | ND            | 67.3          | 40-140      | 4.42  | 30        |             |
| 1,3-Dichlorobenzene                    | 33.1                      | 5.1             | µg/L  | 51.0                                  | ND            | 64.8          | 40-140      | 5.87  | 30        |             |
| 1,4-Dichlorobenzene                    | 33.8                      | 5.1             | µg/L  | 51.0                                  | ND            | 66.2          | 40-140      | 6.18  | 30        |             |
| <b>3,3-Dichlorobenzidine</b>           | ND                        | 10              | µg/L  | 51.0                                  | ND            | *             | 40-140      | NC    | 30        | MS-09, V-34 |
| 2,4-Dichlorophenol                     | 42.4                      | 10              | µg/L  | 51.0                                  | ND            | 83.0          | 30-130      | 4.70  | 30        |             |
| Diethylphthalate                       | 43.4                      | 10              | µg/L  | 51.0                                  | ND            | 85.1          | 40-140      | 7.66  | 30        |             |
| 2,4-Dimethylphenol                     | 35.2                      | 10              | µg/L  | 51.0                                  | ND            | 69.0          | 30-130      | 5.11  | 30        |             |
| Dimethylphthalate                      | 42.2                      | 10              | µg/L  | 51.0                                  | ND            | 82.8          | 40-140      | 9.44  | 30        |             |

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## QUALITY CONTROL

## Semivolatile Organic Compounds by GC/MS - Quality Control

| Analyte                                | Result                    | Reporting Limit | Units | Spike Level                           | Source Result | %REC          | %REC Limits | RPD           | RPD Limit | Notes       |
|----------------------------------------|---------------------------|-----------------|-------|---------------------------------------|---------------|---------------|-------------|---------------|-----------|-------------|
| <b>Batch B230464 - SW-846 3510C</b>    |                           |                 |       |                                       |               |               |             |               |           |             |
| <b>Matrix Spike Dup (B230464-MSD1)</b> | <b>Source: 19E0458-09</b> |                 |       | Prepared: 05/11/19 Analyzed: 05/14/19 |               |               |             |               |           |             |
| 4,6-Dinitro-2-methylphenol             | 46.1                      | 10              | µg/L  | 51.0                                  | ND            | 90.3          | 30-130      | 9.35          | 30        |             |
| 2,4-Dinitrophenol                      | 44.3                      | 10              | µg/L  | 51.0                                  | ND            | 86.8          | 30-130      | 3.29          | 30        |             |
| 2,4-Dinitrotoluene                     | 42.8                      | 10              | µg/L  | 51.0                                  | ND            | 83.9          | 40-140      | 7.77          | 30        |             |
| 2,6-Dinitrotoluene                     | 43.9                      | 10              | µg/L  | 51.0                                  | ND            | 86.1          | 40-140      | 5.47          | 30        |             |
| Di-n-octylphthalate                    | 62.9                      | 10              | µg/L  | 51.0                                  | ND            | 123           | 40-140      | 2.66          | 30        |             |
| 1,2-Diphenylhydrazine/Azobenzene       | 39.2                      | 10              | µg/L  | 51.0                                  | ND            | 76.7          | 40-140      | 10.3          | 30        |             |
| Fluoranthene                           | 44.3                      | 5.1             | µg/L  | 51.0                                  | ND            | 86.9          | 40-140      | 8.93          | 30        |             |
| Fluorene                               | 41.8                      | 5.1             | µg/L  | 51.0                                  | ND            | 82.0          | 40-140      | 9.50          | 30        |             |
| Hexachlorobenzene                      | 39.6                      | 10              | µg/L  | 51.0                                  | ND            | 77.6          | 40-140      | 8.89          | 30        |             |
| Hexachlorobutadiene                    | 38.9                      | 10              | µg/L  | 51.0                                  | ND            | 76.2          | 40-140      | 1.64          | 30        |             |
| Hexachlorocyclopentadiene              | 28.8                      | 10              | µg/L  | 51.0                                  | ND            | 56.5          | 30-130      | 1.27          | 30        | V-05        |
| Hexachloroethane                       | 35.8                      | 10              | µg/L  | 51.0                                  | ND            | 70.1          | 40-140      | 4.22          | 30        |             |
| Indeno(1,2,3-cd)pyrene                 | 40.4                      | 5.1             | µg/L  | 51.0                                  | ND            | 79.1          | 40-140      | 3.65          | 30        |             |
| Isophorone                             | 41.8                      | 10              | µg/L  | 51.0                                  | ND            | 81.8          | 40-140      | 8.22          | 30        |             |
| 1-Methylnaphthalene                    | 35.4                      | 5.1             | µg/L  | 51.0                                  | ND            | 69.3          | 40-140      | 5.72          | 30        |             |
| 2-Methylnaphthalene                    | 41.7                      | 5.1             | µg/L  | 51.0                                  | ND            | 81.7          | 40-140      | 5.39          | 30        |             |
| 2-Methylphenol                         | 21.6                      | 10              | µg/L  | 51.0                                  | ND            | 42.4          | 30-130      | 12.5          | 30        | V-05        |
| 3/4-Methylphenol                       | 24.2                      | 10              | µg/L  | 51.0                                  | ND            | 47.4          | 30-130      | 9.68          | 30        |             |
| Naphthalene                            | 38.9                      | 5.1             | µg/L  | 51.0                                  | ND            | 76.3          | 40-140      | 6.37          | 30        |             |
| 2-Nitroaniline                         | 39.9                      | 10              | µg/L  | 51.0                                  | ND            | 78.2          | 40-140      | 12.6          | 30        |             |
| 3-Nitroaniline                         | 25.9                      | 10              | µg/L  | 51.0                                  | ND            | 50.7          | 40-140      | 13.1          | 30        |             |
| 4-Nitroaniline                         | 34.4                      | 10              | µg/L  | 51.0                                  | ND            | 67.4          | 40-140      | 13.9          | 30        |             |
| Nitrobenzene                           | 38.6                      | 10              | µg/L  | 51.0                                  | ND            | 75.6          | 40-140      | 6.50          | 30        |             |
| 2-Nitrophenol                          | 44.5                      | 10              | µg/L  | 51.0                                  | ND            | 87.2          | 30-130      | 2.16          | 30        |             |
| 4-Nitrophenol                          | 22.2                      | 10              | µg/L  | 51.0                                  | ND            | 43.5          | 30-130      | 6.15          | 30        |             |
| <b>N-Nitrosodimethylamine</b>          | 19.1                      | 10              | µg/L  | 51.0                                  | ND            | <b>37.5</b> * | 40-140      | 9.56          | 30        | MS-22       |
| N-Nitrosodiphenylamine/Diphenylamine   | 44.8                      | 10              | µg/L  | 51.0                                  | ND            | 87.8          | 40-140      | 9.27          | 30        |             |
| N-Nitrosodi-n-propylamine              | 38.3                      | 10              | µg/L  | 51.0                                  | ND            | 75.1          | 40-140      | 10.1          | 30        |             |
| Pentachloronitrobenzene                | 40.8                      | 10              | µg/L  | 51.0                                  | ND            | 80.0          | 40-140      | 6.41          | 30        |             |
| Pentachlorophenol                      | 41.9                      | 10              | µg/L  | 51.0                                  | ND            | 82.2          | 30-130      | 10.1          | 30        |             |
| Phenanthrene                           | 43.2                      | 5.1             | µg/L  | 51.0                                  | ND            | 84.7          | 40-140      | 8.02          | 30        |             |
| <b>Phenol</b>                          | 14.0                      | 10              | µg/L  | 51.0                                  | ND            | <b>27.5</b> * | 30-130      | 2.13          | 30        | MS-09       |
| Pyrene                                 | 45.9                      | 5.1             | µg/L  | 51.0                                  | ND            | 90.1          | 40-140      | 9.58          | 30        |             |
| <b>Pyridine</b>                        | 9.51                      | 5.1             | µg/L  | 51.0                                  | ND            | <b>18.6</b> * | 40-140      | <b>33.2</b> * | 30        | MS-09, R-06 |
| 1,2,4,5-Tetrachlorobenzene             | 39.2                      | 10              | µg/L  | 51.0                                  | ND            | 76.8          | 40-140      | 6.30          | 30        |             |
| 1,2,4-Trichlorobenzene                 | 39.0                      | 5.1             | µg/L  | 51.0                                  | ND            | 76.5          | 40-140      | 2.22          | 30        |             |
| 2,4,5-Trichlorophenol                  | 41.5                      | 10              | µg/L  | 51.0                                  | ND            | 81.3          | 30-130      | 7.55          | 30        |             |
| 2,4,6-Trichlorophenol                  | 42.9                      | 10              | µg/L  | 51.0                                  | ND            | 84.1          | 30-130      | 7.42          | 30        |             |
| Surrogate: 2-Fluorophenol              | 74.5                      |                 | µg/L  | 204                                   |               | 36.5          | 15-110      |               |           |             |
| Surrogate: Phenol-d6                   | 49.4                      |                 | µg/L  | 204                                   |               | 24.2          | 15-110      |               |           |             |
| Surrogate: Nitrobenzene-d5             | 82.2                      |                 | µg/L  | 102                                   |               | 80.5          | 30-130      |               |           |             |
| Surrogate: 2-Fluorobiphenyl            | 85.2                      |                 | µg/L  | 102                                   |               | 83.5          | 30-130      |               |           |             |
| Surrogate: 2,4,6-Tribromophenol        | 186                       |                 | µg/L  | 204                                   |               | 91.1          | 15-110      |               |           |             |
| Surrogate: p-Terphenyl-d14             | 98.7                      |                 | µg/L  | 102                                   |               | 96.8          | 30-130      |               |           |             |

39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332

**QUALITY CONTROL**
**Metals Analyses (Dissolved) - Quality Control**

| Analyte | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC | %REC<br>Limits | RPD | RPD<br>Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

**Batch B230663 - SW-846 3005A Dissolved**
**Blank (B230663-BLK1)**

Prepared: 05/14/19 Analyzed: 05/15/19

|          |    |       |      |  |  |  |  |  |  |  |
|----------|----|-------|------|--|--|--|--|--|--|--|
| Chromium | ND | 0.010 | mg/L |  |  |  |  |  |  |  |
| Copper   | ND | 0.010 | mg/L |  |  |  |  |  |  |  |
| Nickel   | ND | 0.010 | mg/L |  |  |  |  |  |  |  |

**LCS (B230663-BS1)**

Prepared &amp; Analyzed: 05/14/19

|          |      |       |      |      |  |      |        |  |  |  |
|----------|------|-------|------|------|--|------|--------|--|--|--|
| Chromium | 3.88 | 0.010 | mg/L | 4.00 |  | 97.1 | 80-120 |  |  |  |
| Copper   | 3.91 | 0.010 | mg/L | 4.00 |  | 97.9 | 80-120 |  |  |  |
| Nickel   | 4.10 | 0.010 | mg/L | 4.00 |  | 103  | 80-120 |  |  |  |

**Matrix Spike (B230663-MS1)**
**Source: 19E0458-05**

Prepared: 05/14/19 Analyzed: 05/15/19

|          |      |       |      |      |         |     |        |  |  |  |
|----------|------|-------|------|------|---------|-----|--------|--|--|--|
| Chromium | 2.08 | 0.010 | mg/L | 2.04 | ND      | 102 | 75-125 |  |  |  |
| Copper   | 4.14 | 0.010 | mg/L | 4.08 | 0.00418 | 101 | 75-125 |  |  |  |
| Nickel   | 2.13 | 0.010 | mg/L | 2.04 | ND      | 104 | 75-125 |  |  |  |

**Matrix Spike Dup (B230663-MSD1)**
**Source: 19E0458-05**

Prepared: 05/14/19 Analyzed: 05/15/19

|          |      |       |      |      |         |     |        |      |    |  |
|----------|------|-------|------|------|---------|-----|--------|------|----|--|
| Chromium | 2.19 | 0.010 | mg/L | 2.04 | ND      | 107 | 75-125 | 5.07 | 20 |  |
| Copper   | 4.35 | 0.010 | mg/L | 4.08 | 0.00418 | 106 | 75-125 | 4.90 | 20 |  |
| Nickel   | 2.22 | 0.010 | mg/L | 2.04 | ND      | 109 | 75-125 | 4.42 | 20 |  |

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39 Spruce Street \* East Longmeadow, MA 01028 \* FAX 413/525-6405 \* TEL. 413/525-2332**FLAG/QUALIFIER SUMMARY**

|       |                                                                                                                                                                                                                                   |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| *     | QC result is outside of established limits.                                                                                                                                                                                       |
| †     | Wide recovery limits established for difficult compound.                                                                                                                                                                          |
| ‡     | Wide RPD limits established for difficult compound.                                                                                                                                                                               |
| #     | Data exceeded client recommended or regulatory level                                                                                                                                                                              |
| ND    | Not Detected                                                                                                                                                                                                                      |
| RL    | Reporting Limit is at the level of quantitation (LOQ)                                                                                                                                                                             |
| DL    | Detection Limit is the lower limit of detection determined by the MDL study                                                                                                                                                       |
| MCL   | Maximum Contaminant Level                                                                                                                                                                                                         |
|       | Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.                                                                            |
|       | No results have been blank subtracted unless specified in the case narrative section.                                                                                                                                             |
| MS-09 | Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated. |
| MS-22 | Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.                                                         |
| R-06  | Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.                                                                                   |
| V-05  | Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.                                                                                                    |
| V-06  | Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.                                                                                                   |
| V-20  | Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.                           |
| V-34  | Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.                                                                         |

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

| Analyte                             | Certifications    |
|-------------------------------------|-------------------|
| <b><i>SW-846 6010D in Water</i></b> |                   |
| Chromium                            | CT,NH,NY,ME,NC,VA |
| Copper                              | CT,NH,NY,ME,NC,VA |
| Nickel                              | CT,NH,NY,ME,NC,VA |
| <b><i>SW-846 8270D in Soil</i></b>  |                   |
| Acenaphthene                        | CT,NY,NH,ME,NC,VA |
| Acenaphthylene                      | CT,NY,NH,ME,NC,VA |
| Acetophenone                        | NY,NH,ME,NC,VA    |
| Aniline                             | NY,NH,ME,NC,VA    |
| Anthracene                          | CT,NY,NH,ME,NC,VA |
| Benzidine                           | CT,NY,NH,ME,NC,VA |
| Benzo(a)anthracene                  | CT,NY,NH,ME,NC,VA |
| Benzo(a)pyrene                      | CT,NY,NH,ME,NC,VA |
| Benzo(b)fluoranthene                | CT,NY,NH,ME,NC,VA |
| Benzo(g,h,i)perylene                | CT,NY,NH,ME,NC,VA |
| Benzo(k)fluoranthene                | CT,NY,NH,ME,NC,VA |
| Benzoic Acid                        | NY,NH,ME,NC,VA    |
| Bis(2-chloroethoxy)methane          | CT,NY,NH,ME,NC,VA |
| Bis(2-chloroethyl)ether             | CT,NY,NH,ME,NC,VA |
| Bis(2-chloroisopropyl)ether         | CT,NY,NH,ME,NC,VA |
| Bis(2-Ethylhexyl)phthalate          | CT,NY,NH,ME,NC,VA |
| 4-Bromophenylphenylether            | CT,NY,NH,ME,NC,VA |
| Butylbenzylphthalate                | CT,NY,NH,ME,NC,VA |
| Carbazole                           | NC                |
| 4-Chloroaniline                     | CT,NY,NH,ME,NC,VA |
| 4-Chloro-3-methylphenol             | CT,NY,NH,ME,NC,VA |
| 2-Chloronaphthalene                 | CT,NY,NH,NC,VA    |
| 2-Chlorophenol                      | CT,NY,NH,ME,NC,VA |
| 4-Chlorophenylphenylether           | CT,NY,NH,ME,NC,VA |
| Chrysene                            | CT,NY,NH,ME,NC,VA |
| Dibenz(a,h)anthracene               | CT,NY,NH,ME,NC,VA |
| Dibenzofuran                        | CT,NY,NH,ME,NC,VA |
| Di-n-butylphthalate                 | CT,NY,NH,ME,NC,VA |
| 1,2-Dichlorobenzene                 | NY,NH,ME,NC,VA    |
| 1,3-Dichlorobenzene                 | NY,NH,ME,NC,VA    |
| 1,4-Dichlorobenzene                 | NY,NH,ME,NC,VA    |
| 3,3-Dichlorobenzidine               | CT,NY,NH,ME,NC,VA |
| 2,4-Dichlorophenol                  | CT,NY,NH,ME,NC,VA |
| Diethylphthalate                    | CT,NY,NH,ME,NC,VA |
| 2,4-Dimethylphenol                  | CT,NY,NH,ME,NC,VA |
| Dimethylphthalate                   | CT,NY,NH,ME,NC,VA |
| 4,6-Dinitro-2-methylphenol          | CT,NY,NH,ME,NC,VA |
| 2,4-Dinitrophenol                   | CT,NY,NH,ME,NC,VA |
| 2,4-Dinitrotoluene                  | CT,NY,NH,ME,NC,VA |
| 2,6-Dinitrotoluene                  | CT,NY,NH,ME,NC,VA |
| Di-n-octylphthalate                 | CT,NY,NH,ME,NC,VA |
| 1,2-Diphenylhydrazine/Azobenzene    | NY,NH,ME,NC,VA    |



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

| Analyte                             | Certifications    |
|-------------------------------------|-------------------|
| <b><i>SW-846 8270D in Soil</i></b>  |                   |
| Fluoranthene                        | CT,NY,NH,ME,NC,VA |
| Fluorene                            | NY,NH,ME,NC,VA    |
| Hexachlorobenzene                   | CT,NY,NH,ME,NC,VA |
| Hexachlorobutadiene                 | CT,NY,NH,ME,NC,VA |
| Hexachlorocyclopentadiene           | CT,NY,NH,ME,NC,VA |
| Hexachloroethane                    | CT,NY,NH,ME,NC,VA |
| Indeno(1,2,3-cd)pyrene              | CT,NY,NH,ME,NC,VA |
| Isophorone                          | CT,NY,NH,ME,NC,VA |
| 1-Methylnaphthalene                 | NC                |
| 2-Methylnaphthalene                 | CT,NY,NH,ME,NC,VA |
| 2-Methylphenol                      | CT,NY,NH,ME,NC,VA |
| 3/4-Methylphenol                    | CT,NY,NH,ME,NC,VA |
| Naphthalene                         | CT,NY,NH,ME,NC,VA |
| 2-Nitroaniline                      | CT,NY,NH,ME,NC,VA |
| 3-Nitroaniline                      | CT,NY,NH,ME,NC,VA |
| 4-Nitroaniline                      | CT,NY,NH,ME,NC,VA |
| Nitrobenzene                        | CT,NY,NH,ME,NC,VA |
| 2-Nitrophenol                       | CT,NY,NH,ME,NC,VA |
| 4-Nitrophenol                       | CT,NY,NH,ME,NC,VA |
| N-Nitrosodimethylamine              | CT,NY,NH,ME,NC,VA |
| N-Nitrosodi-n-propylamine           | CT,NY,NH,ME,NC,VA |
| Pentachloronitrobenzene             | NY,NC             |
| Pentachlorophenol                   | CT,NY,NH,ME,NC,VA |
| Phenanthrene                        | CT,NY,NH,ME,NC,VA |
| Phenol                              | CT,NY,NH,ME,NC,VA |
| Pyrene                              | CT,NY,NH,ME,NC,VA |
| Pyridine                            | CT,NY,NH,ME,NC,VA |
| 1,2,4,5-Tetrachlorobenzene          | NY,NC             |
| 1,2,4-Trichlorobenzene              | CT,NY,NH,ME,NC,VA |
| 2,4,5-Trichlorophenol               | CT,NY,NH,ME,NC,VA |
| 2,4,6-Trichlorophenol               | CT,NY,NH,ME,NC,VA |
| 2-Fluorophenol                      | NC                |
| <b><i>SW-846 8270D in Water</i></b> |                   |
| Acenaphthene                        | CT,NY,NC,ME,NH,VA |
| Acenaphthylene                      | CT,NY,NC,ME,NH,VA |
| Acetophenone                        | NY,NC             |
| Aniline                             | CT,NY,NC,ME,VA    |
| Anthracene                          | CT,NY,NC,ME,NH,VA |
| Benzidine                           | CT,NY,NC,ME,NH,VA |
| Benzo(a)anthracene                  | CT,NY,NC,ME,NH,VA |
| Benzo(a)pyrene                      | CT,NY,NC,ME,NH,VA |
| Benzo(b)fluoranthene                | CT,NY,NC,ME,NH,VA |
| Benzo(g,h,i)perylene                | CT,NY,NC,ME,NH,VA |
| Benzo(k)fluoranthene                | CT,NY,NC,ME,NH,VA |
| Benzoic Acid                        | NY,NC,ME,NH,VA    |
| Bis(2-chloroethoxy)methane          | CT,NY,NC,ME,NH,VA |

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

| Analyte                             | Certifications    |
|-------------------------------------|-------------------|
| <b><i>SW-846 8270D in Water</i></b> |                   |
| Bis(2-chloroethyl)ether             | CT,NY,NC,ME,NH,VA |
| Bis(2-chloroisopropyl)ether         | CT,NY,NC,ME,NH,VA |
| Bis(2-Ethylhexyl)phthalate          | CT,NY,NC,ME,NH,VA |
| 4-Bromophenylphenylether            | CT,NY,NC,ME,NH,VA |
| Butylbenzylphthalate                | CT,NY,NC,ME,NH,VA |
| Carbazole                           | NC                |
| 4-Chloroaniline                     | CT,NY,NC,ME,NH,VA |
| 4-Chloro-3-methylphenol             | CT,NY,NC,ME,NH,VA |
| 2-Chloronaphthalene                 | CT,NY,NC,ME,NH,VA |
| 2-Chlorophenol                      | CT,NY,NC,ME,NH,VA |
| 4-Chlorophenylphenylether           | CT,NY,NC,ME,NH,VA |
| Chrysene                            | CT,NY,NC,ME,NH,VA |
| Dibenz(a,h)anthracene               | CT,NY,NC,ME,NH,VA |
| Dibenzofuran                        | CT,NY,NC,ME,NH,VA |
| Di-n-butylphthalate                 | CT,NY,NC,ME,NH,VA |
| 1,2-Dichlorobenzene                 | CT,NY,NC,ME,NH,VA |
| 1,3-Dichlorobenzene                 | CT,NY,NC,ME,NH,VA |
| 1,4-Dichlorobenzene                 | CT,NY,NC,ME,NH,VA |
| 3,3-Dichlorobenzidine               | CT,NY,NC,ME,NH,VA |
| 2,4-Dichlorophenol                  | CT,NY,NC,ME,NH,VA |
| Diethylphthalate                    | CT,NY,NC,ME,NH,VA |
| 2,4-Dimethylphenol                  | CT,NY,NC,ME,NH,VA |
| Dimethylphthalate                   | CT,NY,NC,ME,NH,VA |
| 4,6-Dinitro-2-methylphenol          | CT,NY,NC,ME,NH,VA |
| 2,4-Dinitrophenol                   | CT,NY,NC,ME,NH,VA |
| 2,4-Dinitrotoluene                  | CT,NY,NC,ME,NH,VA |
| 2,6-Dinitrotoluene                  | CT,NY,NC,ME,NH,VA |
| Di-n-octylphthalate                 | CT,NY,NC,ME,NH,VA |
| 1,2-Diphenylhydrazine/Azobenzene    | NY,NC             |
| Fluoranthene                        | CT,NY,NC,ME,NH,VA |
| Fluorene                            | NY,NC,ME,NH,VA    |
| Hexachlorobenzene                   | CT,NY,NC,ME,NH,VA |
| Hexachlorobutadiene                 | CT,NY,NC,ME,NH,VA |
| Hexachlorocyclopentadiene           | CT,NY,NC,ME,NH,VA |
| Hexachloroethane                    | CT,NY,NC,ME,NH,VA |
| Indeno(1,2,3-cd)pyrene              | CT,NY,NC,ME,NH,VA |
| Isophorone                          | CT,NY,NC,ME,NH,VA |
| 1-Methylnaphthalene                 | NC                |
| 2-Methylnaphthalene                 | CT,NY,NC,ME,NH,VA |
| 2-Methylphenol                      | CT,NY,NC,NH,VA    |
| 3/4-Methylphenol                    | CT,NY,NC,NH,VA    |
| Naphthalene                         | CT,NY,NC,ME,NH,VA |
| 2-Nitroaniline                      | CT,NY,NC,ME,NH,VA |
| 3-Nitroaniline                      | CT,NY,NC,ME,NH,VA |
| 4-Nitroaniline                      | CT,NY,NC,ME,NH,VA |
| Nitrobenzene                        | CT,NY,NC,ME,NH,VA |
| 2-Nitrophenol                       | CT,NY,NC,ME,NH,VA |

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

| Analyte                      | Certifications    |
|------------------------------|-------------------|
| <b>SW-846 8270D in Water</b> |                   |
| 4-Nitrophenol                | CT,NY,NC,ME,NH,VA |
| N-Nitrosodimethylamine       | CT,NY,NC,ME,NH,VA |
| N-Nitrosodi-n-propylamine    | CT,NY,NC,ME,NH,VA |
| Pentachloronitrobenzene      | NC                |
| Pentachlorophenol            | CT,NY,NC,ME,NH,VA |
| Phenanthrene                 | CT,NY,NC,ME,NH,VA |
| Phenol                       | CT,NY,NC,ME,NH,VA |
| Pyrene                       | CT,NY,NC,ME,NH,VA |
| Pyridine                     | CT,NY,NC,ME,NH,VA |
| 1,2,4,5-Tetrachlorobenzene   | NY,NC             |
| 1,2,4-Trichlorobenzene       | CT,NY,NC,ME,NH,VA |
| 2,4,5-Trichlorophenol        | CT,NY,NC,ME,NH,VA |
| 2,4,6-Trichlorophenol        | CT,NY,NC,ME,NH,VA |
| 2-Fluorophenol               | NC                |

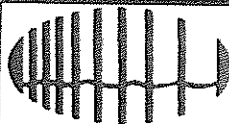
The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

| Code  | Description                                  | Number        | Expires    |
|-------|----------------------------------------------|---------------|------------|
| AIHA  | AIHA-LAP, LLC - ISO17025:2005                | 100033        | 03/1/2020  |
| MA    | Massachusetts DEP                            | M-MA100       | 06/30/2019 |
| CT    | Connecticut Department of Public Health      | PH-0567       | 09/30/2019 |
| NY    | New York State Department of Health          | 10899 NELAP   | 04/1/2020  |
| NH-S  | New Hampshire Environmental Lab              | 2516 NELAP    | 02/5/2020  |
| RI    | Rhode Island Department of Health            | LAO00112      | 12/30/2019 |
| NC    | North Carolina Div. of Water Quality         | 652           | 12/31/2019 |
| NJ    | New Jersey DEP                               | MA007 NELAP   | 06/30/2019 |
| FL    | Florida Department of Health                 | E871027 NELAP | 06/30/2020 |
| VT    | Vermont Department of Health Lead Laboratory | LL015036      | 07/30/2019 |
| ME    | State of Maine                               | 2011028       | 06/9/2021  |
| VA    | Commonwealth of Virginia                     | 460217        | 12/14/2019 |
| NH-P  | New Hampshire Environmental Lab              | 2557 NELAP    | 09/6/2019  |
| VT-DW | Vermont Department of Health Drinking Water  | VT-255716     | 06/12/2020 |
| NC-DW | North Carolina Department of Health          | 25703         | 07/31/2019 |





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



**con-test®**  
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

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

Client Gec

Received By SL

Date 5/6/14

Time 1450

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

Were samples within Temperature? 2-6°C T By Gun # 3 Actual Temp - 4.2  
By Blank # \_\_\_\_\_ Actual Temp - \_\_\_\_\_

Was Custody Seal Intact? N/A Were Samples Tampered with? N/A

Was COC Relinquished? T Does Chain Agree With Samples? T

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

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

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

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? \_\_\_\_\_

Are there Rushes? F Who was notified? \_\_\_\_\_

Are there Short Holds? F Who was notified? \_\_\_\_\_

Is there enough Volume? T

Is there Headspace where applicable? N/A MS/MSD? F

Proper Media/Containers Used? T Is splitting samples required? F

Were trip blanks received? F On COC? F

Do all samples have the proper pH? \_\_\_\_\_ Acid TS2 Base \_\_\_\_\_

| Vials        | # | Containers:  | #  |                 | # |               | # |
|--------------|---|--------------|----|-----------------|---|---------------|---|
| Unp-         |   | 1 Liter Amb. | 10 | 1 Liter Plastic |   | 16 oz Amb.    |   |
| HCL-         |   | 500 mL Amb.  |    | 500 mL Plastic  |   | 8oz Amb/Clear |   |
| Meoh-        |   | 250 mL Amb.  |    | 250 mL Plastic  | 9 | 4oz Amb/Clear |   |
| Bisulfate-   |   | Flashpoint   |    | Col./Bacteria   |   | 2oz Amb/Clear |   |
| DI-          |   | Other Glass  |    | Other Plastic   |   | Encore        |   |
| Thiosulfate- |   | SOC Kit      |    | Plastic Bag     |   | Frozen:       |   |
| Sulfuric-    |   | Perchlorate  |    | Ziplock         |   |               |   |

#### Unused Media

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

Comments:

No volume received for MW 3

2 250mL vials received for MW 4