

Final Engineering Report

Penn Yan Water Street Former MGP Site
Penn Yan, Yates County, New York

New York State Electric & Gas Corporation
Division of Environmental Remediation
NYSDEC Site No. 862009

January 16, 2023

Prepared for:

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Certifications

CERTIFICATIONS

I, Carsten H. Floess, am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Remedial Design were implemented and that all construction activities were completed in substantial conformance with the Department-approved Remedial Design.

I certify that the data submitted to the Department with this Final Engineering Report demonstrates that the remediation requirements set forth in the Remedial Design and in all applicable statutes and regulations have been achieved in accordance with the time frames, if any, established for the remedy.

I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site will be contained in an environmental easement created and recorded pursuant to ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

I certify that a Site Management Plan has been submitted for the implementation of Institutional Controls since remaining contamination exists at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by the Department.

I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.

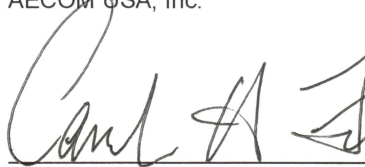
I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic data deliverable requirements and have been accepted by the Department.

I certify that all information and statements in this certification form 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, Carsten H. Floess, of AECOM USA, Inc., 40 British American Blvd, Latham, New York 12110, am certifying as NYSEG's Designated Site Representative for the Site.

Respectfully submitted,

AECOM USA, Inc.



Carsten H. Floess
Registered Professional Engineer
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1/16/2023
Date

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Acronyms and Abbreviations

ACM	Asbestos Containing Material
AECOM	AECOM USA, Inc.
bgs	below ground surface
BMP	Best Management Practices
CAMP	Community Air Monitoring Plan
CKD	cement kiln dust
CLSM	Controlled Low Strength Material
COC	Contaminant of Concern
CPT	Cone Penetrometer Testing
CY	Cubic Yards
DM	Design Modification
DUSR	Data Usability Summary Report
ESMI	Environmental Soil Management Incorporated
EWP	Excavation Work Plan
EC	Engineering Control
eV	Electron Volt
FER	Final Engineering Report
FS	Feasibility Study
ft	feet
HASP	Health and Safety Plan
IC	Institutional Control
IRM	Interim Remedial Measure
MGP	Manufactured Gas Plant
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
mg/m ³	milligrams per cubic meter
NA	Not Applicable
NAPL	Non-Aqueous Phase Liquid
ND	Non-Detect
NTU	Nephelometric Turbidity
NYSDEC	New York State Department of Environmental Conservation
NYSEG	New York State Electric and Gas Corporation
NYSDOH	New York State Department of Health
OSHA	Occupational Safety and Health Administration
PAH	Polycyclic Aromatic Hydrocarbons
PAM	Portable Air Monitoring
PDI	Pre-Design Investigation
PDIWP	Pre-Design Investigation Work Plan
PID	Photoionization Detector
POTW	Publicly Owned Treatment Works
PPE	Personal Protective Equipment
ppm	parts per million
QA	Quality Assurance
QC	Quality Control
RA	Remedial Action
RD	Remedial Design
RDR	Remedial Design Report
RDWP	Remedial Design Work Plan

RI	Remedial Investigation
RI/FS	Remedial Investigation and Feasibility Study
RAO	Remedial Action Objectives
ROD	Record of Decision
SCG	Site Criteria and Guidance
SCO	Soil Cleanup Objective
SES	Sevenson Environmental Services, Inc.
SI	Supplemental Investigation
SMP	Site Management Plan
SVOC	Semi-Volatile Organic Compound
TFS	Temporary Fabric Structure
TEP	Technical Execution Plan
tPAH	Total Polycyclic Aromatic Hydrocarbons
TVOC	Total Volatile Organic Compound
UST	Underground Storage Tank
µg/m ³	micrograms per cubic meter
VOC	Volatile Organic Compound
VSMP	Vibration and Settlement Monitoring Plan
WWTP	Wastewater Treatment Plant

Executive Summary

Introduction and Background

This Final Engineering Report (FER) has been prepared for the Penn Yan Water Street Former Manufactured Gas Plant (MGP) Site, Site No 862009, located in the Village of Penn Yan, Town of Milo, New York (Site). This FER summarizes the remedial actions (RAs) for the Site. AECOM USA, Inc. (AECOM) is the designated representative of New York State Electric and Gas Corporation (NYSEG) and acted as the engineer on record.

The former MGP was constructed in 1899 and operated until 1931. The operating companies included the Penn Yan Gas Light Company (1889–1926) and the New York State Central Electric Corporation (1927–1931). NYSEG entered into an Order on Consent (#D00002-9309) with the New York State Department of Environmental Conservation (NYSDEC) on March 30, 1994, and subsequent Amended and Restate Order on Consent in December 2016 (effective 12/5/2016), to investigate and remediate 36 sites including the 0.81-acre property located in Penn Yan, New York.

The remedy for the Site was performed as one RA (under two phases) and no interim remedial measures were performed. The remedial activities completed at the Site (between July 2015 and May 2020) were conducted in accordance with the NYSDEC-approved Remedial Design (RD) Report (RDR), for the Penn Yan Water Street Former MGP site (February 2015) and Design Modifications 001-004.

Remedial Action Objectives

As defined in the Record of Decision (ROD) [NYSDEC, 2012], based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) were identified for this Site.

- Groundwater RAOs for Public Health Protection
 - Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.
 - Prevent contact with, or inhalation of, volatiles emanating from contaminated groundwater.
- Groundwater RAOs for Environmental Protection
 - Restore groundwater aquifer to pre-disposal/pre-release conditions, to the extent practicable.
 - Prevent the discharge of contaminants to surface water.
 - Remove the source of ground or surface water contamination.
- **Soil RAOs for Public Health Protection**
 - Prevent ingestion/direct contact with contaminated soil.
 - Prevent inhalation of, or exposure to, contaminants volatilizing from contaminated soil.
- Sediment RAOs for Public Health Protection
 - Prevent direct contact with contaminated sediments.
- Sediment RAOs for Environmental Protection
 - Prevent impacts to biota due to ingestion/direct contact with contaminated sediments that would cause toxicity or bioaccumulation through the marine or aquatic food chain.
 - Restore sediments to pre-release/background conditions to the extent feasible.
- Soil Vapor RAOs for Public Health Protection
 - Mitigate impacts to public health resulting from the existing, or the potential for, soil vapor intrusion into buildings at the site.

Remedial Actions Performed

RAs at the Site included removal of impacted materials including:

- Surface soil exceeding restricted-residential soil cleanup objectives (SCOs).
- Former MGP structures, debris, piping, and major obstructions which remain in the subsurface to the extent practicable.
- Subsurface soil with concentrations of total semi-volatile organic compounds (SVOCs) greater than 500 mg/kg, concentrations of volatile organic compounds (VOCs) greater than 10 mg/kg, or which are visually impacted with non-aqueous phase liquid (NAPL) and/or NAPL sheens.
- Sediment in the Outlet which contained visible NAPL, sheen, or which produce a visible sheen when agitated.
- Sediment in the Outlet with concentrations of total polycyclic aromatic hydrocarbons (tPAH) compounds at levels above the Site-specific background concentration of 43 mg/kg tPAH17 (NYSDEC 2012) to a depth no greater than two feet.
- Gross contamination observed beneath the foundation during the grade beam installation.
- Impacted material observed outside of the design limitations removed to visually clean and subsequently sampled for compliance with Site SCOs.

Conclusion

This FER summarizes the successful completion of the RAs for the Site and details the contamination remaining, deviations from the RD, and remaining engineering controls at the Site. Total volumes of waste removed were:

- Non-Hazardous Waste (Abatement Waste) – 109.79 tons to Ontario County Landfill;
- Treated construction water – 15,500 gallons to Tradebe Treatment and Recycling Northeast, LLC of Meriden, Connecticut;
- Non-Hazardous Soil/Solid Remediation Waste – 25,938.46 tons to Seneca Meadows Landfill;
- Conditionally Exempt MGP Remediation Waste as defined by DER-4 – 2,638.01 tons to Environmental Soil Management Incorporated (ESMI) of New York for thermal desorption;
- RQ, UN3077 (Hazardous Waste) – 4,670kg to Clean Harbors Corunna, Ontario, Canada; and
- Universal Waste – 10 pounds to CWM Chemical Services, L.L.C. of Model City, New York.

1. Background and Site Description

1.1 Introduction

This Final Engineering Report (FER) is a required element of the remedial program for the Penn Yan Water Street Former Manufactured Gas Plant (MGP) Site, Site No 862009, located in the Village of Penn Yan, Town of Milo, New York (Site). New York State Electric and Gas (NYSEG) entered into an Order on Consent (#D00002-9309) with the New York State Department of Environmental Conservation (NYSDEC) on March 30, 1994, and subsequent Amended and Restate Order on Consent in December 2016 (effective 12/5/2016), to investigate and remediate 36 sites including the 0.81-acre property located in Penn Yan, New York. The property was remediated to restricted-residential use Site Criteria and Guidances (SCGs). A Site Location Map and Site Map are provided as **Figure 1** and **Figure 2**, respectively.

The boundaries of the Site are described in the Environmental Easement (EE) **Appendix A**, which includes survey map, metes and bounds, and an environmental easement template.

This FER summarizes the remedial actions (RAs) for the Site. AECOM USA, Inc. (AECOM) is the designated representative of NYSEG and acted as the engineer on record. AECOM assumed all duties and responsibilities of and have rights and authority assigned to the Engineer. Severson Environmental Services, Inc. (SES) was the prime contractor and were responsible for conducting and completing the RA.

A compact disc of this FER and all supporting documentation is provided as **Appendix B**.

1.2 Site Location and Description

The Site is located in the Village of Penn Yan, Town of Milo, County of Yates, New York and is identified as two contiguous parcels on Water Street between Liberty Street (Rt. 14A) and Main Street. The parcels are identified as 049.75-1-55 and 049.75-1-56. The Site is situated on an approximately 0.815-acre area bounded by Water Street to the north, Keuka Lake Outlet (the Outlet) to the south, a mixed commercial/residential property consisting of a three-story commercial building occupied by a wine store and a private residence to the east, and a commercial property located at 128 Liberty Street to the west (see **Figure 2A**).

Remedial Investigation (RI) water level measurements taken from the shallow Site wells indicated that the groundwater table is present between 3 and 15 feet below ground surface (bgs) across the Site. The data obtained from the shallow wells on October 25, 2006 was used to map the flow direction for groundwater across the Site. Groundwater flows from the northwest to the southeast with an approximate gradient of 0.034 feet/foot across the Site. The direction of groundwater flow observed during the RI is similar to the direction of groundwater flow observed during the previous investigations performed at the Site (AECOM, 2008).

Three soil units have been identified in the subsurface beneath the Site. From the ground surface downward, these are a manmade fill unit, a silt/clay unit, and a sand unit. The fill unit is found across the Site and generally ranges from 4 feet thick (around the MGP building) to 13 feet thick (adjacent to Water St). The thickness of the fill unit adjacent to the Outlet is approximately 8 feet. Beneath the fill is a silt/clay unit that ranges in thickness between 10 and 20 feet. This silt unit appears to act as a potential aquitard beneath the Site, limiting downward movement of groundwater and contaminants from the Site. A sand unit of unknown thickness is present below the silt/clay. The shale bedrock that underlies the Site was not encountered during the RI. Based on information provided by a local water well drilling company who has drilled a well for their shop on the west side of Liberty Street, the bedrock unit in the area of the Site is likely to be present at a depth of greater than 300 feet bgs (AECOM, 2008). The Outlet has an organic silt sediment unit approximately 4 feet thick. Beneath the organic silt is a silt/clay unit of varying thickness, observed thicknesses range between 0.5 and 15 plus feet.

The Keuka Lake Outlet and associated banks form the south boundary of the Site. The Outlet conveys Keuka Lake water from the lake proper through a flood control structure east to Seneca Lake. The Outlet is classified as a Class C waterway by the NYSDEC and is approximately 95 feet wide adjacent to the Site. Approximately 700 linear feet of the Outlet bottom, or 1.7 acres of sediment, were the off-Site part of the remedial activities.

1.3 Site History

The Site was initially developed as a malt house and wood storage facility, operating from the 1840's to the late 1890's. The MGP was constructed in 1899 and operated until 1931. During this period gas was manufactured with a coal gasification process using coal, coke, and water. The operating companies included the Penn Yan Gas Light Company (1889–1926) and the New York State Central Electric Corporation (1927–1931). Gas was distributed to consumers through buried mains and used primarily for illumination.

1.4 Previous Site Investigations

The following provides a brief chronology of previous investigations at the former MGP Site:

- Between 1986 and 1990, TRC performed fieldwork at the Site that included the excavation of test pits; the completion of soil borings; the installation of monitoring wells; and the analyses of soil, surface water, groundwater, and sediment samples (TRC, 1986, 1990a).
- Between September 1991 and May 1992, SLC Consultants/Constructors, Inc. (SLC) performed remedial work at the Site (SLC, 1991 and 1992) consisting of the following: 1) the cleanout of a subsurface tank (referred to as Tar Tank A) that was used to store tar when the plant operated; 2) the removal of a 3,000-gallon underground storage tank (UST) referred to as Tar Tank B located between the warehouse/garage building and the Outlet; and, 3) The removal and off-Site disposal of tar-impacted soil from within the Tar Tank B excavation area.
- A Supplemental Investigation (SI) was performed by Geraghty and Miller, Inc. in June 1994 (Geraghty and Miller, 1994b). The SI included the completion of three soil borings and the collection of additional sediment samples. Following the SI, eight rounds of groundwater sampling were performed including sampling in November 1991, November 1992, November 1993, July 1994, April 1995, April 1996, April 1997, and April 1998.
- AECOM conducted a RI submitted to NYSDEC in November of 2008 (AECOM, 2008). The scope of the RI included subsurface utility clearing, surface and subsurface soil sampling, test pit excavation, soil boring installation, monitoring well installation and development, groundwater sampling, sediment probing and sampling, bathymetric surveys, and Site surveys.
- In November 2012, AECOM submitted a Feasibility Study (FS) Report assessing remedial alternatives for the Site (AECOM, 2012). The recommended alternative included excavation and dredging of contaminated materials on-Site and in the Outlet.
- In December 2012, NYSDEC issued a Record of Decision (ROD) for the Site, which established a RA for the on-Site and off-Site impacted materials (NYSDEC, 2012). The selected remedial action includes excavation of on-Site soils and the off-Site sediments in the Outlet. The RA objectives (RAOs) established by the ROD are summarized in Section 2.1.
- The Remedial Design Work Plan (RDWP) was submitted on March 13, 2013 and approved by the NYSDEC on May 28, 2013.
- The Pre-Design Investigation Work Plan (PDIWP) was submitted on March 13, 2013 and approved by the NYSDEC on May 28, 2013. Addendum No. 1 of the PDIWP was submitted on October 7, 2013 to change the location of two geotechnical borings and approved by the NYSDEC on October 7, 2013. Addendum No. 2 of the PDIWP was submitted on January 23, 2014 to excavate test pits and expose the building foundation and perform a hazardous building materials survey and approved by the NYSDEC on January 24, 2014.
- AECOM conducted the pre-design investigation (PDI) during two mobilizations to the Site. The initial mobilization occurred from July 9, 2013 to July 18, 2013. The second mobilization to the Site occurred from February 3, 2014 to February 7, 2014. The work from these efforts were compiled in a report provided to the NYSDEC in May 2014.

2. Summary of Site Remedy

2.1 Remedial Action Objectives

As defined in the ROD (NYSDEC, 2012), based on the results of the RI, the following RAOs were identified for this Site.

2.1.1 Groundwater RAOs

RAOs for Public Health Protection

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles emanating from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

2.1.2 Soil RAOs

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of, or exposure to, contaminants volatilizing from contaminated soil.

2.1.3 Sediment RAOs

RAOs for Public Health Protection

- Prevent direct contact with contaminated sediments.

RAOs for Environmental Protection

- Prevent impacts to biota due to ingestion/direct contact with contaminated sediments that would cause toxicity or bioaccumulation through the marine or aquatic food chain.
- Restore sediments to pre-release/background conditions to the extent feasible.

2.1.4 Soil Vapor RAOs

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from the existing, or the potential for, soil vapor intrusion into buildings at the Site.

2.2 Description of Selected Remedy

The Site was remediated in accordance with the remedy selected by the NYSDEC in the ROD dated December 2012. There were no interim remedial measures at the Site during the Remedial Investigation and Feasibility Study (RI/FS).

Prior to the RI/FS, as noted in Section 1.4, SLC performed limited remedial work at the Site consisting of the cleanout of Tar Tank A, the cleanout and removal of Tar Tank B, and the removal and off-Site disposal of tar-impacted soil from within the Tar Tank B excavation area.

The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. The ROD required excavation of MGP-impacted soils, sediment, and debris. The following are the components of the selected remedy:

1. Asbestos containing material (ACM) and hazardous materials abatement of the Former MGP Building.
2. Structural repairs and reinforcement of the Former MGP Building.
3. Removal of sediment in the Outlet which contains visible non-aqueous phase liquid (NAPL), sheen, or which produce a visible sheen when agitated.
4. Removal of sediment in the Outlet adjacent to the Site and downstream of the Site to the control structure with concentrations of total polycyclic aromatic hydrocarbon (tPAH) compounds at levels above the Site-specific background concentration of 43 milligrams per kilogram (mg/kg) tPAH17 (NYSDEC 2012) to a depth no greater than two feet.
5. Backfill areas where sediment was removed to re-establish bottom elevations and provide habitat for aquatic organisms.
6. Excavation of sub-surface soil with concentrations of total semi-volatile organic compounds (SVOCs) greater than 500 mg/kg, concentrations of volatile organic compounds (VOCs) greater than 10 mg/kg, or soils which are visually impacted with NAPL and/or NAPL sheens.
7. Removal of former MGP structures, debris, piping, and major obstructions which remain in the subsurface to the extent practicable.
8. Excavation of surface soil exceeding restricted-residential soil cleanup objectives (SCOs) as defined by 6 NYCRR Part 375-6.8.
9. Backfilling excavations to re-establish original Site grades.
10. Placement of Site cover consisting of pavement, sidewalks, buildings, or two feet of clean soil.
11. Transportation of excavated soil and sediment to the temporary fabric structure (TFS) for amendment and dewatering. Restoration of the Site with topsoil and gravel; re-building the bank adjacent to the Site with topsoil and plantings, planting grass in Upland areas, and planting subaqueous vegetation in selected Outlet areas.
12. Off-Site transportation and disposal or treatment of soil and sediment removed from the Site at a permitted waste management facility.
13. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the Site.
14. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting.
15. Periodic certification of the institutional and engineering controls listed above.

3. Interim Remedial Measures, Operable Units and Remedial Contracts

The remedy for the Site was performed as one RA (under two phases) and no interim remedial measures were performed. The ROD for the Penn Yan Water Street Former MGP Site does not define separate operable units.

As discussed in Section 1.4, SLC did perform remedial work at the Site between September 1991 and May 1992. This work included removal and off-Site disposal of tar-impacted soils and coal tar wastes from two vessels which were exposed during investigation work. The excavation area to remove the 3,000 gallon UST is labeled as "Previous IRM Excavation Area" on **Figure 2A**.

4. Description of Remedial Actions Performed

The remedial activities completed at the Site (between July 2015 and May 2020) were conducted in accordance with the NYSDEC-approved Remedial Design (RD) Report for the Penn Yan Water Street Former MGP site (**Appendix C**, February 2015)

During the first year of remediation work at the Site, multiple changed conditions came to light that required design modifications to meet the remedial objectives of the ROD. The notable changed conditions consisted of the following:

- MGP process components, coal tar NAPL and residual contamination was discovered inside the former gas house during the preparation of the structural reinforcement of the historic structure needed to allow for installation of the excavation shoring between it and the Outlet;
- Subgrade impacts in the Outlet bank area between the building and the Outlet were found to be more complex and substantial once access to the bank slope and shallow water areas was obtained;
- Settlement of the historic gas plant building caused by slope instability during the initial remedial efforts of the slope and sediments; and,
- Article 16 Flood Control Permit terms required restoration of flow capacity within the Outlet in the event of high flow forecasting within one workday of the identification of potential flood conditions.

These findings required revisions to the RD so that the remedial objectives in the ROD could be achieved without impact to the historic structure. As such, this required a pause in the remedial work between July 2017 through August 2018 so that the additional engineering and procurement efforts could be completed.

These changes are discussed further in Section 4 and refer to work performed during Phase 1 and Phase 2 of the remedy. Phase 1 refers to remedial work performed during July 2015 to July 2017 and Phase 2 refers to remedial work performed between August 2018 and December 2019. Some restoration, including subaquatic planting in the Outlet, had to be completed during the “next” growing season (2020). The deviations from the RD are noted below. Design Modifications and NYSDEC approval documentation are compiled in **Appendix D**. Remedial Action contractor record drawings are provided as **Appendix E** as a detail supplement.

4.1 Governing Documents

The Engineer reviewed all plans and submittals for this remedial project and confirmed that they were in compliance with the February 2015 RD (AECOM, 2015) and Design Modifications 001-004. Remedial documents were submitted to the NYSDEC in a timely manner and prior to the start of remedial construction activities.

4.1.1 Site-Specific Health & Safety Plan (HASP)

The remedial work performed under this remedial action was in full compliance with governmental requirements, including site and worker safety requirements mandated by Federal Occupational Safety and Health Administration (OSHA). The Severson and AECOM HASPs were prepared for all remedial and invasive work performed at the Site.

4.1.2 Construction Quality

The Quality Assurance (QA) managed performance of the remedial action tasks through designed and documented quality assurance/quality control (QA/QC) methodologies applied in the field and in the laboratory. Roles and responsibilities related to QA was included as Section 5.9 of the RD Report approved by NYSDEC. The QA section of the RD provided a detailed description of the observation and testing activities that were used to monitor construction quality and confirm that remedial construction was in conformance with the remediation objectives and specifications.

4.1.3 Soil/Materials Handling Plan

The soils and materials from the Site were managed in accordance with Section 4.6 of the RD. MGP-impacted soils and debris were transported in accordance with the applicable regulations for the transportation of solid or liquid materials. Loads of the material transported off the Site were accompanied by executed Remediation Waste Manifests. Transporters utilized during the project maintained NYSDEC Waste Transporter Permits (6 NYCRR Part 364). Total volumes of waste removed were:

- Non-Hazardous Waste (Abatement Waste) – 109.79 tons to Ontario County Landfill;
- Post-treatment construction water (treated water collected from Site excavation work that did not meet discharge limits to the Village of Penn Yan Publicly Owned Treatment Works (POTW) – 15,500 gallons to Tradebe Treatment and Recycling Northeast, LLC of Meriden, Connecticut;
- Non-Hazardous Soil/Solid Remediation Waste – 25,938.46 tons to Seneca Meadows Landfill;
- Conditionally Exempt MGP Remediation Waste as defined in DER-4 – 2,638.01 tons to Environmental Soil Management Incorporated (ESMI) of New York for thermal desorption;
- RQ, UN3077 (Hazardous Waste, Asbestos-contaminated gas pipe with coal tar/NAPL) – 4,670kg to Clean Harbors Corunna, Ontario, Canada; and
- Universal Waste – 10 pounds to CWM Chemical Services, L.L.C. of Model City, New York

Excavations were conducted with odor control systems present at the excavation. When odors were detected, a mixture of Bio-Solve and water was sprayed both in the air and in the excavation area to reduce and inhibit odors emanating from contaminated soils. A pressure washer was used to apply the mixture. Further odor suppression was provided by covering active excavation areas with polyethylene sheeting on non/less impacted soils at the end of the day, as needed. Impacted sediments were managed for off-Site disposal, through the TFS, as necessary, to control vapor, odor and dust emissions as required under the ROD.

4.1.4 Community Air Monitoring Plan (CAMP)

A CAMP was implemented during intrusive activities to provide continuous direct measurements of total VOCs (TVOCs) and suspended particulates (i.e., PM₁₀) potentially released during excavation and handling of MGP-impacted materials. The CAMP included real time air quality monitoring performed throughout the duration of excavation activities and included upwind, downwind, and nearest receptor measurements. Meteorological measurements were collected using an on-Site weather station.

TVOC monitoring was accomplished using a photoionization detector (PID) with a 10.6 electron volt (eV) lamp. Each day the analyzer was calibrated with a 100 parts per million (ppm) isobutylene air standard. Continuous real-time and periodic hand-held air monitoring was conducted upwind and downwind of the work area along the Site perimeter from three portable air monitoring (PAM) stations. PAM stations were located in the upwind and downwind directions and at a sensitive receptor location.

The New York State Department of Health (NYSDOH) Generic CAMP recommends a 15-minute alert and action level for TVOCs of 5.0 and 25.0 ppm respectively above background. Remedial Design Appendix B - Community Air Monitoring Program details work zone and CAMP limits less than or equal to the NYSDOH Generic CAMP level of 5.0 ppm.

Work-zone action limits of 2.5 ppm and 5.0 ppm above existing ambient conditions were set within the Exclusion Zone. The CAMP monitoring had a single action limit set at 5.0 ppm, triggered by either an exceedance of the 15-minute average VOCs concentration of 5.0 ppm (above background) at the perimeter of the Exclusion Zone or odor complaint.

These action limits were used to determine whether modifications to remedial activities and operations were required. Engineering control measures or modifications to the excavation process to minimize VOC emissions would be initiated for sustained VOC levels greater than 2.5 ppm within the work zone. Engineering control measures would be initiated for 15-minute VOC levels greater than 5.0 ppm at the perimeter of the Site. If the downwind TVOC measurement was greater than 5.0 ppm above the upwind background level over a 15-minute averaging period, vapor suppression techniques (i.e., foaming or misting surfaces with water or covering exposed loose soils) were implemented to reduce the generation of TVOC emissions.

Following vapor suppression implementation, monitoring would continue and the NYSEG and NYSDEC on-Site representatives and the NYSEG project manager would be notified. If actions to control VOCs emissions were not effective and concentrations continued at or above 5.0 ppm (above background), the excavation and waste handling activities would be halted, and vapor suppression techniques continued until corrective measures were effective.

The 5.0 ppm action level (above background) is based on an estimated concentration for benzene, which is one of the VOCs included in the volatile organic analyzer reading. Since the volatile organic analyzer detects volatile compounds other than benzene, the 5.0ppm action level was considered to be conservative.

In conjunction with the real-time volatile emission monitoring, continuous monitoring equipment for particulate matter was used to collect real-time airborne particulate data on a 15-minute basis. The instrument used for this sampling was a DustTrak Ambient Particulate Monitoring System which operates on the principle of light scattering. Particulate measurements were based on 15-minute time-weighted averages. The continuous particulate samplers were zeroed daily and periodically checked for upscale conditions using a smoke generating device. Real-time PM10 particulate monitoring was performed at three monitoring locations along the perimeter of the remedial zones at upwind and downwind locations and at a sensitive receptor.

The NYSDOH Generic CAMP recommended for particulate matter less than 10 micrometers in size (PM10) an alert and action level of 0.10 and 0.15 milligrams per cubic meter (mg/m³) [100 and 150 micrograms per cubic meter (µg/m³)] respectively above background. This action limit was used to determine whether modifications to remedial activities and operations were required. If the downwind particulate measurement of particles less than PM10 was greater than 0.10 mg/m³ above the upwind background level over a 15-minute averaging period, or if dust was observed leaving the project area, dust suppression techniques (i.e., misting surfaces with water or covering open piles) were implemented to reduce the generation of fugitive dust. If the action level of 0.15 mg/m³ (above background) was exceeded for a 15-minute period, the NYSEG and NYSDEC on-Site representatives and the NYSEG project manager would be notified, and the source of the exceedance identified, and corrective actions implemented.

CAMP results are presented in Section 4.2.7 of this document.

4.1.5 Contractors Technical Execution Plan (TEP)

The Remediation Engineer reviewed all plans and submittals for this remedial project (i.e., those described in Section 4.1 above plus contractor and subcontractor submittals) and confirmed that they were in compliance with the RD. All remedial documents were submitted to NYSDEC and NYSDOH in a timely manner and prior to the start of work. NYSDEC correspondence pertaining to approvals of various items is provided in **Appendix D**.

4.2 Remedial Program Elements

4.2.1 Contractors and Consultants

During this period of remedial activities at the Site, a Consultant, a remedial action Contractor, and numerous subcontractors were retained:

1. AECOM USA, Inc – AECOM, under direct contract to NYSEG, was the owner's (NYSEG's) Consultant for the RD and served as Resident Engineer/Construction Manager during the RA. As Resident Engineer, AECOM was responsible for monitoring work for conformance with the RD. The firms below were sub-contractors to AECOM during the performance of the project.
 - a. Eurofins Test America – Test America Laboratories, Inc. of Amherst, New York was AECOM's subcontractor that performed analytical laboratory services for Phase 2 of the remediation.
 - b. ALS Environmental – ALS Group USA, Corp. of Rochester, New York was AECOM's subcontractor that performed analytical laboratory services associated for Phase 1 of the remediation.
 - c. Nothnagle Drilling, Inc. of Scottsville, New York – was AECOM's subcontractor for drilling and well installation services during Phase 1 and Phase 2 of the remediation.
 - d. Atlantic Testing Laboratories was AECOM's subcontractor for vibracore drilling.
 - e. ConeTec, Inc of West Berlin, New Jersey was AECOM's subcontractor for Cone Penetrometer Testing (CPT) drilling.
 - f. Dakota Technologies, Inc of Fargo, North Dakota was ConeTec's subcontractor for TARGost testing in conjunction with CPT drilling.

- g. IGS - Integrated Geotechnical Solutions, Inc of Hainesport, New Jersey was AECOM's subcontractor for vibration and settlement monitoring during Phase 1 of the remediation.
 - h. GeolInstruments of Narragansett, Rhode Island was AECOM's subcontractor for vibration and settlement monitoring during Phase 2 of the remediation.
 - i. Eco Rental – Eco-Rental Solutions, LLC of Rochester, New York was AECOM's subcontractor for community air and turbidity monitoring during Phase 1 of the remediation.
 - j. Pine Buyer LLC - Doing business as: "Pine Environmental Services LLC", (Pine) with offices at 405 Cambridge Ave, Syracuse, New York provided field air and weather monitoring instrumentation during Phase 2 of the remediation.
 - k. DR Pilla – Dominick R. Pilla Associates PC of Nyack, New York was AECOM's subcontractor for gas house structural repair consulting.
 - l. Woodford Brothers - Woodford Brothers, Inc., of Apulia Station, New York was AECOM's subcontractor for underpinning of the former gas house during Phase 1 of the remediation.
2. Severson Environmental Services, Inc. – SES of Niagara Falls, New York was the Remediation Contractor (Contractor) for the remedial action (July 2015 to December 2019). SES's duties included: asbestos abatement; Site setup; sheet pile installation; excavation; dredging; dust control, and Site restoration. The following is a list of subcontractors utilized by SES:
- a. Thew Associates PE-LS of Canton, New York. was SES's subcontractor for Site surveying.
 - b. Richard Kaczynski – Kaczynski Land Surveying of Penn Yan, New York was SES's subcontractor for Site survey in 2015-2016.
 - c. Riccelli Trucking, Inc. of Syracuse, New York completed waste hauling (C&D).
 - d. Glynn Geotechnical Engineering of Lockport, New York completed shoring design.
 - e. Enviro-Tech – Enviro-Tech, Inc., was SES's subcontractor for the former gas house abatement.
 - f. Marchionda Excavating of Penn Yan, New York was SES's subcontractor for Site utility and temporary facilities set up.
 - g. Mertec of Penn Yan, New York was SES's subcontractor for Site electric utility set up.
 - h. FJM - Frank J. Marianacci, Inc of Bloomfield, New York was SES's subcontractor for building rehabilitation work at the outset of Phase 1.
 - i. CMI – CMI Structural Solutions, Inc of Ontario, New York was SES's subcontractor for helical pile underpinning during Phase 2 of the remediation.
 - j. ACP – Architectural Concrete Plus of Dundee, New York was SES's subcontractor for tie rod installation during Phase 2 of the remediation.
 - k. Rain for Rent of Avon, New York provided water storage tanks.
 - l. Clark Rigging of Lockport, New York was SES's subcontractor for Crane services.
 - m. C.P. Ward Crane of Scottsville, New York was SES's subcontractor for crane services.
3. ESMI – Environmental Soil Management, Inc of Fort Edward, New York was NYSEG's contractor for the off-Site thermal desorption of contaminated soils. The following trucking companies were used to transport the material:
- a. Longhorn – Longhorn Trucking Company, Inc. of Fort Plain, New York was a SES subcontractor for waste hauling.
 - b. R. Galusha – R. Galusha Transport, LLC of Fort Edward, New York was a SES subcontractor for waste hauling.
 - c. Cedar Hill – Cedar Hill Trucking, Inc. of Selkirk, New York was a SES subcontractor for waste hauling.
 - d. ICC – ICC Trucking of Holyoke, Massachusetts was a ESMI subcontractor for waste hauling.
 - e. Cason – Cason, Inc. of Duanesburg New York was a ESMI subcontractor for waste hauling.

- f. Maplewood Ice – Maplewood Ice Co. of Whitehall, New York was a ESMI subcontractor for waste hauling.
 - g. JGB – JGB Transport of Fort Ann, New York was a ESMI subcontractor for waste hauling.
4. Parsons - Parsons of Syracuse, New York was NYSEG's contractor for on-Site Construction Management/Oversight in November and December 2019.

4.2.2 Site Preparation

A pre-construction meeting was held at the Penn Yan Village Hall with NYSDEC, NYSEG, AECOM, SES, the Village of Penn Yan, and other stakeholders on June 25, 2015. The minutes of the pre-construction meeting are provided in **Appendix F**.

Documentation of agency approvals required by the RD is included in **Appendix D**.

A NYSDEC-approved project sign was erected at the project entrance and remained in place during all phases of the remedial action.

Pre-remedial activities were performed to abate hazardous materials within, and to structurally upgrade, the former gas house (refer Section 4.2.3) and prepare the Site for remedial construction activities (refer Section 4.2.4).

4.2.3 Pre-remediation Building Abatement and Structural Repairs/Reinforcement

During the RD it was determined that the former MGP building would remain on the Site through the remediation due to its historical significance to the Village of Penn Yan. Accordingly, it would then be necessary to stabilize and reinforce the building prior to installation of excavation shoring components. Before the structural work could begin, the building required abatement of hazardous materials which had been identified during the Hazardous Material Survey during the RD. These included the following ACMs:

- 9" x 9" floor tile
- Floor tile mastic
- Cementitious asbestos-containing exhaust pipe
- Exterior caulk
- Metal roof undercoating
- Roof flashing cement

Former gas house abatement and structural work took place from July through December 2015. SES mobilized the remediation crew in November 2015. Documentation of the ACM abatement is included in **Appendix G**.

4.2.4 Site Mobilization

Prior to the start of the remedial activities, the Site was prepared with several general Site preparation activities. These activities were performed by SES and their subcontractors. On behalf of NYSEG, the Construction Manager monitored activities for conformance with the RD. The following activities were conducted as part of the Site set-up:

- Utility Notification - Dig Safely New York was contacted prior to any construction activities, and on-Site and off-Site utilities were identified and marked out.
- A pre-construction meeting was held with NYSDEC, NYSEG, NYSDOH, AECOM, SES, and community stakeholders on June 25, 2015.
- Site Security – A temporary 6-foot high chain link fence was installed around the perimeter of the former MGP site. Entrance gates were located at the existing driveway locations along the curb line. A project sign for "NYSDEC Order of Consent No. D00002-9309" compliant with NYSDEC specifications was posted. During daily operations, admittance requirements and visitor monitoring were in effect, as specified in the HASP, for activities at the Site. Placement of the chain link fence was as shown on the design drawings.
- Additionally, the Contractor secured the use of a nearby property for Site offices and (clean) staging/laydown. This project support area was located at 131-147 Water Street across the street to the north and just east from the Site. A temporary fence was also installed on the opposite (south) side of the Outlet to prevent access to the

outlet during dredging activities. The fence on the far side of the outlet remained in place until dredging of cells 1-6 was completed and associated steel sheet piling removed.

- Local Traffic Control - Truck hauling access was controlled to minimize disturbance to local traffic patterns and loads.
- Mobile office trailers and Site offices – SES rented two mobile office trailers. The trailers were mobilized, blocked, and leveled to be utilized as offices: one for the Construction Manager, CAMP technician and NYSDEC oversight, and one for SES. Both trailers were equipped with tables, desks, electrical outlets, and internet hotspots. Office supplies, potable water and portable toilets were available for project personnel. Space for records storage, personal protective equipment (PPE), monitoring equipment, first aid, sample preparation and storage, and weekly project meetings was also available.
- Erosion and sedimentation controls - Prior to beginning work on-Site, silt socks and silt fence were installed along the perimeter of the Site as required by contract drawings. The integrity of the silt socks and silt fence was checked daily.
- Exclusion Zone – Barricades, snow fencing, and cones were used to delineate the perimeter of the Exclusion Zone. Additionally, when containing impacted materials, the TFS was identified as an exclusion zone.
- Contamination Reduction Zone - The work area Contamination Reduction Zone (i.e., the area immediately outside the Exclusion Zone) was used as a primary decontamination area for equipment and personnel. The Contamination Reduction Zone included any outdoor truck loading areas.
- To prevent contamination during the loading of contaminated soils for off-Site disposal, SES placed poly sheeting in the truck loading area prior to beginning loading. Soils making contact with trucks during loading were primarily removed by dry, physical means or secondarily by spot washing at the completion of loading.
- Personnel Contamination Reduction Area – The Personnel Contamination Reduction Area was located prior to exiting the Exclusion Zone. If personnel entered the excavation area, they were required to decontaminate their boots. A boot washtub with solution of detergent, water, and a long handle brush was used to decontaminate boots. An additional boot washtub containing rinse water, and a long handle brush was available for a final rinse. PPE was disposed of with contaminated soils.
- Support Zone -The Support Zone was the area where project support was rendered without contact with potentially contaminated material. This area was located outside the Contamination Reduction Zone and was set up in different locations as work progressed around the Site.
- A temporary on-Site wastewater treatment system for pre-treatment during dewatering of excavation areas prior to discharge to the Village of Penn Yan Wastewater Treatment Facility was installed. In addition, an SES subcontractor (Mertec) installed a three-phase 480-volt electrical supply and control panel to power the wastewater treatment plant. Erection and leak testing of the wastewater treatment plant was completed on September 9, 2016.
- A derelict railroad bridge span and pilings (i.e., the abutments were to remain) crossing the Outlet over the impacted area was removed;
- Setup of a wastewater treatment system discharge to the Village of Penn Yan approved sanitary sewer system manhole located on Water Street.
- Mobilization of construction equipment that was used for the on-Site remedial construction.
- Transportation and unloading of NYSEG AZ48 and SES sheet piles for the temporary sheet piling used around the excavation and dredging areas. Sheet piles were staged and prepared for installation on-Site.
- Preparation of the material handling pad.
- Setup and operation of the Temporary Fabric Structure and associated air handling system.

4.2.5 General Site Controls

Site Controls during the RA included: Site security; on-Site record keeping; erosion and sediment controls; excavation dewatering; and equipment decontamination. General components of each are as follows:

- Site security – Installation of a 6-foot temporary chain link fence surrounding the work areas, including the former MGP site, adjacent docks along the shoreline of the Outlet, and the affected area of the Outlet requiring dredging under the ROD.
- Job Site record keeping – Copies of correspondence, material manifests, project meeting minutes, Daily Reports, and permits.
- Erosion and sedimentation controls - Silt sock and silt fence were installed and maintained around the downgradient perimeter of the work area.
- Equipment decontamination and residual waste management – Equipment decontamination occurred over the active excavation area. This involved cleaning buckets with pressure washers over the open excavation, and decontamination of trucks by pressure washing (as needed) affected surfaces of tri-axes prior to leaving the Site.
- Waste management – Soils were pre-characterized during the PDI. Soils were classified as Non-hazardous Solid Waste or Conditionally Exempt MGP Remediation Waste as defined in DER-4. Pre-characterizing soils minimized the need for on-Site soil management

4.2.6 Nuisance Controls

In order to minimize disturbances to the surrounding community resulting from the RA (primarily dust, odors, turbidity, traffic, and noise), the following nuisance control measures were implemented:

- Construction work hours were generally limited to 10-hour workdays to minimize potential disturbance to nearby residences from construction noise.
- MGP odors were controlled by spraying Biosolve, a surfactant, mixed with water on exposed soils. Secondary odor control was available through covering waste soils with polyethylene sheeting. Further odor suppression was provided by covering active excavation areas with polyethylene sheeting or non/less impacted soils at the end of the day, as needed. Impacted sediments were managed for off-Site disposal, through the TFS, as necessary, to control vapor, odor and dust emissions as required under the ROD.
- Site soils were prevented from migrating off-Site by removing soils from disposal trucks by brushing and other dry removal techniques. A mixture of Biosolve and water was used to wash any wet soils off the trucks, as needed, while the trucks were within the Contamination Reduction Zone on-site. During dredging operations, trucks were loaded within the TFS. Site equipment transferring material or equipment from the Site to the trailer compound area were decontaminated to ensure no transfer of materials from the Site
- Dust suppression was provided by spraying water on exposed soils with hoses and pressure washers. Water was also sprayed when SES used cement kiln dust (CKD) with soils that were too wet to be transported safely. Dredged sediments were dewatered and amended, as needed, within the TFS on the material handling pad. Where possible, excavated soils were blended within the excavation in preparation for loading for off-Site transportation and disposal. Soils excavated from the bank area between the former gas house and the Outlet, and those excavated from within/under the former gas house, were managed on the material handling pad where they were loaded onto trucks for off-Site disposal.
- Local truck hauling access was controlled to minimize disturbance to local traffic patterns and loads. Prior to the start of trucking material off-Site, AECOM met with the Village of Penn Yan to determine truck routes. AECOM conducted a baseline survey of roads on the truck route on May 12, 2016. During Phase 2, trucks used to transport material off-Site were staged one-at-a-time at the Site entrance on Water Street. Traffic control measures were implemented during import and export of materials for the Site. Truck routing during Phase 2 was consistent with that utilized during the Phase 1 work.
- A complaint hotline was setup. This hotline was routed into a 24-hour answering service that would take information from the caller and then relay the information to Site personnel on the phone list for the most expedient resolution. The Site personnel on the contact list for the complaint hotline included NYSDEC, NYSEG, and SES staff and project managers to ensure an individual with appropriate authority could be reached immediately. Typically, the call would be returned by a representative of the NYSDEC, and the details entered into the project record.

4.2.7 CAMP Results

A CAMP was implemented during the RA as described in Section 4.1.4. Weekly data summary reports were generated to document and report on the previous week's air monitoring data collection activities, to include any corrective actions implemented as a result of high TVOC and/or PM10 concentrations observed. Weekly CAMP data summary reports are included as **Appendix H**.

During Phase 1, Site construction related CAMP exceedances occurred on the following days:

- November 3, 2015 PM10 exceedance during saw cutting activities. The Contractor used more water during saw cutting activities and dust levels returned to pre-alert levels.
- April 25, 2015 PM10 exceedance due to diesel exhaust during sheet pile installation activities adjacent to the CAMP station. The Contractor implemented control measures.
- March 28, 2017 PM10 exceedance caused by the exhaust of a demolition saw being used to cut concrete. The Contractor was directed to limit use of the saw to shorter duration events.
- July 10, 2017 PM10 exceedance caused by sawing concrete. The Contractor utilized additional dust control measures.

During Phase 2, Site construction related CAMP exceedances were observed on the following days:

- June 4, 2019 PM10 exceedance due to spraying Biosolve adjacent to the CAMP station.
- June 10, 2019 PM10 exceedance due to spraying Biosolve adjacent to the CAMP station.

4.2.8 Turbidity Monitoring Results

A Turbidity Monitoring Plan was implemented during the RA as stated in the ROD. Namely, this plan included continuous monitoring, via remote buoys upstream of the work areas, near the Liberty Street Bridge and downstream of the work area, below the dam structure at Main Street.

If the threshold differential turbidity level between the two locations of 100 Nephelometric Turbidity unit (NTU)s was reached, the Contractor was to implement additional Best Management Practices (BMP). Weekly data summary reports were generated to document and report on the previous week's turbidity monitoring data collection activities, and to include any corrective actions implemented as a result of high NTU observed. Weekly Turbidity data summary reports are included as **Appendix I**.

During Phase 1, Site construction related turbidity exceedances were observed on the following days:

- October 12, 2016 – TB#2 (downstream monitor) recorded 159.2 NTU on 10/12/16 at 12:15 pm due to the Village of Penn Yan opening Gate 6. Readings at TB#2 dropped to levels below 100 NTU at 12:45 pm and returned to regular levels approximately 1 hour later. The Village of Penn Yan was notified of the elevated readings.
- October 21, 2016 – TB#2 (downstream monitor) recorded readings greater than 100 NTU on 10/21/16 at 8:15 am. The peak was not due to work in the Outlet. Turbid water was being dumped into the sluiceway downstream of the work area from a storm drain outfall. The exceedance reached 115 NTU and lasted 15 minutes. The Village of Penn Yan was notified, and turbidity levels returned to normal approximately 1 hour later.

During Phase 2 no construction related turbidity exceedances were observed.

4.2.9 Reporting

Weekly field construction reports including a photographic log were generated to document typical aspects of the RA. The Construction Manager's weekly reports are included in **Appendix J**. During active periods of work, weekly progress meetings were conducted each Tuesday to discuss project activities, schedule, and community concerns. Meeting minutes are included in **Appendix F**.

4.3 Contaminated Materials Removal Action

Removal activities for contaminated or impacted materials included:

- Excavation of surface soil exceeding restricted-residential SCOs. The Contractor addressed the shallow soil removal areas of the Site near Water Street as the first excavations. These areas were cut to a depth of two feet below ground surface. A demarcation layer, (orange snow fence) was placed at the limit of excavation. Backfill was then placed to within six inches of restoration grade.
- Removal of former MGP structures, debris, piping, and major obstructions in the subsurface to the extent practicable. The former gas holder foundation was excavated and demolished. The broken-up concrete foundation was then sized such that it could be used to backfill the proposed material handling pad footprint temporarily. Additional piping and pipe conduit structures were removed from around the former gas house.
- Excavation of subsurface soil with concentrations of total SVOCs greater than 500 mg/kg, concentrations of VOCs greater than 10 mg/kg, or which are visually impacted with NAPL and/or NAPL sheens.
- Removal of these soils included the areas directly around the gas holder, piping, and ducts as well as a general area extending approximately 10 feet north and west of the former gas house. Near the northwest corner of the former gas house, the impacts were observed to extend beneath the gas house foundation. These impacts were not accessible during the Phase 1 work and were later addressed during Phase 2 (see sections 4.8.2 and 4.10.3 for additional detail).
- Removal of sediment in the Outlet which contained visible NAPL, sheen, or which produce a visible sheen when agitated.
- Removal of sediment in the Outlet with concentrations of total PAH compounds at levels above the Site-specific background concentration of 43 mg/kg tPAH17 (NYSDEC 2012) to a depth no greater than two feet.
- Backfilling of areas where sediment was removed to re-establish bottom elevations.
- Off-Site transportation and disposal, or treatment of soil and sediment removed from the Site at a permitted waste management facility.
- Construction water, fluids pumped from active excavations or that which had contacted contaminated materials, was collected and treated on-Site. Treated water was discharged to the Village of Penn Yan POTW under the Industrial Sewer Use Permit or hauled off-Site for disposal.
- Other remedial performance criteria (e.g., removal of source material). In areas where gross contamination was observed beneath the foundation during the grade beam installation, confirmation sample results were detected above criteria, or impacted material was observed outside of the design limitations, these materials were removed to visually clean and subsequently sampled for compliance with SCOs.

Results of soil samples analyzed in the laboratory were compared to the SCOs described in Section 2.2.

4.3.1 Material Removed/Limits of Removal

The limit of removal is shown in **Figure 3A - 3C**. Cross sections showing the depth of removal and geologic units are provided in **Figure 4A - 4C**.

Phase 1 included a minimum of two feet of excavation to allow a cover across the NYSEG property as required under the ROD. From approximately the tower west, the cut depth increased up to 6-8 feet in the location of the former holder foundation. Material was excavated to a depth of approximately five feet directly adjacent to and around the NW corner of the former gas house. From that deeper excavation heading west to the property line, and north to Water Street, a minimum of two feet of shallow soil was removed. Excavated areas were backfilled to a rough grade approaching restoration grades. Final finish grades were restored at the completion of Phase 2.

During Phase 1, the shallow excavation area and land-side upland excavations were completed, with the exception of the TFS footprint. It was planned that that area would not be excavated until after the sediment removal and bank excavations/backfill had been completed. Excavations extended to the walls (north and west) of the former gas house to two feet below ground surface. As these excavations proceeded downward, a slope of 2 horizontal on 1 vertical was utilized to prevent settlement of the building foundation. In order to continue the remediation (sediment dredging within the season fish "window"), it was mutually agreed with NYSDEC that the areas of observed contamination along the building foundation would be backfilled. Where contamination was observed, polyethylene sheeting was placed over the impacts prior to backfill. This allowed for the air handling system components to be placed between the former gas house and TFS.

Sediment dredging commenced with removal of PAH-impacted sediments in Cell 1 (at the downstream end of the dredge area, see **Figure 3B**) and proceeded in an alternating pattern across the channel width proceeding upstream. Dredging was able to progress into Cell 6 directly adjacent to the former gas house. However, deeper impacts discovered in the bank adjacent to the former gas house and the realized settlement of the gas house required remedial excavations/dredging in this area to be postponed into Phase 2.

During Phase 2, materials were excavated from the interior and exterior of the former gas house along the foundations to allow installation of the grade beams and helical piles. Once underpinned, the interior was excavated to allow for removal of former gas house infrastructure and MGP residuals. Inside of the gas house, the cut depth ranged from approximately six feet below the bottom of the building's first level floors to as much as 12 feet. Along, and in some cases under, the foundations cut depth varied from 3.5-8 feet. On the exterior of the building, materials were excavated in the wet from the bank area south of the gas house and west of the gas house. Excavation depths within the bank area cells varied based on visual confirmation of impacted material removal. Excavation depths in the individual bank area cells ranged up to 17 feet. In the area west of the gas house, beneath the former TFS, excavation depth varied per the design.

Excavation depths adjacent to the Outlet from the southwest corner of the former gas house to the western side of the property were as much as 12 feet. From the southwest corner of the building north toward Water Street, excavation depths ranged from approximately five feet to as much as 10 feet. Moving west from the building, two foot and five foot cut depths were achieved. During excavation work in Phase 2, excavation continued past design depth/grade as necessary to remove accessible visually impacted material.

Materials removed during both phases included:

- Cover Soil: During Phase 1, two feet of soil cover was removed from the upland portion of the Site and replaced with clean import fill. In Phase 2, additional cover was removed from the east side of the building to facilitate the Phase 2 underpinning work on the exterior of the building.
- Concrete Slabs: Exterior areas and interior concrete slabs either at or below grade were removed to the extent practicable to facilitate grade beam installation, soil remediation goals and preserve the stability of the building.
- Sediment: Within the Outlet, the dredge limits were divided into eight sub-cells (1, 2, 3, 4, 5A, 5B, 6A, 6B). Two feet of sediment was dredged from across cells 1, 2, 3, 4, 5A, and 5B;
 - Cells 6A and Cell 6B required additional sampling to more fully map the depth of coal tar NAPL and sheen impacts in place of the originally planned excavation in the dry to achieve SCOs. Dredge depth (thickness) in Cell 6A and 6B varied from 2-10 feet.
- Bank Area Soils and Sediment: In Phase 2, soils from the bank area were incorporated into Cell 6B which targeted sediment from the Outlet. These impacted materials were excavated in-the-wet to remove contaminated soils and debris while not increasing the potential for further settlement complications for the former gas house.
- Building Interior Sub-slab soils: During Phase 2, sub-slab soils were removed to facilitate the underpinning grade beams and allow for the excavation to “visually chase” coal tar/NAPL beneath the slabs. On the interior of the building, the concrete slabs in each room were removed to allow access to the soils beneath. Once slab removal had progressed to an appropriate point, the sub-slab soils and any remaining gas plant fixtures were removed to an appropriate depth to meet SCOs and allow installation of the grade beams. In areas of the building where the full extent of the impacted sub-slab soils could not be removed prior to the installation of grade beams, the soils beneath the grade beams were mapped to be undermined after grade beam installation.
- Gas Plant Fixtures: During Phase 2, gas plant fixtures on the interior and exterior of the building were removed to the extent practicable. Piping and former MGP equipment that contained coal tar residuals, hardened coal tar, and may have contained asbestos pipe-wrap was segregated for disposal to an appropriate facility. Piping not suspected to contain asbestos pipe-wrap was tested to be free of asbestos and scrapped.
- Upland Soils: Removal of soils to design depth was completed beneath the TFS. Upland soils were removed on the western half of the Site.

4.3.2 Disposal Details

Segregation of disposal soils into waste streams was achieved in the field based on visual and olfactory observations made as the work progressed. Visually impacted/odorous soil/sediment containing coal tar were disposed of at ESMI of New York, all other soils and sediments were disposed at Seneca Meadows.

During Phase 1, disposal of excavated material began on December 9, 2015 and continued until July 12, 2017.

Phase 1 disposal consisted of various wastes, including:

- Remediation Waste, disposed of at Seneca Meadows
- Conditionally-Exempt Non-Hazardous Waste disposed of at ESMI of New York
- C&D waste disposed of at Waste Management High Acres Landfill and Ontario County Landfill
- Universal waste: (5 pounds (lbs)). - 1 Mercury containing thermostat packed in vermiculite contained in a single 5 gallon bucket and 15 lb. - 17 - 84" fluorescent light bulbs and 23 - 42" fluorescent bulbs) disposed of at Model City, and 5 lb. - 3 PCB ballasts packed in vermiculite contained in a single 5 gallon bucket turned over to NYSEG for disposal.

In Phase 2, disposal of excavated Non-Hazardous Solid Waste materials began on October 30, 2018 and continued until November 21, 2019. The remediation waste materials were disposed at Seneca Meadows Landfill, and Conditionally-Exempt Non-Hazardous Waste was disposed of at ESMI of New York. Metal piping and equipment from the former MGP that contained residual coal tar and may have potentially contained asbestos was also disposed of during the work. This material was disposed at the Carunna landfill in Ontario, Canada under an approved profile through Clean Harbors.

During remedial work, construction water and bank cell wet excavation water was collected and treated in the on-Site wastewater treatment system. The water was treated and disposed of to the Village of Penn Yan wastewater treatment plant under an Industrial Sewer Use Permit. However, a small volume of treated water was found to be outside the Village acceptance criteria and was therefore disposed at an approved permitted off-Site treatment facility. Approximately 15,500 gallons of the treated wastewater was hauled off-Site for disposal at an approved facility.

Copies of waste manifests for these materials are included in **Appendix K**. Bulk disposal quantities of each waste stream are presented in **Table 1** below, by phase of project. Waste Transporters are presented in **Table 2** below.

Table 1. Summary of Waste Disposal Volumes and Facilities

Material (source)	Quantity			Disposal Facility Name(s)
	Phase 1	Phase 2	Total	
Remediation Waste	14,080.39 tons	11,858.07 tons	25,938.46 tons	Seneca Meadows Landfill, Waterloo, New York
Conditionally-Exempt Non-Haz Waste	1,905.11 tons	732.9 tons	2,638.01 tons	Environmental Soil Management Incorporated of NY, Fort Edward, New York
C&D Waste	109.79 tons	0 tons	109.79 tons	Ontario County, NY Landfill Casella
RQ, UN3077 Hazardous Waste	0 kg	4,670 kg	4,760 kg	Clean Harbor Canada, Inc - Landfill in Carunna, Ontario, Canada
Universal Waste	10 lb	0 lb	10 lb	CWM Chemical Services, L.L.C. of Model City, New York

Table 2. Waste Transporters

Waste Material	Transporter	License
Non-hazardous solid waste	Riccelli Enterprises	7A-434
	Sevenson Environmental Services	9A-768

Conditionally Exempt MGP Remediation Waste as defined by DER-4	Cedar Hill	4A-314
	Goulet	MA-113
	TMB Trucking, Fort Ann, LLC	5A-822
	Rojcewicz Trucking, LLC	5A-825
	Real Bark Mulch, LLC	5A-735
	Casella Construction, Inc.	VT-079
	JBG Transport	5A-683
	Longhorn Trucking	4A-485
C&D Waste	Riccelli Enterprises	7A-434
	Envirotech	8A-1008
Universal Waste	Frank's Vac Truck Service	NYD982792814
	NYSEG	N/A
Hazardous Waste (MGP pipe with ACM)	Clean Harbors	11-6-2021
Waste Water	Village POTW	ISU permit SIU-2A
	Tradebe	CTD021816889

4.3.2.1 Waste Characterization

Initially, waste characterization sampling was conducted prior to Site mobilization as part of the PDI. Two additional composite samples were collected in association with initial samples for Seneca Meadows waste characterization to demonstrate outliers for elevated lead results in the re-characterization sampling. Analysis was planned to be conducted in a stepwise process (i.e., the first sample was analyzed and the second held for possible analysis). The second sample, PWEXWS01002, was not analyzed. The additional sampling demonstrated that the initial elevated lead levels were anomalies.

Fourteen additional samples were collected from upland areas where visually impacted soil had been identified previously. These 14 additional samples were analyzed for only % sulfur in order to augment data sets from the initial waste characterization samples to satisfy screening criteria for ESMI of New York acceptance. Subsequently, the represented 14 soil sets were approved for disposal at ESMI of New York.

Three additional waste characterization samples were collected from outlet sediments (composited from nine locations) and submitted to Seneca Meadows and ESMI of New York. The additional three collected sediment waste characterization data sets demonstrated that the materials represented were acceptable at either ESMI of New York or Seneca Meadows.

During Phase 2, waste characterization samples were collected in association with impacts identified in the bank and under the former gas house. These samples were collected prior to the start of the Phase 2 work to ensure that the volume targeted for disposal was included under the accepted waste profiles for Seneca Meadows and ESMI of New York. Waste characterization samples of the metal piping and equipment from the former MGP were collected and submitted to Clean Harbors in order to identify the waste profile for this material. Acceptance for disposal was difficult due to the combination of coal tar/NAPL and asbestos containing pipe wrap. The material was approved for disposal at the Clean Harbors facility in Carunna, Ontario, Canada as hazardous waste (RQ, UN3077).

Table 1 shows the total quantities of each category of material removed from the site and the disposal locations. A summary of the samples collected to characterize the waste, and associated analytical results are summarized on **Table 3** attached. Waste Profile Applications which include characterization sample results and acceptance letters by disposal facilities are included in **Appendix L**. Manifests and bills of lading are included in electronic format in **Appendix K**.

4.3.3 On-Site Reuse

No excavated soils were reused as backfill material at the Site during either phase of the remediation.

4.3.4 Excavation Dewatering, Treatment, Monitoring and Discharge

A temporary wastewater treatment plant (WWTP) was mobilized and operated to store, treat, and discharge water collected and/or generated during the remedial efforts. The WWTP was mobilized and prepared to accept water on

September 29, 2016. Water sources included excavation dewatering and wastewater from decontamination areas. The WWTP was installed in accordance with the Village of Penn Yan's temporary discharge requirements for discharging to the sanitary sewer. The WWTP discharged to the Village of Penn Yan-approved sanitary sewer system manhole located in Water Street.

The WWTP was constructed on an enlarged embankment reaching farther into the Site from Water Street than the preconstruction conditions. This embankment was created with a temporary stockpile of import soils. The WWTP included two 20,000-gallon fractionalization tanks (one a baffle tank and the other a settling tank), primary and secondary bag filters, primary and secondary granular activated carbon vessels, and one 20,000-gallon effluent tank used to store water before discharging.

Per Village of Penn Yan requirements, the first 20,000 gallons of water were treated in batch mode, sampled, and the analytical results submitted to the Village Department of Public Works for approval prior to discharge. Following approval for continuous discharge, effluent samples were collected for every 40,000 gallons treated. Effluent samples were collected and shipped under Chain of Custody to either ALS or Eurofins Test America for analysis.

Over the course of the project, SES discharged 287,514 gallons of treated water; 87,978 gallons in Phase 1 and 199,536 gallons in Phase 2. **Table 1** summarizes the off-Site disposal events. Over the course of the project, 15 effluent samples were collected for analysis. The first 14 discharge samples did not contain any analytes in exceedance of criteria and were all acceptable for discharge. The July 23, 2019 batch, incidentally the last batch of water that was in process, approximately 10,000 had been accumulated in the effluent tank when the total cyanide analyte results showed a value of 0.28 milligrams per liter (mg/L). The Daily Maximum Effluent Concentration Limit was 0.1 mg/L. The Village of Penn Yan requested that a second analysis for total cyanide be run on the batch of water to determine if the previous result had been anomalous. The sample was collected on August 6, 2019 and returned a result of 0.34 mg/L. It was subsequently decided that the approximately 15,500 gallons that had been accumulated by October 29, 2019 could be disposed off-Site most efficiently. **Table 4** summarizes the analytical results for the effluent samples collected over the course of the project. The analytical data reports for the samples are presented in **Appendix M**.

4.3.5 Vibration and Settlement Monitoring

Vibration and Settlement Monitoring were conducted by the Construction Manager as detailed in the Vibration and Settlement Monitoring Plan (VSMP) located in Appendix F of the 100% RDR. The VSMP included vibration and settlement monitoring requirements for sensitive structures within 100 feet of shoring system installations or excavations. Vibration action limits were often reached, at times multiple instances per day, due to varying activities ranging from Site equipment operation to neighborhood truck traffic. Monitoring was accomplished with Instante! Micromate Plus seismographs equipped with telemetry enabling real-time notification when the vibration action levels were reached.

Work methods, best practices and scheduling/sequencing were adjusted as needed to reduce vibrations below the action level. Settlement monitoring was conducted using combinations of a liquid level system and a dual automated total station system. The VSMP was also updated to correspond with the Design Modifications made during the implementation of the RA.

Settlement monitoring documented the settlement of the former gas house from two primary events during the execution of the Phase 1 Site remedial activities. These included:

- May 24, 2016 - In excess of 0.75-inch settlement at the southeast corner of the former gas plant during installation of the first three secant piles of the retaining wall structure located approximately 7, 8 and 14 feet south of the building respectively. These were installed as part of the excavation support system for the excavation of impacted soils in the Outlet bank and into the Outlet itself, the originally designed Cell 6.
- February 15, 2017 - Between 0.045-0.055 inch settlement at the southwest corner of the building during the dredging of impacted sediments in the Outlet approximately 30 feet away.

In both cases work was stopped, the conditions assessed, and alternative means and methods evaluated and changed, as needed prior to continuation of the planned work. Further discussion on changes to the RD are detailed in Section 4.10.

4.4 Remedial Performance/Documentation Sampling

Post-excavation/post-dredging sampling was conducted in accordance with the ROD, RD, and DEC-approved Design Modifications (DMs). These post removal samples were categorized as documentation or confirmation samples:

- Documentation samples were utilized to document impacts at the end points (bottom and/or sidewalls) through chemical analysis for Site contaminants of concern (COC) where removal was planned to a minimum elevation or depth.
- Confirmation samples were used for screening of endpoints to determine if Site SCO's had been achieved or if follow-up/additional removal was required.

In Dredge Cells 1-5, targeting elevated PAH concentrations, documentation sampling was utilized. In the upland deep excavations, confirmation sampling was utilized.

4.4.1 Phase 1 Sampling

Phase 1 sampling conducted in the upland areas of the Site were conducted in accordance with the ROD and RD as follows:

- In accordance with the RD, sampling was not required in areas where two feet of surface material was removed to create space to install the required two feet of clean cover soils.
- In excavation areas deeper than two feet, one bottom sample was to be collected for each 2,500 square feet of excavated area (50'x50' grid on average). In the upland excavation areas, additional MGP impacts were generally not identified outside of the design limits. On March 30, 2016, two confirmation samples were collected which represented the bottom samples for the deep excavations completed to that date (the former holder foundation area and around the northwest former of the former gas house). Both samples returned results within acceptable SCOs.
- In the Outlet, documentation samples were to be collected at the rate of one per 2,500 square feet of dredged area (one per 50ftx50ft grid), based on the size of each individual dredge cell. This method would likely result in a slightly higher sample rate based on the footprint of the entire dredge area. Additionally, following discussions with NYSDEC, MGP impacts identified in cell 6B varied from the original RI conditions and necessitated a reduction in the grid size to 1,600 square feet so that "hot spots" could be addressed in the most efficient manner.

During Phase 1, samples were collected at the completion of dredging (based on GPS coordinates) within each cell. The AECOM Construction Manager and the on-Site NYSDEC representative, along with the SES Site Superintendent directed the equipment operator to scrape the bottom of the dredged area (roughly center of 40'x40' grid). The material was brought to the surface and screened visually for signs of impact and odor. If impacts were not observed, a sample was collected and submitted to the laboratory for analysis for VOCs and SVOCs. In cases where impacts were observed after the first dredge pass, additional dredging was directed in the field (typically 6"-12" deeper). When "over dredging" in excess of 6"-12" deep was required to reach a "clean" bottom, the remediation team (i.e., NYSDEC, NYSEG, AECOM, SES) held meetings to discuss and develop the path forward. In the case of Cell 6B, over dredging resulted in reducing the footprint of Cell 6B in response to the settlement observed at the southwest corner of the former gas house.

At the request of the Village of Penn Yan, SES assisted with the replacement of Gate 6 of the Outlet control structure. To facilitate replacement of the gate, a cofferdam was installed in the raceway upstream of Gate 6 and the raceway was drained. After draining the raceway, sheens were observed leaching from the sediment. This area was outside the scope of the RA. For informational purposes, AECOM collected two sediment samples for VOC and SVOC analysis. Laboratory results for the samples collected reported concentrations below SCOs.

4.4.2 Phase 2 Sampling

Confirmation and documentation samples were collected and submitted for analysis during the remedial excavation portion of the work in Phase 2. Confirmation and documentation sample results were provided to NYSDEC as they were received. In general, for confirmation samples, NYSDEC reviewed the results and provided agreement to proceed with backfill of an excavation if the results met SCOs. Documentation sample results were also reviewed by NYSDEC.

Confirmation soil sampling was conducted in the following areas:

- Within the former gashouse rooms and areas where the building foundation was undermined.
- In the upland areas west of the gas house where both bottom and sidewall confirmation samples were collected per the DER-10 requirements, or as needed for concluding hotspot excavations.
- Sample locations were selected per the approved DM (discussed in Section 4.10) for sampling within and under the building, or as selected in consultation with NYSDEC. A sampling plan (location figure with all samples labeled) was developed in coordination with NYSDEC to ensure consistent sample identification as the work progressed. Samples located along the grade beams around the perimeter of each room were categorized as “sidewall samples”, i.e., PWEXSWXXXXX. Samples collected across each room excavation were categorized as “bottom samples”, i.e., PWEXBMXXXXX. When visual impacts were observed beneath the grade beams, confirmation samples were not collected during initial excavation within each room. As mutually agreed with NYSDEC as part of DM-003, visually impacted soils would be removed from under the grade beams following completion of underpinning (i.e., after tie rod installation/tensioning and helical pile installation/loading). In portions of the building where this approach was required, subsequent bottom confirmation sampling occurred prior to backfilling with Controlled Low Strength Material (CLSM) aka “flowable fill”. Additional detail discussed below in this section.

Figure 3A - 3C presents the locations of confirmation samples collected and the approximate location of the visual and documentation samples collected.

Documentation samples were also collected and submitted for analysis. Typically, during excavation in-the-wet, a visual confirmation sample was collected and examined for the presence of contamination (visually clean). With approval from NYSDEC, if visually clean, a documentation sample was collected. Documentation samples were submitted for analysis. Documentation samples were collected in the following areas:

- In the Cell 6B bank and shoreline excavation area south of the former MGP building;
- In the dredged sheen remediation area in the Outlet;
- Shallow upland excavation areas at the north end of the TFS; and
- Multiple locations beneath the former TFS where fill was used to construct the TFS.

Sampling approach and methodology during Phase 2 (excavations inside/under the gas house and the remaining upland area) was in accordance with the ROD and the Department-approved RD. Sampling did vary by the removal area and the extent of impacts observed. The approach and rationale for the sampling was described in NYSDEC-approved DM 004.

The documentation and confirmation samples were collected using pre-cleaned stainless-steel equipment. In general, sidewall and bottom sample locations with open access were collected by hand using stainless steel spoons and utensils. In some locations where backfill materials used in constructing grade beams slumped onto the sample location, a stainless-steel bucket auger was used to sample the materials beneath the backfill. Sampling beneath the undermined foundation was completed using stainless steel spoons or the bucket auger depending on safe access limitations at the time of sample collection. Where stainless steel spoons were used, sample jar sets were directly filled from the sample location using a stainless-steel spoon. When sampling using the bucket auger, materials in the auger were emptied into a stainless-steel bowl and the sample jars filled directly from the bowl.

During the in-the-wet bank excavation work, deep excavations without simple safe access, or dredging in the Outlet, the excavator bucket was used to bring the material to the surface for sampling. Representative samples were collected from the excavator bucket using stainless steel spoons to directly fill the sample jars.

All sampling equipment was decontaminated between sample locations using an Alconox® wash, and a deionized water rinse (2X). Cleaned sampling equipment was segregated into new plastic containers to protect from re-contamination.

4.4.2.1 Sampling at Former Gas House

During grade beam preparation excavations, subfloor excavations and obstruction removal, it was found that the foundations did not extend as deep as observed during the supplemental investigation of the building. This required further modification to the underpinning design. The portions of the building where the foundations did not extend a

minimum of three and a half feet below grade required extending the grade beams below the bottom of foundation. This resulted in creating a block of soil (between the grade beams and under the building wall) that could not be excavated (refer to Section 4.10 for additional detail). Grade beam excavations were completed to the depth appropriate to complete each beam section installation.

Where MGP-impacted materials were observed beneath the foundation or below the bottom depth of the grade beam, the grade beams were installed with the intent to remove impacted soils and coal tar remaining after the fully interconnected underpinning system was completed. To this end, and to prevent tracking of contamination, polyethylene sheeting was placed below a bedding of crushed stone beneath the grade beams in grossly contaminated areas. These areas where MGP-impacts were observed to extend beneath the grade beams were later addressed during the remedial excavations (refer Section 4.6).

During remedial excavation under the wall/grade beams where gross contamination was previously documented (Northwest room and Tower) or where sidewall confirmation sampling results from adjoining rooms did not meet criteria, contaminated soils were excavated from below the underpinned foundation. Once a visibly clean bottom of excavation was observed, a confirmation sample was collected from approximately the center of each 10-foot long excavation beneath the underpinned foundation.

Where gross contamination was not present beneath the foundation, inside and outside of the building, confirmation samples (sidewall) were collected approximately six inches below the bottom of the grade beam. These were considered sidewall samples. Sidewall samples were collected at nominal 10-foot spacing around the perimeter of the rooms; inside and outside the building. Sample locations were adjusted based on the location of grade beams and the location of installed helical piles.

Confirmation samples were also collected from the bottom of the excavation in each room. In the larger rooms (Northwest, Southwest, and Southeast rooms), a minimum of two bottom samples were collected. In the Southeast room, three bottom samples were collected. In the smaller rooms (small Northeast, large Northeast, West Corridor and Tower) one bottom sample was collected. Bottom and sidewall sample locations were adjusted with NYSDEC concurrence to address areas of deeper excavation. Additional bottom samples were collected if multiple areas of localized gross contamination required deeper excavation.

As sampling progressed, there were several locations where grossly contaminated soils or contaminated foundations was observed such that “visual” cleanup criteria were not met. These included the northwest corner of the Southwest room, the northeast corner of the Northwest room, and the northwest corner of the large Northeast room. Based on sidewall sample results in these two areas of the former gas house, these locations were included as areas where grossly contaminated soils were present and were subsequently excavated from below the underpinned foundation. Following the removal of the impacted soils in these locations, confirmation samples were collected.

Confirmation sample results were reviewed against the appropriate SCOs and then provided to NYSDEC for review and authorization to proceed with backfill or placement of CLSM. Confirmation and documentation samples results are summarized on **Table 5** and **Table 6** respectively. The sample analytical results show that the SCOs defined for the RA have been met. The following is noted:

- QA/QC – All sampling was completed in accordance with Section 5.9 of the RD Report and DER-10.
- DUSR – Data Usability Summary Reports (DUSRs) were prepared for all data generated in this remedial performance evaluation program. The DUSR and associated raw data is included in **Appendix M**.

4.5 Imported Backfill

Several types of fill were imported to the Site for various uses. **Table 7** below provides a breakdown of the various materials, as well as use, source, import quantity, and placement:

Table 7. Backfill Quantities and Sources

Import Fill Description	Use	Source	Quantity imported	Placement
Crushed Cobbles	Bridging/ roads/work platforms	City Hill	414.5 tons	Various locations around site – most to be removed during site restoration

Import Fill Description	Use	Source	Quantity imported	Placement
Concrete	Secant pile template	Hansen	64.5 Cubic Yards (CY)	Secant pile template – approximately 50% has been removed to date. The rest was removed/disposed as part of the Phase 2 bank excavation.
#2 Stone	Various	The Dolomite Group – Manchester, NY	2117.6 tons	55.86 tons used for excavation at NE corner of the site (Water Street Wines and Spirits driveway) 76.56 tons used for laydown area lot 95.15 tons used for installation of secant template 157.67 tons used for onsite WWTP containment 500.4 tons used for TFS asphalt sub-base 244.97 tons used to construct upland crane platforms due to vibration concerns with former gas house 172.31 tons used in the construction/maintenance of site haul roads
Medium Stone Fill	Specified to be on site as part of the ERP	The Dolomite Group – Bath, NY	62.13 tons	Approximately 62.13 tons was stockpiled onsite in the laydown area on the north side of Water Street for emergency use as required under the Article 16 Flood Control Permit. Approximately 176.32 tons was used to buttress the work platform sheeting when cell 6B over dredge was required.
Common Underwater Fill	Specified for used as cap material below 2 foot cut in dredged areas	City Hill	2,430 tons	110.6 tons used to buttress bank area sheeting 2,398.49 tons used as deep backfill in cell 6B, 53.68 tons used to backfill secant template (later removed in Phase 2)
Habitat Fill	Top 2 feet of cap material in dredged areas of Keuka Lake outlet including Cell 6B in the bank area.	City Hill	1,358.25 tons	Two foot cap on all areas dredged from Keuka Lake outlet
Asphalt	TFS material processing area	Rochester Asphalt – Manchester Plant	395.12 tons	Inside footprint of Temporary Fabric Structure. Material was disposed at end of project.
6" Rip Rap	Work platforms	The Dolomite Group – Manchester, NY	967.2 tons	Used to construct various work platforms for equipment as required during Phase 1. Material removed and disposed during Phase 2.
Bank Run Gravel	TFS and WWTP bases	City Hill	2,227.1 tons	621.1 tons used to construct TFS base 1606 tons used to construct onsite WWTP pad. A portion of this material was used during site restoration.
Common Fill	General Site Backfill	City Hill - Dresden	4,605 CY	Placed in upland excavation areas, generally top two feet of backfill.
#1 and #2 Washed Stone	Grade beams and foundation drainage.	City Hill	147.51	Placed around drainage pipe installed around the perimeter of the building.
#1 Washed Stone	Bedding for excavations.	City Hill	116.55	Backfilled bottom of grade beam excavations.
Topsoil	Site Restoration and bank area	City Hill	300	Bank area and throughout site for restoration.

The import materials were approved by the Construction Manager prior to placement. Where applicable, analytical results were provided to the Construction Manager prior to importing backfill materials.

Documentation of the import materials is included in **Appendix N**. All soil and sediment backfill sample results met criteria. Final backfill elevations are shown on **Figure 5A** and **5B**, backfill thicknesses are depicted on the cross sections in **Figures 6A** and **6B**.

4.6 Contamination Remaining at the Site

SCOs, as defined under the ROD, were achieved with minor exception. Instances documented through sampling and chemical analytical testing are detailed below. Additional detail on COCs remaining at the Site at concentrations below SCOs is documented in **Tables 5** and **6**.

4.6.1 Sediment

In accordance with the ROD, the site-specific background concentration for sediment was tPAH17 of 43 mg/kg. This goal was exceeded at 4 sample locations in the Outlet. A minimum of two feet of clean habitat fill was installed above these locations. All visual contamination was removed per the NYSDEC-approved visual screening process.

Table 8 and **Figures 7A** and **7B** summarize the results and locations of the sediment samples collected that exceed the SCGs after completion of the RA.

4.6.2 Foundation Walls

In areas of the building where the building's foundation was shallower than anticipated, MGP impacts (soils and coal tar) remain on or below the existing foundation between the newly installed grade beams. Due to building stability issues and the impracticality of removing these materials, it became necessary to remove impacted materials from under the wall/grade beams and backfill with CLSM. The areas shown on **Figure 8** were undermined to remove gross contamination present under the wall/grade beams. After undermining, once a visibly clean bottom of excavation was observed, a bottom confirmation sample was collected at the approximate center of each 10-foot section excavated.

After review of the bottom sample results against the SCOs (refer **Table 5**), backfill with CLSM was authorized by NYSDEC. Backfill with CLSM was completed as specified in WCD-004 R3 20190422. CLSM materials were placed a minimum of 12 inches below both grade beams, extended a minimum of 12 inches beyond both interior and exterior grade beams, and up onto the grade beams 15 inches. In conjunction with the newly installed grade beams, the CLSM encased remaining impacted material within concrete (grade beams and CLSM). The areas of the building where CLSM was installed are shown on **Figure 8**. In-place containment of impacted materials with concrete and CLSM in these areas was authorized by NYSDEC with approval of the work change directive. The impacted soils encased between the grade beams and CLSM could not be sampled.

4.7 Soil Cover System

The Site ROD required that a minimum of 24 inches of clean soil cover be present across the Site. The Site cover consists of either structures such as buildings, pavement, sidewalks comprising the Site development, or a soil cover in areas where the upper two feet of exposed surface soils would exceed the restricted-residential use SCOs.

The cover system is present in areas where deep soil excavation was not performed during the remediation of the Site. Where the soil cover is required, it is a minimum of two feet of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted-residential use. The soil cover is placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. The cover system provides an additional barrier between the subsurface and any potential receptors at the Site.

4.8 Other Engineering Controls

In addition to the cover discussed in Section 4.7, the other engineering controls (ECs) for the Site are discussed below. These are pursuant to the Site Management Plan (AECOM, 2020) [**Appendix O**].

4.8.1 Soil Engineered Cover System

Exposure to contamination remaining at the Site is prevented by a soil and engineered cover system placed over portions of the Site. On the Water Street side of the Site, this soil and engineered cover system is comprised of a minimum of 24 inches of clean soil. On the Outlet Bank side of the building, this system is comprised of:

- Six-inch thick geoweb infilled with a one-inch layer of AquaGate overlain by a five-inch layer of AquaBlok
- Geotextile demarcation layer
- Minimum of 12 inches of clean soil

Figures 5A and 6B present the location of the two cover systems and applicable demarcation layers. The Excavation Work Plan (EWP) provided in Appendix D of the Site Management Plan (SMP) outlines the procedures required to be implemented in the event the cover system is breached, penetrated, or temporarily removed, and any underlying remaining contamination is disturbed.

Procedures for the inspection of this cover are provided in the Monitoring and Sampling Plan included in Section 4.0 of the SMP. Work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a HASP and associated CAMP prepared for the Site and provided in SMP Appendix E.

4.8.2 Controlled Low Strength Material (CLSM)

CLSM is present in the area of the building foundation as described in Section 4.6.2. The CLSM shall not be removed without prior approval from NYSDEC.

The EWP provided in the SMP Appendix D outlines the procedures required to be implemented in the event the EC is breached, penetrated, or temporarily removed, and any underlying remaining contamination is disturbed. Work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a HASP and associated CAMP prepared for the Site and provided in SMP Appendix E

4.9 Institutional Controls

A series of Institutional Controls (ICs) is required by the ROD to: (1) implement, maintain, and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination; and (3) limit the use and development of the Site to restricted-residential uses.

Adherence to these ICs on the Site is required by the Environmental Easement and will be implemented under the SMP. ICs identified in the Environmental Easement may not be discontinued without an amendment to, or extinguishment of, the Environmental Easement. The IC boundaries are shown on SMP Figure 2A and 2B. These ICs are:

- The property may be used for restricted-residential use;
- All ECs must be operated and maintained as specified in the SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Yates Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;
- Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;
- Data and information pertinent to Site management must be reported at the frequency and in a manner as defined in the SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in the SMP;

- Access to the Site must be provided to agents, employees, or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement;
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on SMP Figure 2A and 2B, and any potential impacts that are identified must be monitored or mitigated; and,
- Vegetable gardens and farming on the Site are prohibited.

Other planned restrictions to the Site, as per the ROD, include compliance with the approved SMP provided as **Appendix O**.

4.10 Deviations from the Remedial Design

Deviations from the approved RD are discussed in the following subsections. Challenges encountered during the structural stabilization of the former gas house portion of the remedy resulted in several changes to the remediation approach in the first few months of the work. Revisions to the design were submitted for NYSDEC approval in one of four DMs (DM-001 through DM-004). DM-001 and DM-002 were completed during Phase 1, DM-003 and DM-004 were completed during Phase 2. The DMs and corresponding NYSDEC approvals are included in **Appendix D**.

4.10.1 Diesel Range Organics Sheen

On November 8, 2016, sheen was observed coming from the area around the storm sewer outfall downstream of the former railroad bridge abutment in Cell 2. Additional dredging was conducted to remove material in the area of the sheen. The impacts appeared to be from non-MGP related contaminants and appeared to look and smell like diesel fuel.

A sample was collected and sent to a laboratory for analysis and the area was contained with absorbent oil booms and an impermeable silt curtain. The sheen was reported to NYSDEC Spill Response Group on November 9, 2016 (Spill #1607790). A representative of NYSDEC Spill Response visited the Site on November 10, 2016 and gave verbal approval to backfill the area around the observed sheen. Email confirmation was received on November 14, 2016 that no further action was required. Documentation of email correspondence and the spill report are included in **Appendix D**.

4.10.2 Sediment Dredging Cell Containment

Due to the flow requirements in the Outlet, a change to the cell design was required in order to maintain acceptable emergency response action times in the Article 16 Permit negotiations. A multi-layer turbidity curtain alternative was presented as the headwater and backwater ends of the excavation cells rather than steel sheet pile. The concern was that in the event of a rain event, flows in the outlet would not be sufficient to adequately manage lake levels and sheeting extraction would be ineffective, costly, and too slow to prevent flooding, and associated damage around the Keuka Lake shore.

Upon consultation between AECOM, SES, NYSEG, NYSDEC, and the Keuka Lake Association, the change to turbidity curtains was approved and implemented. Due to the main channel of the Outlet not being able to be dewatered and excavated in the dry, NYSDEC required that a supplemental investigation take place to more fully map contamination present in the Cell 6 portion of the RD-proposed dredge. Subsequent findings revealed that impacts extended up to 10 feet deep into soils and sediments beneath the previously inaccessible bank slope.

4.10.3 Gas House Settlement

Settlement of the former gas house was realized during construction of the secant pile wall. The resulting stop work order was in place until the building could be structurally stabilized. It was determined that the most reasonable approach would be to underpin the southern section of the former gas house.

4.10.4 Impacts Within the Gas House

After removal of the ACM flooring in the Northeast room during the initial abatement portions of the structural restoration of the former gas house, a small tar vault (approximately 4ft³) was identified beneath the timber floor structure. Identification of this vault during the PDI was impossible due to the presence of the suspect ACM flooring in that area. Identification of the vault indicated that additional MGP process components likely existed under the

existing floors within the former gas house. The project team, AECOM's Construction Manager, Engineer of Record, project geologists, SES's Superintendent, and project engineer, coordinated an investigation inside and under the former gas house and found extensive MGP impacts in the Northwest, Northeast, and Southeast rooms. A complete re-design for Phase 2 was then undertaken during the shutdown.

4.10.5 Deeper Impacts along the Bank

With the identification of deeper MGP impacts in Cell 6B, as well as the additional impacts discovered under the former gas house, impacts within the area between the former gas house and the waters' edge were found to extend several feet deeper into the subsurface soils. A comprehensive redesign of the bank area including the portion of Cell 6 (later 6B) directly towards the building, and to address the widespread impacts and process components within the building, required a temporary shutdown of Site work to fully engineer and procure the expanded remedy.

4.10.6 Post-Dredge Sheen Area Removal

During remobilization for Phase 2 of the RA, sheens were observed in the Keuka Lake Outlet similar to those produced from the Site impacted sediments prior to dredging. Effort was made to identify where the sheen was originating from, but no determination was able to be made before temperatures (air and water) dipped below the seasonal highs of summer. Historically, the impacted sediments had ebulliated tar and sheen during the warmest water conditions. Outlet conditions were monitored throughout the fall, winter, and spring with little or no sheen and/or tar noted.

In order to identify the source (or sources) of the tar/sheen observed during the warm water conditions, it was decided to conduct a supplemental investigation during the summer of 2019. AECOM submitted the *Keuka Lake Outlet Sheen Investigation – Work Plan* dated July 31, 2019. NYSDEC approved the work plan and on August 6, 2019, AECOM mobilized staff and equipment to conduct the investigation. SES supported the effort with use of a boat, driver and additional labor as needed. Through the probing work across the remedial dredge areas, it was possible to isolate an area approximately 10 feet across the Outlet channel and approximately 30 down the centerline of the channel that produced sheen and tar when aggressively probed and agitated. Further detail is provided in the PY Outlet Sheen Investigation Letter Report included in **Appendix P**.

The delineated area producing sheen and tar was subsequently re-dredged between October 14 and 16, 2019. The area was backfilled with habitat fill following collection of documentation samples. Refer **Figure 3A** for re-dredge location, limits and documentation sample layout.

5. References

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NYSDEC, 2010. DER-10 – “Technical Guidance for Site Investigation and Remediation”. May 3, 2010.

NYSDEC, 1994. Order on Consent (Index Number DO-0002-9309). March 1994.

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NYSDEC, 2009. *CP-43: Groundwater Monitoring Well Decommissioning Procedures*. December 2009.

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Table 3A: Waste Characterization Sample Analytical Results - VOC

Location ID Sample Date					PDI-01 7/10/2013	PDI-02 7/10/2013	PDI-03 7/10/2013	PDI-04 7/10/2013	PDI-05 7/10/2013	PDI-06 7/10/2013	PDI-07 7/10/2013	PDI-08 7/10/2013	PDI-09 7/10/2013	PDI-09 7/10/2013	PDI-10 7/10/2013	SS-07 7/10/2013	SS-08 7/10/2013	SS-09 7/10/2013	PWEXWS01001 10/15/2015
Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted- Res	Seneca Meadows TCLP Waste Criteria	Seneca Meadows Waste Acceptance Criteria	PDI-1-071013	PDI-2-071013	PDI-3-071013	PDI-4-071013	PDI-5-071013	PDI-6-071013	PDI-7-071013	PDI-8-071013	PDI-90-071013	PDI-9-071013	GTB-2-PDI-10-071013	SS-7-071013	SS-8-071013	SS-9-071013	Bk08862
BTEX Compounds (ug/Kg)																			
Benzene	71-43-2	4800	NL	10000	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	21	< 5.6	< 6.4	< 6.3	NA
Ethylbenzene	100-41-4	41000	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
m&p-Xylene	1330-20-7-m,p	NL	NL	NL	< 11	< 11	< 11	< 12	< 12	< 11	< 12	< 55	< 14	< 14	< 12	< 11	< 13	< 13	NA
o-Xylene	95-47-6	NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Toluene	108-88-3	100000	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Xylenes (total)	CALC-XYLENE	100000	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 55	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Total BTEX (ug/Kg)	CALC-BTEX	NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 55	< 7.2	< 7.2	21	< 5.6	< 6.4	< 6.3	NA
Other VOCs (ug/Kg)																			
1,1,1-Trichloroethane	71-55-6	100000	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
1,1,2,2-Tetrachloroethane	79-34-5	NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
1,1,2-Trichloroethane	79-00-5	NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
1,1-Dichloroethane	75-34-3	26000	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
1,1-Dichloroethene	75-35-4	100000	NL	14000	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
1,2-Dichloroethane	107-06-2	3100	NL	10000	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
1,2-Dichloropropane	78-87-5	NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
2-Butanone	78-93-3	100000	NL	4000000	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	6.5	< 5.6	< 6.4	< 6.3	NA
2-Hexanone	591-78-6	NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
4-Methyl-2-pentanone	108-10-1	NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Acetone	67-64-1	100000	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Bromodichloromethane	75-27-4	NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Bromoform	75-25-2	NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Bromomethane	74-83-9	NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Carbon disulfide	75-15-0	NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Carbon tetrachloride	56-23-5	2400	NL	10000	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Chlorobenzene	108-90-7	100000	NL	2000000	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Chloroethane	75-00-3	NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Chloroform	67-66-3	49000	NL	120000	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Chloromethane	74-87-3	NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
cis-1,2-Dichloroethene	156-59-2	100000	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
cis-1,3-Dichloropropene	10061-01-5	NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Dibromochloromethane	124-48-1	NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Styrene	100-42-5	NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Tetrachloroethene	127-18-4	19000	NL	14000	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
trans-1,2-Dichloroethene	156-60-5	100000	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
trans-1,3-Dichloropropene	10061-02-6	NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Trichloroethene	79-01-6	21000	NL	10000	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Vinyl chloride	75-01-4	900	NL	4000	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	< 6.1	< 5.6	< 6.4	< 6.3	NA
Total VOCs		NL	NL	NL	< 5.6	< 5.7	< 5.5	< 6.0	< 6.2	< 5.7	< 5.9	< 28	< 7.2	< 7.2	27.5	< 5.6	< 6.4	< 6.3	NA
VOCs-TCLP (ug/L)																			
1,1-Dichloroethene	75-35-4	NL	700	NL	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA
1,2-Dichloroethane	107-06-2	NL	500	NL	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA
2-Butanone (MEK)	78-93-3	NL	200000	NL	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	NA
Benzene	71-43-2	NL	500	NL	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA
Carbon tetrachloride	56-23-5	NL	500	NL	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA
Chlorobenzene	108-90-7	NL	100000	NL	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA
Chloroform	67-66-3	NL	6000	NL	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA
Tetrachloroethene	127-18-4	NL	700	NL	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA
Trichloroethene	79-01-6	NL	500	NL	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA
Vinyl chloride	75-01-4	NL	200	NL	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	NA

Notes:
NA = Not Analyzed
NL = Not Listed
ND = Not Detected
U = Not detected above given laboratory reporting limit.
Bold = Detected above reporting limit.
Grey highlighted cells exceed the NYSDEC Part 375-6 Restricted Residential Use Level
Orange highlighted cells exceed the Seneca Meadows Landfill Waste Approval Analytical Screening Level
Total VOCs includes all of the BTEX and other VOC compounds.
ug/kg = Micrograms per kilogram
ug/L = Micrograms per Liter
PDI and SS samples are presented in predesign investigation report dated XX.

Table 3A: Waste Characterization Sample Analytical Results - VOC

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted- Res	Seneca Meadows TCLP Waste Criteria	Seneca Meadows Waste Acceptance Criteria	PWEXWS01002 10/15/2015 Bk08862	PWEXWS04003 3/10/2016 T1600349	PWEXWS04004 3/10/2016 T1600349	PWEXWS04005 3/10/2016 T1600349	PWEXWS04006 3/22/2016 T1600407	PWEXWS04007 3/22/2016 T1600407	PWEXWS04008 3/22/2016 T1600407	PWEXWS04011 4/11/2016 T1600557	PWEXWS04012 4/11/2016 T1600557	PWEXWS04013 4/11/2016 T1600557	PWEXWS04014 4/11/2016 T1600557	PWEXWS04015 4/11/2016 T1600557	PWEXWS04016 4/11/2016 T1600557	PWEXWS04017 4/11/2016 T1600557
BTEX Compounds (ug/Kg)																		
Benzene	71-43-2	4800	NL	10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	100-41-4	41000	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m&p-Xylene	1330-20-7-m,p	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	95-47-6	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	108-88-3	100000	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (total)	CALC-XYLENE	100000	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX (ug/Kg)	CALC-BTEX	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other VOCs (ug/Kg)																		
1,1,1-Trichloroethane	71-55-6	100000	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	79-34-5	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	79-00-5	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	75-34-3	26000	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	75-35-4	100000	NL	14000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	107-06-2	3100	NL	10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	78-87-5	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	78-93-3	100000	NL	4000000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	591-78-6	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	108-10-1	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	67-64-1	100000	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	75-27-4	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromoform	75-25-2	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromomethane	74-83-9	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	75-15-0	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon tetrachloride	56-23-5	2400	NL	10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	108-90-7	100000	NL	2000000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane	75-00-3	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	67-66-3	49000	NL	120000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloromethane	74-87-3	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	156-59-2	100000	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	10061-01-5	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	124-48-1	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	100-42-5	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	127-18-4	19000	NL	14000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,2-Dichloroethene	156-60-5	100000	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	10061-02-6	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	79-01-6	21000	NL	10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	75-01-4	900	NL	4000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total VOCs		NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VOCs-TCLP (ug/L)																		
1,1-Dichloroethene	75-35-4	NL	700	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	107-06-2	NL	500	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone (MEK)	78-93-3	NL	200000	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	71-43-2	NL	500	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon tetrachloride	56-23-5	NL	500	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	108-90-7	NL	100000	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	67-66-3	NL	6000	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	127-18-4	NL	700	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	79-01-6	NL	500	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	75-01-4	NL	200	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
NA = Not Analyzed
NL = Not Listed
ND = Not Detected
U = Not detected above given laboratory reporting limit.
Bold = Detected above reporting limit.
Grey highlighted cells exceed the NYSDEC Part 375-6 Restricted Residential Use Level
Orange highlighted cells exceed the Seneca Meadows Landfill Waste Approval Analytical Screeni
Total VOCs includes all of the BTEX and other VOC compounds.
ug/kg = Micrograms per kilogram
ug/L = Micrograms per Liter
PDI and SS samples are presented in predesign investigation report dated XX.

Table 3A: Waste Characterization Sample Analytical Results - VOC

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted- Res	Seneca Meadows TCLP Waste Criteria	Seneca Meadows Waste Acceptance Criteria	PWEXWS04018 4/11/2016 T1600557	PWBOWS02019 4/27/2016 R1604238 R1604342	PWBOWS02020 4/27/2016 R1604238 R1604342	PWBOWS02021 4/27/2016 R1604238 R1604342	PWSPWS02053 2/9/2017 R1701214-001 / R1701241-001	PWSPWS02054 2/9/2017 R1701239-001 / R1701245-001	PWSPWS02055 2/10/2017 R1701262-001 / R1701263-001	PWSPWSNA 063 2/21/2017 480-113714-1	PWSPWSNA072 2/28/2017 480-114023-1	PWSPWSNA073 2/28/2017 480-114023-2	PWBOWS04076 5/4/2017 480-117648-1	PWBOWS08077 5/4/2017 480-117648-2	PWBOWS12078 5/4/2017 480-117648-2
BTEX Compounds (ug/Kg)																	
Benzene	71-43-2	4800	NL	10000	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	200	180 U	410 U	NA	NA	NA
Ethylbenzene	100-41-4	41000	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	530	470	1200	NA	NA	NA
m&p-Xylene	1330-20-7-m,p	NL	NL	NL	NA	15 U	19 U	85 U	21000 U	110000 U	38000 U	NA	NA	NA	NA	NA	NA
o-Xylene	95-47-6	NL	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	NA	NA	NA	NA	NA	NA
Toluene	108-88-3	100000	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	170	270 U	680	NA	NA	NA
Xylenes (total)	CALC-XYLENE	100000	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	1500	1300	3500	NA	NA	NA
Total BTEX (ug/Kg)	CALC-BTEX	NL	NL	NL	NA	7.5 U	9.3 U	43 U	U	U	U	2400	2220	5790	NA	NA	NA
Other VOCs (ug/Kg)																	
1,1,1-Trichloroethane	71-55-6	100000	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
1,1,2,2-Tetrachloroethane	79-34-5	NL	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
1,1,2-Trichloroethane	79-00-5	NL	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
1,1-Dichloroethane	75-34-3	26000	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
1,1-Dichloroethene	75-35-4	100000	NL	14000	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
1,2-Dichloroethane	107-06-2	3100	NL	10000	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
1,2-Dichloropropane	78-87-5	NL	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
2-Butanone	78-93-3	100000	NL	4000000	NA	12	11	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
2-Hexanone	591-78-6	NL	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
4-Methyl-2-pentanone	108-10-1	NL	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
Acetone	67-64-1	100000	NL	NL	NA	43	34	110	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
Bromodichloromethane	75-27-4	NL	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
Bromoform	75-25-2	NL	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
Bromomethane	74-83-9	NL	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
Carbon disulfide	75-15-0	NL	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
Carbon tetrachloride	56-23-5	2400	NL	10000	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
Chlorobenzene	108-90-7	100000	NL	2000000	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
Chloroethane	75-00-3	NL	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
Chloroform	67-66-3	49000	NL	120000	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
Chloromethane	74-87-3	NL	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
cis-1,2-Dichloroethene	156-59-2	100000	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
cis-1,3-Dichloropropene	10061-01-5	NL	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
Dibromochloromethane	124-48-1	NL	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
Styrene	100-42-5	NL	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
Tetrachloroethene	127-18-4	19000	NL	14000	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
trans-1,2-Dichloroethene	156-60-5	100000	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
trans-1,3-Dichloropropene	10061-02-6	NL	NL	NL	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
Trichloroethene	79-01-6	21000	NL	10000	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
Vinyl chloride	75-01-4	900	NL	4000	NA	7.5 U	9.3 U	43 U	10000 U	57000 U	19000 U	ND	ND	ND	NA	NA	NA
Total VOCs		NL	NL	NL	NA	55	45	110	U	U	U	2400	2220	5790	NA	NA	NA
VOCs-TCLP (ug/L)																	
1,1-Dichloroethene	75-35-4	NL	700	NL	NA	< 0.05	< 0.05	< 0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	107-06-2	NL	500	NL	NA	< 0.05	< 0.05	< 0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	78-93-3	NL	200000	NL	NA	< 0.1	< 0.1	< 0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	71-43-2	NL	500	NL	NA	< 0.05	< 0.05	< 0.05	ND	74.3U	ND	9.7 U	6.2 U	ND	ND	0.13	ND
Carbon tetrachloride	56-23-5	NL	500	NL	NA	< 0.05	< 0.05	< 0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	108-90-7	NL	100000	NL	NA	< 0.05	< 0.05	< 0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	67-66-3	NL	6000	NL	NA	< 0.05	< 0.05	< 0.05	63.3U	63.0U	62.4 U	ND	ND	ND	ND	ND	ND
Tetrachloroethene	127-18-4	NL	700	NL	NA	< 0.05	< 0.05	< 0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	79-01-6	NL	500	NL	NA	< 0.05	< 0.05	< 0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	75-01-4	NL	200	NL	NA	< 0.05	< 0.05	< 0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
NA = Not Analyzed
NL = Not Listed
ND = Not Detected
U = Not detected above given laboratory reporting limit.
Bold = Detected above reporting limit.
Grey highlighted cells exceed the NYSDEC Part 375-6 Restricted Residential Use Level
Orange highlighted cells exceed the Seneca Meadows Landfill Waste Approval Analytical Screen
Total VOCs includes all of the BTEX and other VOC compounds.
ug/kg = Micrograms per kilogram
ug/L = Micrograms per Liter
PDI and SS samples are presented in predesign investigation report dated XX.

Table 3A: Waste Characterization Sample Analytical Results - VOC

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted- Res	Seneca Meadows TCLP Waste Criteria	Seneca Meadows Waste Acceptance Criteria	PWFTWWNA079 5/12/2017 480-118029-1	PWFTWWNA080 5/15/2017 480-118059-1	PWFTWWNA081 5/15/2017 480-118059-3	PWTPWS04082 5/18/2017 480-118233-1	PWTPWS04083 5/18/2017 480-118233-2	PWTPWS04084 5/31/2017 480-118820-1	PWTPWS04085 5/31/2017 480-118820-2	PWEXWSNA074 1/3/2019 460-172817-1	PWEXWSNA075 1/4/2019 460-172817-2
BTEX Compounds (ug/Kg)													
Benzene	71-43-2	4800	NL	10000	ND	ND	ND	ND	ND	ND	ND	NA	NA
Ethylbenzene	100-41-4	41000	NL	NL	ND	ND	ND	3400	0.44 U	0.6 U	0.72 U	NA	NA
m&p-Xylene	1330-20-7-m,p	NL	NL	NL	NA	NA	NA	ND	NA	NA	NA	NA	NA
o-Xylene	95-47-6	NL	NL	NL	NA	NA	NA	ND	NA	NA	NA	NA	NA
Toluene	108-88-3	100000	NL	NL	ND	ND	ND	ND	0.66 U	ND	0.58 U	NA	NA
Xylenes (total)	CALC-XYLENE	100000	NL	NL	ND	ND	ND	31000	1.0 U	5.6 U	6.0 U	NA	NA
Total BTEX (ug/Kg)	CALC-BTEX	NL	NL	NL	ND	ND	ND	34400	U	U	U	NA	NA
Other VOCs (ug/Kg)													
1,1,1-Trichloroethane	71-55-6	100000	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
1,1,2,2-Tetrachloroethane	79-34-5	NL	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
1,1,2-Trichloroethane	79-00-5	NL	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
1,1-Dichloroethane	75-34-3	26000	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
1,1-Dichloroethene	75-35-4	100000	NL	14000	ND	ND	ND	ND	ND	ND	ND	NA	NA
1,2-Dichloroethane	107-06-2	3100	NL	10000	ND	ND	ND	ND	ND	ND	ND	NA	NA
1,2-Dichloropropane	78-87-5	NL	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
2-Butanone	78-93-3	100000	NL	4000000	ND	ND	ND	ND	ND	ND	ND	NA	NA
2-Hexanone	591-78-6	NL	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
4-Methyl-2-pentanone	108-10-1	NL	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
Acetone	67-64-1	100000	NL	NL	ND	ND	ND	ND	5.2 U	ND	52	NA	NA
Bromodichloromethane	75-27-4	NL	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
Bromoform	75-25-2	NL	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
Bromomethane	74-83-9	NL	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
Carbon disulfide	75-15-0	NL	NL	NL	0.47 U	ND	ND	ND	3.4 U	ND	ND	NA	NA
Carbon tetrachloride	56-23-5	2400	NL	10000	ND	ND	ND	ND	ND	ND	ND	NA	NA
Chlorobenzene	108-90-7	100000	NL	2000000	ND	ND	ND	ND	ND	ND	ND	NA	NA
Chloroethane	75-00-3	NL	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
Chloroform	67-66-3	49000	NL	120000	ND	ND	ND	ND	0.47 U	ND	ND	NA	NA
Chloromethane	74-87-3	NL	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
cis-1,2-Dichloroethene	156-59-2	100000	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
cis-1,3-Dichloropropene	10061-01-5	NL	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
Dibromochloromethane	124-48-1	NL	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
Styrene	100-42-5	NL	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
Tetrachloroethene	127-18-4	19000	NL	14000	ND	ND	ND	ND	ND	ND	ND	NA	NA
trans-1,2-Dichloroethene	156-60-5	100000	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
trans-1,3-Dichloropropene	10061-02-6	NL	NL	NL	ND	ND	ND	ND	ND	ND	ND	NA	NA
Trichloroethene	79-01-6	21000	NL	10000	ND	ND	ND	ND	ND	ND	ND	NA	NA
Vinyl chloride	75-01-4	900	NL	4000	ND	ND	ND	ND	ND	ND	ND	NA	NA
Total VOCs		NL	NL	NL	U	ND	ND	34400	U	ND	U	NA	NA
VOCs-TCLP (ug/L)													
1,1-Dichloroethene	75-35-4	NL	700	NL	NA	NA	NA	ND	ND	NA	NA	ND	ND
1,2-Dichloroethane	107-06-2	NL	500	NL	NA	NA	NA	ND	ND	NA	NA	ND	ND
2-Butanone (MEK)	78-93-3	NL	200000	NL	NA	NA	NA	ND	ND	NA	NA	ND	ND
Benzene	71-43-2	NL	500	NL	NA	NA	NA	0.012	ND	NA	NA	13000	ND
Carbon tetrachloride	56-23-5	NL	500	NL	NA	NA	NA	ND	ND	NA	NA	ND	ND
Chlorobenzene	108-90-7	NL	100000	NL	NA	NA	NA	ND	ND	NA	NA	ND	ND
Chloroform	67-66-3	NL	6000	NL	NA	NA	NA	ND	ND	NA	NA	ND	ND
Tetrachloroethene	127-18-4	NL	700	NL	NA	NA	NA	ND	ND	NA	NA	ND	ND
Trichloroethene	79-01-6	NL	500	NL	NA	NA	NA	ND	ND	NA	NA	ND	ND
Vinyl chloride	75-01-4	NL	200	NL	NA	NA	NA	ND	ND	NA	NA	ND	ND

Notes:
NA = Not Analyzed
NL = Not Listed
ND = Not Detected
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Bold = Detected above reporting limit.
Grey highlighted cells exceed the NYSDEC Part 375-6 Restricted Residential Use Level
Orange highlighted cells exceed the Seneca Meadows Landfill Waste Approval Analytical Screeni
Total VOCs includes all of the BTEX and other VOC compounds.
ug/kg = Micrograms per kilogram
ug/L = Micrograms per Liter
PDI and SS samples are presented in predesign investigation report dated XX.

Table 3B: Waste Characterization Sample Analytical Results - SVOC

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted- Res	Seneca Meadows TCLP Waste Criteria	Seneca Meadows Waste Acceptance Criteria	PDI-01 7/10/2013 PDI-1-071013	PDI-02 7/10/2013 PDI-2-071013	PDI-03 7/10/2013 PDI-3-071013	PDI-04 7/10/2013 PDI-4-071013	PDI-05 7/10/2013 PDI-5-071013	PDI-06 7/10/2013 PDI-6-071013	PDI-07 7/10/2013 PDI-7-071013	PDI-08 7/10/2013 PDI-8-071013	PDI-09 Dup 7/10/2013 PDI-90-071013	PDI-09 7/10/2013 PDI-9-071013	PDI-10 7/10/2013 GTB-2-PDI-10-071013	SS-07 7/10/2013 SS-7-071013
PAH Compounds (ug/Kg)																
2-Methylnaphthalene	91-57-6	NL	NL	NL	< 370	< 370	450	< 400	< 410	<380	< 390	11000	< 470	< 470	9100	< 370
Acenaphthene	83-32-9	100000	NL	NL	< 370	< 370	1200	< 400	< 410	< 380	< 390	3800	< 470	< 470	20000	< 370
Acenaphthylene	208-96-8	100000	NL	NL	< 370	< 370	200	< 400	< 410	< 380	< 390	12000	1200	< 470	11000	< 370
Anthracene	120-12-7	100000	NL	NL	< 370	< 370	700	< 400	< 410	<380	< 390	9700	1200	< 470	36000	< 370
Benzo(a)anthracene	56-55-3	1000	NL	NL	1700	380	8800	< 400	520	<380	520	9500	6500	780	44000	790
Benzo(a)pyrene	50-32-8	1000	NL	NL	2500	580	9400	< 400	620	<380	580	8100	5600	790	39000	990
Benzo(b)fluoranthene	205-99-2	1000	NL	NL	1600	480	9000	< 400	< 410	<380	510	6300	5400	800	30000	850
Benzo(ghi)perylene	191-24-2	100000	NL	NL	2400	590	4800	< 400	650	<380	470	3300	2500	< 470	20000	710
Benzo(k)fluoranthene	207-08-9	3900	NL	NL	1900	460	5200	< 400	510	<380	510	5600	5100	810	31000	900
Chrysene	218-01-9	3900	NL	NL	1600	400	7900	< 400	490	<380	530	7300	6500	1000	38000	810
Dibenzo(a,h)anthracene	53-70-3	330	NL	NL	< 370	< 370	1600	< 400	< 410	<380	< 390	1100	1300	< 470	6800	< 370
Fluoranthene	206-44-0	100000	NL	NL	2200	680	20000	< 400	590	570	860	25000	9700	1900	95000	1200
Fluorene	86-73-7	100000	NL	NL	< 370	< 370	3600	< 400	< 410	<380	< 390	11000	< 470	< 470	26000	< 370
Indeno(1,2,3-cd)pyrene	193-39-5	500	NL	NL	2000	490	4900	< 400	520	<380	440	3600	2800	< 470	21000	690
Naphthalene	91-20-3	NL	NL	NL	< 370	< 370	2000	< 400	< 410	<380	< 390	24000	< 470	< 470	33000	< 370
Phenanthrene	85-01-8	100000	NL	NL	1100	450	16000	< 400	< 410	<380	470	30000	2600	660	92000	530
Pyrene	129-00-0	100000	NL	NL	1900	650	11000	< 400	500	500	690	13000	5900	1200	58000	840
Total PAHs (ug/Kg)	CALC-PAH	NL	NL	NL	18900	5160	114850	< 400	4400	1070	5580	184300	56300	7940	609900	8310
Other SVOCs (ug/Kg)																
1,2,4-Trichlorobenzene	120-82-1	NL	NL	NL	< 370	< 370	< 370	< 400	< 410	<380	< 390	< 360	< 470	< 470	< 3200	< 370
1,2-Dichlorobenzene	95-50-1	100	NL	NL	< 370	< 370	< 370	< 400	< 410	< 380	< 390	< 360	< 470	< 470	< 3200	< 370
1,3-Dichlorobenzene	541-73-1	49	NL	NL	< 370	< 370	< 370	< 400	< 410	< 380	< 390	< 360	< 470	< 470	< 3200	< 370
1,4-Dichlorobenzene	106-46-7	13	NL	150	< 370	< 370	< 370	< 400	< 410	<380	< 390	< 360	< 470	< 470	< 3200	< 370
2,2'-oxybis(1-Chloropropane)	108-60-1	NL	NL	NL	< 370	< 370	< 370	< 400	< 410	<380	< 390	< 360	< 470	< 470	< 3200	< 370
2,4,5-Trichlorophenol	95-95-4	NL	NL	8000000	< 370	< 370	< 370	< 400	< 410	<380	< 390	< 360	< 470	< 470	< 3200	< 370
2,4,6-Trichlorophenol	88-06-2	NL	NL	40000	< 370	< 370	< 370	< 400	< 410	<380	< 390	< 360	< 470	< 470	< 3200	< 370
2,4-Dichlorophenol	120-83-2	NL	NL	NL	< 370	< 370	< 370	< 400	< 410	<380	< 390	< 360	< 470	< 470	< 3200	< 370
2,4-Dimethylphenol	105-67-9	NL	NL	NL	< 370	< 370	< 370	< 400	< 410	<380	< 390	< 360	< 470	< 470	< 3200	< 370
2,4-Dinitrophenol	51-28-5	NL	NL	NL	< 1900	< 1900	< 1900	< 2100	< 2100	< 2000	< 2000	< 1900	< 2400	< 2400	< 17000	< 1900
2,4-Dinitrotoluene	121-14-2	NL	NL	2600	< 370	< 370	< 370	< 400	< 410	<380	< 390	< 360	< 470	< 470	< 3200	< 370
2,6-Dinitrotoluene	606-20-2	NL	NL	NL	< 370	< 370	< 370	< 400	< 410	<380	< 390	< 360	< 470	< 470	< 3200	< 370
2-Chloronaphthalene	91-58-7	NL	NL	NL	< 370	< 370	< 370	< 400	< 410	<380	< 390	< 360	< 470	< 470	< 3200	< 370
2-Chlorophenol	95-57-8	NL	NL	NL	< 370	< 370	< 370	< 400	< 410	<380	< 390	< 360	< 470	< 470	< 3200	< 370
2-Methylphenol	95-48-7	100000	NL	4000000	< 370	< 370	< 370	< 400	< 410	<380	< 390	< 360	< 470	< 470	< 3200	< 370
2-Nitroaniline	88-74-4	NL	NL	NL	< 1900	< 1900	< 1900	< 2100	< 2100	< 2000	< 2000	< 1900	< 2400	< 2400	< 17000	< 1900
2-Nitrophenol	88-75-5	NL	NL	NL	< 370	< 370	< 370	< 400	< 410	<380	< 390	< 360	< 470	< 470	< 3200	< 370
3&4-Methyl Phenol	782-06-0	100000	NL	4000000	< 370	< 370	< 370	< 400	< 410	<380	< 390	< 360	< 470	< 470	< 3200	< 370
3,3'-Dichlorobenzidine	91-94-1	NL	NL	NL	< 370	< 370	< 370	< 400	< 410	<380	< 390	< 360	< 470	< 470	< 3200	< 370
3-Nitroaniline	99-09-2	NL	NL	NL	< 1900	< 1900	< 1900	< 2100	< 2100	< 2000	< 2000	< 1900	< 2400	< 2400	< 17000	< 1900
4,6-Dinitro-2-methylphenol	534-52-1	NL	NL	NL	< 1900	< 1900	< 1900	< 2100	< 2100	< 2000	< 2000	< 1900	< 2400	< 2400	< 17000	< 1900
4-Bromophenyl phenyl ether	101-55-3	NL	NL	NL	< 0.37	< 0.38	< 0.39	< 400	< 410	<380	< 390	< 360	< 470	< 470	< 3200	< 370
4-Chloro-3-methylphenol	59-50-7	NL	NL	NL	< 370	< 370	< 371	< 400								

Table 3B: Waste Characterization Sample Analytical Results - SVOC

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted- Res	Seneca Meadows TCLP Waste Criteria	Seneca Meadows Waste Acceptance Criteria	PDI-01 7/10/2013 PDI-1-071013	PDI-02 7/10/2013 PDI-2-071013	PDI-03 7/10/2013 PDI-3-071013	PDI-04 7/10/2013 PDI-4-071013	PDI-05 7/10/2013 PDI-5-071013	PDI-06 7/10/2013 PDI-6-071013	PDI-07 7/10/2013 PDI-7-071013	PDI-08 7/10/2013 PDI-8-071013	PDI-09 Dup 7/10/2013 PDI-90-071013	PDI-09 7/10/2013 PDI-9-071013	PDI-10 7/10/2013 GTB-2-PDI-10-071013	SS-07 7/10/2013 SS-7-071013
Phenol	108-95-2	100000	NL	NL	< 370	< 370	< 370	< 400	< 410	<380	< 390	< 360	< 470	< 470	< 3200	< 370
Total SVOCs (ug/Kg)		NL	NL	NL	18900	5160	119980	< 2100	4400	1070	5580	198.1	56300	7940	639900	8310
SVOCs-TCLP (ug/L)																
1,4-Dichlorobenzene	106-46-7	NL	7500	NL	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
2,4,5-Trichlorophenol	95-95-4	NL	400000	NL	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
2,4,6-Trichlorophenol	88-06-2	NL	2000	NL	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
2,4-Dinitrotoluene	121-14-2	NL	130	NL	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
2-Methylphenol	95-48-7	NL	200	NL	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
3&4-Methyl Phenol	782-06-0	NL	200	NL	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
Hexachlorobenzene	118-74-1	NL	130	NL	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
Hexachlorobutadiene	87-68-3	NL	500	NL	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
Hexachloroethane	67-72-1	NL	3000	NL	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
mp-Cresol	15831-10-4				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	98-95-3	NL	2000	NL	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
o-Cresol	95-48-7				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	87-86-5	NL	100000	NL	< 500	< 500	< 500	< 500	< 500	< 500	< 500	< 500	< 500	< 500	< 500	< 500
Pyridine	110-86-1	NL	5000	NL	< 500	< 500	< 500	< 500	< 500	< 500	< 500	< 500	< 500	< 500	< 500	< 500

Notes:
NA = Not Analyzed
NL = Not Listed
ND = Not Detected
U = Not detected above given laboratory reporting limit.
Bold = Detected above reporting limit.
Grey highlighted cells exceed the NYSDEC Part 375-6 Restricted Residential Use Level
Orange highlighted cells exceed the Seneca Meadows Landfill Waste Approval Analytical Screening Level
ug/kg = Micrograms per kilogram
ug/L = Micrograms per Liter
PDI and SS samples are presented in Predesign Investigation Report dated XX.

Table 3B: Waste Characterization Sample Analytical Results - SVOC

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted- Res	Seneca Meadows TCLP Waste Criteria	Seneca Meadows Waste Acceptance Criteria	SS-08 7/10/2013 SS-8-071013	SS-09 7/10/2013 SS-9-071013	PWEXWS01001 10/15/2015 Bk08862	PWEXWS01002 10/15/2015 Bk08862	PWEXWS04003 3/10/2016 T1600349	PWEXWS04004 3/10/2016 T1600349	PWEXWS04005 3/10/2016 T1600349	PWEXWS04006 3/22/2016 T1600407	PWEXWS04007 3/22/2016 T1600407	PWEXWS04008 3/22/2016 T1600407	PWEXWS04011 4/11/2016 T1600557	PWEXWS04012 4/11/2016 T1600557	PWEXWS04013 4/11/2016 T1600557
PAH Compounds (ug/Kg)																	
2-Methylnaphthalene	91-57-6	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	83-32-9	100000	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	208-96-8	100000	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	120-12-7	100000	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	56-55-3	1000	NL	NL	0.83	7700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	50-32-8	1000	NL	NL	1100	10000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	205-99-2	1000	NL	NL	1100	7900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(ghi)perylene	191-24-2	100000	NL	NL	790	7900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	207-08-9	3900	NL	NL	870	7800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	218-01-9	3900	NL	NL	870	7400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	53-70-3	330	NL	NL	< 420	2400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	206-44-0	100000	NL	NL	1400	11000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	86-73-7	100000	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	193-39-5	500	NL	NL	770	7500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	91-20-3	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	85-01-8	100000	NL	NL	560	4400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	129-00-0	100000	NL	NL	920	7800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PAHs (ug/Kg)	CALC-PAH	NL	NL	NL	9210	81800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other SVOCs (ug/Kg)																	
1,2,4-Trichlorobenzene	120-82-1	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	95-50-1	100	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	541-73-1	49	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	106-46-7	13	NL	150	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2'-oxybis(1-Chloropropane)	108-60-1	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	95-95-4	NL	NL	8000000	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	88-06-2	NL	NL	40000	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	120-83-2	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	105-67-9	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	51-28-5	NL	NL	NL	< 2200	< 8600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	121-14-2	NL	NL	2600	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	606-20-2	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	91-58-7	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	95-57-8	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	95-48-7	100000	NL	4000000	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	88-74-4	NL	NL	NL	< 2200	< 8600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	88-75-5	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methyl Phenol	782-06-0	100000	NL	4000000	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	91-94-1	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	99-09-2	NL	NL	NL	< 2200	< 8600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	534-52-1	NL	NL	NL	< 2200	< 8600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	101-55-3	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	59-50-7	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	106-47-8	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	7005-72-3	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	100-01-6	NL	NL	NL	< 2200	< 8600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	100-02-7	NL	NL	NL	< 2200	< 8600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzyl alcohol	100-51-6	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	111-91-1	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl) ether	111-44-4	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl) phthalate	117-81-7	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	85-68-7	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	86-74-8	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	132-64-9	59000	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	131-11-3	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	84-66-2	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	84-74-2	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	117-84-0	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	118-74-1	1200	NL	2600	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	87-68-3	NL	NL	10000	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	77-47-4	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	67-72-1	NL	NL	60000	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	78-59-1	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methanamine, n-methyl-n-nitroso	62-75-9	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	98-95-3	100000	NL	40000	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	621-64-7	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	86-30-6	NL	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	87-86-5	6700	NL	2000000	< 2200	< 8600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 3B: Waste Characterization Sample Analytical Results - SVOC

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted- Res	Seneca Meadows TCLP Waste Criteria	Seneca Meadows Waste Acceptance Criteria	SS-08 7/10/2013 SS-8-071013	SS-09 7/10/2013 SS-9-071013	PWEXWS01001 10/15/2015 Bk08862	PWEXWS01002 10/15/2015 Bk08862	PWEXWS04003 3/10/2016 T1600349	PWEXWS04004 3/10/2016 T1600349	PWEXWS04005 3/10/2016 T1600349	PWEXWS04006 3/22/2016 T1600407	PWEXWS04007 3/22/2016 T1600407	PWEXWS04008 3/22/2016 T1600407	PWEXWS04011 4/11/2016 T1600557	PWEXWS04012 4/11/2016 T1600557	PWEXWS04013 4/11/2016 T1600557
Phenol	108-95-2	100000	NL	NL	< 420	< 1700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total SVOCs (ug/Kg)		NL	NL	NL	9210	81800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs-TCLP (ug/L)																	
1,4-Dichlorobenzene	106-46-7	NL	7500	NL	< 100	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	95-95-4	NL	400000	NL	< 100	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	88-06-2	NL	2000	NL	< 100	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	121-14-2	NL	130	NL	< 100	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	95-48-7	NL	200	NL	< 100	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methyl Phenol	782-06-0	NL	200	NL	< 100	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	118-74-1	NL	130	NL	< 100	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	87-68-3	NL	500	NL	< 100	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	67-72-1	NL	3000	NL	< 100	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
mp-Cresol	15831-10-4				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	98-95-3	NL	2000	NL	< 100	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Cresol	95-48-7				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	87-86-5	NL	100000	NL	< 500	< 500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyridine	110-86-1	NL	5000	NL	< 500	< 500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
NA = Not Analyzed
NL = Not Listed
ND = Not Detected
U = Not detected above given laboratory reporting limit.
Bold = Detected above reporting limit.

Grey highlighted cells exceed the NYSDEC Part 375-6 Restricted Residential Use Level
Orange highlighted cells exceed the Seneca Meadows Landfill Waste Approval Analytical Screening Level
ug/kg = Micrograms per kilogram
ug/L = Micrograms per Liter
PDI and SS samples are presented in Predesign Investigation Report dated XX.

Table 3B: Waste Characterization Sample Analytical Results - SVOC

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted- Res	Seneca Meadows TCLP Waste Criteria	Seneca Meadows Waste Acceptance Criteria	PWEXWS04014 4/11/2016 T1600557	PWEXWS04015 4/11/2016 T1600557	PWEXWS04016 4/11/2016 T1600557	PWEXWS04017 4/11/2016 T1600557	PWEXWS04018 4/11/2016 T1600557	PWBOWS02019 4/27/2016 R1604238 R1604342	PWBOWS02020 4/27/2016 R1604238 R1604342	PWBOWS02021 4/27/2016 R1604238 R1604342	PWSPWS02053 2/9/2017 R1701214-001 / R1701241-001	PWSPWS02054 2/9/2017 R1701239-001 / R1701245-001	PWSPWS02055 2/10/2017 R1701262-001 / R1701263-001	PWSPWSNA 063 2/21/2017 480-113714-1	PWSPWSNA072 2/28/2017 480-114023-1
PAH Compounds (ug/Kg)																	
2-Methylnaphthalene	91-57-6	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100 U	1800	60000	42000	25000	20000	10000
Acenaphthene	83-32-9	100000	NL	NL	NA	NA	NA	NA	NA	490 U	3900	3000	67000	51000	29000	24000	15000
Acenaphthylene	208-96-8	100000	NL	NL	NA	NA	NA	NA	NA	490 U	3100 U	1200 U	19000 U	11000 U	9100 U	2600 U	1800 U
Anthracene	120-12-7	100000	NL	NL	NA	NA	NA	NA	NA	490 U	8100	3300	69000	60000	32000	20000	12000
Benzo(a)anthracene	56-55-3	1000	NL	NL	NA	NA	NA	NA	NA	740	15000	3200	48000	42000	21000	14000	9300
Benzo(a)pyrene	50-32-8	1000	NL	NL	NA	NA	NA	NA	NA	710	13000	2400	35000	34000	16000	8900	6400
Benzo(b)fluoranthene	205-99-2	1000	NL	NL	NA	NA	NA	NA	NA	810	14000	2700	38000	34000	17000	9900	7100
Benzo(ghi)perylene	191-24-2	100000	NL	NL	NA	NA	NA	NA	NA	500	7600	1400	20000	19000	10000	4100 U	3600
Benzo(k)fluoranthene	207-08-9	3900	NL	NL	NA	NA	NA	NA	NA	490 U	5200	1200 U	19000 U	14000	9100 U	5600 U	4100
Chrysene	218-01-9	3900	NL	NL	NA	NA	NA	NA	NA	690	12000	2400	38000	33000	17000	11000	7700
Dibenzo(a,h)anthracene	53-70-3	330	NL	NL	NA	NA	NA	NA	NA	486 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	480 U
Fluoranthene	206-44-0	100000	NL	NL	NA	NA	NA	NA	NA	1600	30000	7400	120000	100000	53000	31000	21000
Fluorene	86-73-7	100000	NL	NL	NA	NA	NA	NA	NA	488 U	4400	3100	61000	49000	28000	20000	11000
Indeno(1,2,3-cd)pyrene	193-39-5	500	NL	NL	NA	NA	NA	NA	NA	489 U	6600	1200 U	19000	20000	9400	3800 U	3200
Naphthalene	91-20-3	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	3000	140000	100000	70000	48000	27000
Phenanthrene	85-01-8	100000	NL	NL	NA	NA	NA	NA	NA	1300	24000	11000	180000	150000	85000	53000	33000
Pyrene	129-00-0	100000	NL	NL	NA	NA	NA	NA	NA	1300	25000	6200	87000	77000	41000	27000	19000
Total PAHs (ug/Kg)	CALC-PAH	NL	NL	NL	NA	NA	NA	NA	NA	7650	168800	50900	982000	825000	453400	286800	189400
Other SVOCs (ug/Kg)																	
1,2,4-Trichlorobenzene	120-82-1	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	95-50-1	100	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	541-73-1	49	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	106-46-7	13	NL	150	NA	NA	NA	NA	NA	490 U	3100U	1200 U	NA	NA	NA	NA	NA
2,2'-oxybis(1-Chloropropane)	108-60-1	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	95-95-4	NL	NL	8000000	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
2,4,6-Trichlorophenol	88-06-2	NL	NL	40000	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
2,4-Dichlorophenol	120-83-2	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
2,4-Dimethylphenol	105-67-9	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
2,4-Dinitrophenol	51-28-5	NL	NL	NL	NA	NA	NA	NA	NA	2500 U	16000 U	6100 U	99000 U	54000 U	47000 U	ND	ND
2,4-Dinitrotoluene	121-14-2	NL	NL	2600	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
2,6-Dinitrotoluene	606-20-2	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
2-Chloronaphthalene	91-58-7	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
2-Chlorophenol	95-57-8	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
2-Methylphenol	95-48-7	100000	NL	4000000	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
2-Nitroaniline	88-74-4	NL	NL	NL	NA	NA	NA	NA	NA	2500 U	16000 U	6100 U	99000 U	54000 U	47000 U	ND	ND
2-Nitrophenol	88-75-5	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
3&4-Methyl Phenol	782-06-0	100000	NL	4000000	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	NA	NA
3,3'-Dichlorobenzidine	91-94-1	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
3-Nitroaniline	99-09-2	NL	NL	NL	NA	NA	NA	NA	NA	2500 U	16000 U	6100 U	99000 U	54000 U	47000 U	ND	ND
4,6-Dinitro-2-methylphenol	534-52-1	NL	NL	NL	NA	NA	NA	NA	NA	2500 U	16000 U	6100 U	99000 U	54000 U	47000 U	ND	ND
4-Bromophenyl phenyl ether	101-55-3	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
4-Chloro-3-methylphenol	59-50-7	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
4-Chloroaniline	106-47-8	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
4-Chlorophenyl phenyl ether	7005-72-3	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
4-Nitroaniline	100-01-6	NL	NL	NL	NA	NA	NA	NA	NA	2500 U	16000 U	6100 U	99000 U	54000 U	47000 U	ND	ND
4-Nitrophenol	100-02-7	NL	NL	NL	NA	NA	NA	NA	NA	2500 U	16000 U	6100 U	99000 U	54000 U	47000 U	ND	ND
Benzyl alcohol	100-51-6	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	99000 U	54001 U	47001 U	ND	ND
bis(2-Chloroethoxy)methane	111-91-1	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
bis(2-Chloroethyl) ether	111-44-4	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
bis(2-Ethylhexyl) phthalate	117-81-7	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
Butyl benzyl phthalate	85-68-7	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
Carbazole	86-74-8	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	22000	20000	11000	6000 U	4200
Dibenzofuran	132-64-9	59000	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	2100	47000	37000	22000	16000	9400
Diethyl phthalate	131-11-3	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
Dimethyl phthalate	84-66-2	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
Di-n-butyl phthalate	84-74-2	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
Di-n-octyl phthalate	117-84-0	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
Hexachlorobenzene	118-74-1	1200	NL	2600	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
Hexachlorobutadiene	87-68-3	NL	NL	10000	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
Hexachlorocyclopentadiene	77-47-4	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
Hexachloroethane	67-72-1	NL	NL	60000	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
Isophorone	78-59-1	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
Methanamine, n-methyl-n-nitroso	62-75-9	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19001 U	11001 U	9101 U	ND	ND
Nitrobenzene	98-95-3	100000	NL	40000	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
N-Nitrosodi-n-propylamine	621-64-7	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
N-Nitrosodiphenylamine	86-30-6	NL	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
Pentachlorophenol	87-86-5	6700	NL	2000000	NA	NA	NA	NA	NA	2500 U	16000 U	6100 U	99000 U	54000 U	47000 U	ND	ND

Table 3B: Waste Characterization Sample Analytical Results - SVOC

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted- Res	Seneca Meadows TCLP Waste Criteria	Seneca Meadows Waste Acceptance Criteria	PWEXWS04014 4/11/2016 T1600557	PWEXWS04015 4/11/2016 T1600557	PWEXWS04016 4/11/2016 T1600557	PWEXWS04017 4/11/2016 T1600557	PWEXWS04018 4/11/2016 T1600557	PWBOWS02019 4/27/2016 R1604238 R1604342	PWBOWS02020 4/27/2016 R1604238 R1604342	PWBOWS02021 4/27/2016 R1604238 R1604342	PWSPWS02053 2/9/2017 R1701214-001 / R1701241-001	PWSPWS02054 2/9/2017 R1701239-001 / R1701245-001	PWSPWS02055 2/10/2017 R1701262-001 / R1701263-001	PWSPWSNA 063 2/21/2017 480-113714-1	PWSPWSNA072 2/28/2017 480-114023-1
Phenol	108-95-2	100000	NL	NL	NA	NA	NA	NA	NA	490 U	3100U	1200 U	19000 U	11000 U	9100 U	ND	ND
Total SVOCs (ug/Kg)		NL	NL	NL	NA	NA	NA	NA	NA	7160	131000	53000	69000	57000	33000	16000	0
SVOCs-TCLP (ug/L)																	
1,4-Dichlorobenzene	106-46-7	NL	7500	NL	NA	NA	NA	NA	NA	< 0.1	< 0.1	< 0.1	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	95-95-4	NL	400000	NL	NA	NA	NA	NA	NA	< 0.1	< 0.1	< 0.1	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	88-06-2	NL	2000	NL	NA	NA	NA	NA	NA	< 0.1	< 0.1	< 0.1	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	121-14-2	NL	130	NL	NA	NA	NA	NA	NA	< 0.1	< 0.1	< 0.1	ND	ND	ND	ND	ND
2-Methylphenol	95-48-7	NL	200	NL	NA	NA	NA	NA	NA	< 0.1	< 0.1	< 0.1	NA	NA	ND	NA	ND
3&4-Methyl Phenol	782-06-0	NL	200	NL	NA	NA	NA	NA	NA	< 0.1	< 0.1	< 0.1	NA	NA	ND	NA	ND
Hexachlorobenzene	118-74-1	NL	130	NL	NA	NA	NA	NA	NA	< 0.1	< 0.1	< 0.1	ND	ND	ND	ND	ND
Hexachlorobutadiene	87-68-3	NL	500	NL	NA	NA	NA	NA	NA	< 0.1	< 0.1	< 0.1	ND	ND	ND	ND	ND
Hexachloroethane	67-72-1	NL	3000	NL	NA	NA	NA	NA	NA	< 0.1	< 0.1	< 0.1	ND	ND	ND	ND	ND
mp-Cresol	15831-10-4				NA	NA	NA	NA	NA	NA	NA	NA	4.1J	8.2J	9.9U	NA	NA
Nitrobenzene	98-95-3	NL	2000	NL	NA	NA	NA	NA	NA	< 0.1	< 0.1	< 0.1	ND	ND	ND	ND	ND
o-Cresol	95-48-7				NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	NA
Pentachlorophenol	87-86-5	NL	100000	NL	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND	ND	ND	ND	ND
Pyridine	110-86-1	NL	5000	NL	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND	ND	ND	ND	ND

Notes:
NA = Not Analyzed
NL = Not Listed
ND = Not Detected
U = Not detected above given laboratory reporting limit.
Bold = Detected above reporting limit.
Grey highlighted cells exceed the NYSDEC Part 375-6 Restricted Residential Use Level
Orange highlighted cells exceed the Seneca Meadows Landfill Waste Approval Analytical Screening Levels
ug/kg = Micrograms per kilogram
ug/L = Micrograms per Liter
PDI and SS samples are presented in Predesign Investigation Report dated XX.

Table 3B: Waste Characterization Sample Analytical Results - SVOC

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted- Res	Seneca Meadows TCLP Waste Criteria	Seneca Meadows Waste Acceptance Criteria	PWSPWSNA073 2/28/2017 480-114023-2	PWBOWS04076 5/4/2017 480-117648-1	PWBOWS08077 5/4/2017 480-117648-2	PWBOWS12078 5/4/2017 480-117648-2	PWFTWWNA079 5/12/2017 480-118029-1	PWFTWWNA080 5/15/2017 480-118059-1	PWFTWWNA081 5/15/2017 480-118059-3	PWTPWS04082 5/18/2017 480-118233-1	PWTPWS04083 5/18/2017 480-118233-2	PWTPWS04084 5/31/2017 480-118820-1	PWTPWS04085 5/31/2017 480-118820-2	PWEXWSNA074 1/3/2019 460-172817-1
PAH Compounds (ug/Kg)																
2-Methylnaphthalene	91-57-6	NL	NL	NL	23000	NA	NA	NA	ND	ND	ND	54000	ND	ND	ND	NA
Acenaphthene	83-32-9	100000	NL	NL	28000	NA	NA	NA	ND	ND	ND	12000	ND	170 U	ND	NA
Acenaphthylene	208-96-8	100000	NL	NL	3700 U	NA	NA	NA	ND	ND	ND	44000	ND	1000	370 U	NA
Anthracene	120-12-7	100000	NL	NL	25000	NA	NA	NA	ND	ND	ND	61000	650 U	2600	830 U	NA
Benzo(a)anthracene	56-55-3	1000	NL	NL	18000	NA	NA	NA	ND	ND	ND	40000	2400	7200	2900	NA
Benzo(a)pyrene	50-32-8	1000	NL	NL	13000	NA	NA	NA	ND	ND	ND	32000	2000 U	5800	2700	NA
Benzo(b)fluoranthene	205-99-2	1000	NL	NL	14000	NA	NA	NA	ND	ND	ND	35000	3200	7700	3300	NA
Benzo(ghi)perylene	191-24-2	100000	NL	NL	6600	NA	NA	NA	ND	ND	ND	18000	1600	3200	1600 U	NA
Benzo(k)fluoranthene	207-08-9	3900	NL	NL	8000	NA	NA	NA	ND	ND	ND	17000	920 U	2700	1600 U	NA
Chrysene	218-01-9	3900	NL	NL	16000	NA	NA	NA	ND	ND	ND	34000	2200	6100	2600	NA
Dibenzo(a,h)anthracene	53-70-3	330	NL	NL	1000 U	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
Fluoranthene	206-44-0	100000	NL	NL	42000	NA	NA	NA	ND	ND	ND	120000	4200	14000	5800	NA
Fluorene	86-73-7	100000	NL	NL	23000	NA	NA	NA	ND	ND	ND	57000	530 U	1000	ND	NA
Indeno(1,2,3-cd)pyrene	193-39-5	500	NL	NL	6000	NA	NA	NA	ND	ND	ND	16000	1500 U	3100	1500 U	NA
Naphthalene	91-20-3	NL	NL	NL	59000	NA	NA	NA	ND	ND	ND	410000	ND	340 U	ND	NA
Phenanthrene	85-01-8	100000	NL	NL	64000	NA	NA	NA	ND	ND	ND	190000	1900 U	8700	2600	NA
Pyrene	129-00-0	100000	NL	NL	35000	NA	NA	NA	ND	ND	ND	76000	3400	13000	5200	NA
Total PAHs (ug/Kg)	CALC-PAH	NL	NL	NL	380600	NA	NA	NA	ND	ND	ND	1216000	17000	76100	25100	NA
Other SVOCs (ug/Kg)																
1,2,4-Trichlorobenzene	120-82-1	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	95-50-1	100	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	541-73-1	49	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	106-46-7	13	NL	150	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2'-oxybis(1-Chloropropane)	108-60-1	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	95-95-4	NL	NL	8000000	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
2,4,6-Trichlorophenol	88-06-2	NL	NL	40000	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
2,4-Dichlorophenol	120-83-2	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
2,4-Dimethylphenol	105-67-9	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
2,4-Dinitrophenol	51-28-5	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
2,4-Dinitrotoluene	121-14-2	NL	NL	2600	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
2,6-Dinitrotoluene	606-20-2	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
2-Chloronaphthalene	91-58-7	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
2-Chlorophenol	95-57-8	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
2-Methylphenol	95-48-7	100000	NL	4000000	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
2-Nitroaniline	88-74-4	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
2-Nitrophenol	88-75-5	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
3&4-Methyl Phenol	782-06-0	100000	NL	4000000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	91-94-1	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
3-Nitroaniline	99-09-2	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
4,6-Dinitro-2-methylphenol	534-52-1	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
4-Bromophenyl phenyl ether	101-55-3	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
4-Chloro-3-methylphenol	59-50-7	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
4-Chloroaniline	106-47-8	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
4-Chlorophenyl phenyl ether	7005-72-3	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
4-Nitroaniline	100-01-6	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
4-Nitrophenol	100-02-7	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
Benzyl alcohol	100-51-6	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	111-91-1	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
bis(2-Chloroethyl) ether	111-44-4	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
bis(2-Ethylhexyl) phthalate	117-81-7	NL	NL	NL	ND	NA	NA	NA	ND	2.6 U	2.6 U	ND	ND	ND	ND	NA
Butyl benzyl phthalate	85-68-7	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
Carbazole	86-74-8	NL	NL	NL	7800	NA	NA	NA	ND	ND	ND	23000	320 U	350 U	ND	NA
Dibenzofuran	132-64-9	59000	NL	NL	19000	NA	NA	NA	ND	ND	ND	56000	ND	590 U	ND	NA
Diethyl phthalate	131-11-3	NL	NL	NL	ND	NA	NA	NA	ND	0.29 U	0.31 U	ND	ND	ND	ND	NA
Dimethyl phthalate	84-66-2	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
Di-n-butyl phthalate	84-74-2	NL	NL	NL	ND	NA	NA	NA	ND	0.79 U	0.33 U	ND	ND	ND	ND	NA
Di-n-octyl phthalate	117-84-0	NL	NL	NL	ND	NA	NA	NA	ND	ND	0.65 U	ND	ND	ND	ND	NA
Hexachlorobenzene	118-74-1	1200	NL	2600	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
Hexachlorobutadiene	87-68-3	NL	NL	10000	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
Hexachlorocyclopentadiene	77-47-4	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
Hexachloroethane	67-72-1	NL	NL	60000	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
Isophorone	78-59-1	NL	NL	NL	ND	NA	NA	NA	ND	ND	0.8 U	ND	ND	ND	ND	NA
Methanamine, n-methyl-n-nitroso	62-75-9	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA
Nitrobenzene	98-95-3	100000	NL	40000	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
N-Nitrosodi-n-propylamine	621-64-7	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
N-Nitrosodiphenylamine	86-30-6	NL	NL	NL	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA
Pentachlorophenol	87-86-5	6700	NL	2000000	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	NA

Table 3B: Waste Characterization Sample Analytical Results - SVOC

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted- Res	Seneca Meadows TCLP Waste Criteria	Seneca Meadows Waste Acceptance Criteria	PWSPWSNA073 2/28/2017 480-114023-2	PWBOWS04076 5/4/2017 480-117648-1	PWBOWS08077 5/4/2017 480-117648-2	PWBOWS12078 5/4/2017 480-117648-2	PWFTWWNA079 5/12/2017 480-118029-1	PWFTWWNA080 5/15/2017 480-118059-1	PWFTWWNA081 5/15/2017 480-118059-3	PWTPWS04082 5/18/2017 480-118233-1	PWTPWS04083 5/18/2017 480-118233-2	PWTPWS04084 5/31/2017 480-118820-1	PWTPWS04085 5/31/2017 480-118820-2	PWEXWSNA074 1/3/2019 460-172817-1
Phenol	108-95-2	100000	NL	NL	ND	NA	NA	NA	ND	ND	0.91 U	ND	ND	ND	ND	NA
Total SVOCs (ug/Kg)		NL	NL	NL	26800	NA	NA	NA		U	U	79000	U	U	ND	NA
SVOCs-TCLP (ug/L)																
1,4-Dichlorobenzene	106-46-7	NL	7500	NL	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND
2,4,5-Trichlorophenol	95-95-4	NL	400000	NL	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND
2,4,6-Trichlorophenol	88-06-2	NL	2000	NL	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND
2,4-Dinitrotoluene	121-14-2	NL	130	NL	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND
2-Methylphenol	95-48-7	NL	200	NL	ND	0.0024 U	0.11	ND	NA	NA	NA	NA	NA	NA	NA	22000
3&4-Methyl Phenol	782-06-0	NL	200	NL	ND	0.0040 U	0.18	ND	NA	NA	NA	NA	NA	NA	NA	45000
Hexachlorobenzene	118-74-1	NL	130	NL	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND
Hexachlorobutadiene	87-68-3	NL	500	NL	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND
Hexachloroethane	67-72-1	NL	3000	NL	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND
mp-Cresol	15831-10-4				NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Nitrobenzene	98-95-3	NL	2000	NL	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND
o-Cresol	95-48-7				NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA
Pentachlorophenol	87-86-5	NL	100000	NL	ND	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	ND
Pyridine	110-86-1	NL	5000	NL	ND	ND	ND	0.0022 U	NA	NA	NA	ND	ND	NA	NA	2800

Notes:
NA = Not Analyzed
NL = Not Listed
ND = Not Detected
U = Not detected above given laboratory reporting limit.
Bold = Detected above reporting limit.

Grey highlighted cells exceed the NYSDEC Part 375-6 Restricted Residential Use Level
Orange highlighted cells exceed the Seneca Meadows Landfill Waste Approval Analytical Screening Criteria
ug/kg = Micrograms per kilogram
ug/L = Micrograms per Liter
PDI and SS samples are presented in Predesign Investigation Report dated XX.

Table 3B: Waste Characterization Sample Analytical Results - SVOC

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted- Res	Seneca Meadows TCLP Waste Criteria	Seneca Meadows Waste Acceptance Criteria	PWEXWSNA075 1/4/2019 460-172817-2
PAH Compounds (ug/Kg)					
2-Methylnaphthalene	91-57-6	NL	NL	NL	NA
Acenaphthene	83-32-9	100000	NL	NL	NA
Acenaphthylene	208-96-8	100000	NL	NL	NA
Anthracene	120-12-7	100000	NL	NL	NA
Benzo(a)anthracene	56-55-3	1000	NL	NL	NA
Benzo(a)pyrene	50-32-8	1000	NL	NL	NA
Benzo(b)fluoranthene	205-99-2	1000	NL	NL	NA
Benzo(ghi)perylene	191-24-2	100000	NL	NL	NA
Benzo(k)fluoranthene	207-08-9	3900	NL	NL	NA
Chrysene	218-01-9	3900	NL	NL	NA
Dibenzo(a,h)anthracene	53-70-3	330	NL	NL	NA
Fluoranthene	206-44-0	100000	NL	NL	NA
Fluorene	86-73-7	100000	NL	NL	NA
Indeno(1,2,3-cd)pyrene	193-39-5	500	NL	NL	NA
Naphthalene	91-20-3	NL	NL	NL	NA
Phenanthrene	85-01-8	100000	NL	NL	NA
Pyrene	129-00-0	100000	NL	NL	NA
Total PAHs (ug/Kg)	CALC-PAH	NL	NL	NL	NA
Other SVOCs (ug/Kg)					
1,2,4-Trichlorobenzene	120-82-1	NL	NL	NL	NA
1,2-Dichlorobenzene	95-50-1	100	NL	NL	NA
1,3-Dichlorobenzene	541-73-1	49	NL	NL	NA
1,4-Dichlorobenzene	106-46-7	13	NL	150	NA
2,2'-oxybis(1-Chloropropane)	108-60-1	NL	NL	NL	NA
2,4,5-Trichlorophenol	95-95-4	NL	NL	8000000	NA
2,4,6-Trichlorophenol	88-06-2	NL	NL	40000	NA
2,4-Dichlorophenol	120-83-2	NL	NL	NL	NA
2,4-Dimethylphenol	105-67-9	NL	NL	NL	NA
2,4-Dinitrophenol	51-28-5	NL	NL	NL	NA
2,4-Dinitrotoluene	121-14-2	NL	NL	2600	NA
2,6-Dinitrotoluene	606-20-2	NL	NL	NL	NA
2-Chloronaphthalene	91-58-7	NL	NL	NL	NA
2-Chlorophenol	95-57-8	NL	NL	NL	NA
2-Methylphenol	95-48-7	100000	NL	4000000	NA
2-Nitroaniline	88-74-4	NL	NL	NL	NA
2-Nitrophenol	88-75-5	NL	NL	NL	NA
3&4-Methyl Phenol	782-06-0	100000	NL	4000000	NA
3,3'-Dichlorobenzidine	91-94-1	NL	NL	NL	NA
3-Nitroaniline	99-09-2	NL	NL	NL	NA
4,6-Dinitro-2-methylphenol	534-52-1	NL	NL	NL	NA
4-Bromophenyl phenyl ether	101-55-3	NL	NL	NL	NA
4-Chloro-3-methylphenol	59-50-7	NL	NL	NL	NA
4-Chloroaniline	106-47-8	NL	NL	NL	NA
4-Chlorophenyl phenyl ether	7005-72-3	NL	NL	NL	NA
4-Nitroaniline	100-01-6	NL	NL	NL	NA
4-Nitrophenol	100-02-7	NL	NL	NL	NA
Benzyl alcohol	100-51-6	NL	NL	NL	NA
bis(2-Chloroethoxy)methane	111-91-1	NL	NL	NL	NA
bis(2-Chloroethyl) ether	111-44-4	NL	NL	NL	NA
bis(2-Ethylhexyl) phthalate	117-81-7	NL	NL	NL	NA
Butyl benzyl phthalate	85-68-7	NL	NL	NL	NA
Carbazole	86-74-8	NL	NL	NL	NA
Dibenzofuran	132-64-9	59000	NL	NL	NA
Diethyl phthalate	131-11-3	NL	NL	NL	NA
Dimethyl phthalate	84-66-2	NL	NL	NL	NA
Di-n-butyl phthalate	84-74-2	NL	NL	NL	NA
Di-n-octyl phthalate	117-84-0	NL	NL	NL	NA
Hexachlorobenzene	118-74-1	1200	NL	2600	NA
Hexachlorobutadiene	87-68-3	NL	NL	10000	NA
Hexachlorocyclopentadiene	77-47-4	NL	NL	NL	NA
Hexachloroethane	67-72-1	NL	NL	60000	NA
Isophorone	78-59-1	NL	NL	NL	NA
Methanamine, n-methyl-n-nitroso	62-75-9	NL	NL	NL	NA
Nitrobenzene	98-95-3	100000	NL	40000	NA
N-Nitrosodi-n-propylamine	621-64-7	NL	NL	NL	NA
N-Nitrosodiphenylamine	86-30-6	NL	NL	NL	NA
Pentachlorophenol	87-86-5	6700	NL	2000000	NA

Table 3B: Waste Characterization Sample Analytical Results - SVOC

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted- Res	Seneca Meadows TCLP Waste Criteria	Seneca Meadows Waste Acceptance Criteria	PWEXWSNA075 1/4/2019 460-172817-2
Phenol	108-95-2	100000	NL	NL	NA
Total SVOCs (ug/Kg)		NL	NL	NL	NA
SVOCs-TCLP (ug/L)					
1,4-Dichlorobenzene	106-46-7	NL	7500	NL	ND
2,4,5-Trichlorophenol	95-95-4	NL	400000	NL	ND
2,4,6-Trichlorophenol	88-06-2	NL	2000	NL	ND
2,4-Dinitrotoluene	121-14-2	NL	130	NL	ND
2-Methylphenol	95-48-7	NL	200	NL	1.2 U
3&4-Methyl Phenol	782-06-0	NL	200	NL	2.4 U
Hexachlorobenzene	118-74-1	NL	130	NL	ND
Hexachlorobutadiene	87-68-3	NL	500	NL	ND
Hexachloroethane	67-72-1	NL	3000	NL	ND
mp-Cresol	15831-10-4				NA
Nitrobenzene	98-95-3	NL	2000	NL	ND
o-Cresol	95-48-7				NA
Pentachlorophenol	87-86-5	NL	100000	NL	ND
Pyridine	110-86-1	NL	5000	NL	2.6 U

Notes:
NA = Not Analyzed
NL = Not Listed
ND = Not Detected
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Bold = Detected above reporting limit.
Grey highlighted cells exceed the NYSDEC Part 375-6 Restricted Residential Use Level
Orange highlighted cells exceed the Seneca Meadows Landfill Waste Approval Analytical Screening Criteria
ug/kg = Micrograms per kilogram
ug/L = Micrograms per Liter
PDI and SS samples are presented in Predesign Investigation Report dated XX.

Table 3C: Waste Characterization Sample Analytical Results - Inorganics

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted- Res	Seneca Meadows TCLP Waste Criteria	Seneca Meadows Waste Acceptance	PWEXWS04003 3/10/2016 T1600349	PWEXWS04004 3/10/2016 T1600349	PWEXWS04005 3/10/2016 T1600349	PWEXWS04006 3/22/2016 T1600407	PWEXWS04007 3/22/2016 T1600407	PWEXWS04008 3/22/2016 T1600407	PWEXWS04011 4/11/2016 T1600557	PWEXWS04012 4/11/2016 T1600557	PWEXWS04013 4/11/2016 T1600557	PWEXWS04014 4/11/2016 T1600557	PWEXWS04015 4/11/2016 T1600557	PWEXWS04016 4/11/2016 T1600557	PWEXWS04017 4/11/2016 T1600557	PWEXWS04018 4/11/2016 T1600557	PWBOWS02019 4/27/2016 R1604238 R1604342	PWBOWS02020 4/27/2016 R1604238 R1604342
Metals (mg/Kg)																				
Antimony	7440-36-0	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 U	11 U
Arsenic	7440-38-2	16	NL	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2	1.8 U
Barium	7440-39-3	400	NL	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	59.3	37.1
Beryllium	7440-41-7	72	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.42 U	0.53 U
Cadmium	7440-43-9	4.3	NL	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.7 U	0.89 U
Chromium	7440-47-3	180	NL	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.2	3.6
Lead	7439-92-1	400	NL	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.3	20.2
Mercury	7439-97-6	0.81	NL	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.148	0.061 U
Nickel	7440-02-0	310	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	16.2	7.1 U
Selenium	7782-49-2	180	NL	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 U	1.8 U
Silver	7440-22-4	180	NL	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 U	1.8 U
Thallium	7440-28-0	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 U	1.8 U
Vanadium	7440-62-2	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13.6	8.9 U
Zinc	7440-66-6	10000	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	59.9	33.1
Metals-TCLP (mg/L)																				
Arsenic	7440-38-2	NL	5	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.5 U	0.5 U
Barium	7440-39-3	NL	100	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	1.0 U
Cadmium	7440-43-9	NL	1	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1 U	0.1 U
Chromium	7440-47-3	NL	5	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1 U	0.1 U
Lead	7439-92-1	NL	5	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1 U	0.1 U
Mercury	7439-97-6	NL	0.2	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	.00030 U	.00030 U
Selenium	7782-49-2	NL	1	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.5 U	0.5 U
Silver	7440-22-4	NL	5	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1 U	0.1 U
Cyanide (mg/Kg)																				
Total Cyanide	57-12-5	27	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.14 U	0.17 U
PCBs (ug/kg)																				
Aroclor 1016	12674-11-2	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	49 U	61 U
Aroclor 1221	11104-28-2	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99 U	120 U
Aroclor 1232	11141-16-5	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	49 U	61 U
Aroclor 1242	53469-21-9	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	49 U	61 U
Aroclor 1248	12672-29-6	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	49 U	61 U
Aroclor 1254	11097-69-1	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	49 U	61 U
Aroclor 1260	11096-82-5	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	49 U	61 U
Total PCB	CALC-PCB	1000	NL	50000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	49 U	61 U
Pesticides-TCLP (ug/L)																				
Chlordane	57-74-9	NL	30	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0025	< 0.0025
Endrin	72-20-8	NL	20	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.00050	< 0.00050
Gamma BHC - Lindane	58-89-9	NL	400	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.00050	< 0.00050
Heptachlor	76-44-8	NL	8	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.00050	< 0.00050
Heptachlor Epoxide	1024-57-3	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.00050	< 0.00050
Methoxychlor	72-43-5	NL	10000	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.00050	< 0.00050
Toxaphene	8001-35-2	NL	500	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0050	< 0.0050
Herbicides-TCLP (ug/L)																				
2,4-D	94-75-7	NL	10000	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0050	< 0.0050
2,4,5-TP		58000	1000	20000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silvex	93-72-1	NL	1000	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.0050	< 0.0050
Reactivity (mg/Kg)																				
Cyanide (Reactivity)	57-12-5-R	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide (Reactivity)	18496-25-8-R	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fuels (mg/Kg)																				
Diesel fuels	68334-30-5	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate (mg/Kg)																				
Sulfate	14808-79-8	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flashpoint (deg C)																				
Flashpoint	Flashpoint	NL	NL	>60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	> 100	> 100
Free Liquid																				
Free Liquid	FREE LIQUID	NL	NL	None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Absent	Present
Heat of Combustion																				
Heat of Combustion	HOC	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PH																				
pH	pH	NL	NL	2 - 12.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.96	7.3
Soilds																				
Total Solids	TSOLIDS	NL	NL	+20%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	71.8	57.9
Sulfur																				
% Sulfur	%	NL	NL	NL	0.02	0.01	0.07	0.11	0.01	0.02	0.22	0.17	0.15	0.15	0.19	0.12	0.15	0.15	NA	NA
Diesel and Residual Range Organics (ug/kg)																				
Gasoline Range Organics		NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diesel Range Organics (DRO) as C10-C28 Alkanes		NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	530000	480000
C28 - C40 ORO		NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	130000	290000

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Orange highlighted cells exceed the Seneca Meadows Landfill Waste Approval Analytical Screenin
ug/kg = Micrograms per kilogram
ug/L = Micrograms per Liter
PDI and SS samples are presented in predesign investigation report dated XX.

Table 3C: Waste Characterization Sample Analytical Results - Inorganics

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted- Res	Seneca Meadows TCLP Waste Criteria	Seneca Meadows Waste Acceptance	PWBOWS02021 4/27/2016 R1604238 R1604342	PWSPWS02053 2/9/2017 R1701214-001 / R1701241-001	PWSPWS02054 2/9/2017 R1701239-001 / R1701245-001	PWSPWS02055 2/10/2017 R1701262-001 / R1701263-001	PWSPWSNA 063 2/21/2017 480-113714-1	PWSPWSNA072 2/28/2017 480-114023-1	PWSPWSNA073 2/28/2017 480-114023-2	PWBOWS04076 5/4/2017 480-117648-1	PWBOWS08077 5/4/2017 480-117648-2	PWBOWS12078 5/4/2017 480-117648-2	PWFTWWNA079 5/12/2017 480-118029-1	PWFTWWNA080 5/15/2017 480-118059-1	PWFTWWNA081 5/15/2017 480-118059-3	PWTPWS04082 5/18/2017 480-118233-1	PWTPWS04083 5/18/2017 480-118233-2
Metals (mg/Kg)																			
Antimony	7440-36-0	NL	NL	NL	11 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	NA
Arsenic	7440-38-2	16	NL	100	3.3	5.1	5	7.3	NA	NA	NA	NA	NA	NA	0.019 U	0.018	0.017	NA	NA
Barium	7440-39-3	400	NL	2000	75.2	76	83	76.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	7440-41-7	72	NL	NL	0.53 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	NA
Cadmium	7440-43-9	4.3	NL	20	0.88 U	0.73 U	0.77 U	0.66 U	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	NA
Chromium	7440-47-3	180	NL	100	16.2	16.4	18.1	15.3	NA	NA	NA	NA	NA	NA	0.0051	0.0085	0.0045	NA	NA
Lead	7439-92-1	400	NL	100	205	59.3	62	49.6	NA	NA	NA	NA	NA	NA	0.0049 U	0.0040 U	ND	NA	NA
Mercury	7439-97-6	0.81	NL	4	0.272	0.141	0.294	0.1	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	NA
Nickel	7440-02-0	310	NL	NL	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	NA
Selenium	7782-49-2	180	NL	20	1.8 U	1.5 U	1.5 U	1.3 U	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	NA
Silver	7440-22-4	180	NL	100	1.8 U	1.5 U	1.5 U	1.3 U	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	NA
Thallium	7440-28-0	NL	NL	NL	1.8 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	NA	NA
Vanadium	7440-62-2	NL	NL	NL	17.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	7440-66-6	10000	NL	NL	82.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0083	ND	ND	NA	NA
Metals-TCLP (mg/L)																			
Arsenic	7440-38-2	NL	5	NL	0.5 U	ND	ND	ND	0.011 U	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Barium	7440-39-3	NL	100	NL	1.0 U	ND	ND	ND	0.81 U	1300	0.980 U	0.60 U	0.61 U	0.37 U	NA	NA	NA	0.40 U	0.14 U
Cadmium	7440-43-9	NL	1	NL	0.1 U	ND	ND	ND	0.002	4.1	0.0025	0.00095 U	0.0010 U	0.0011 U	NA	NA	NA	0.0012 U	0.0017 U
Chromium	7440-47-3	NL	5	NL	0.1 U	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Lead	7439-92-1	NL	5	NL	0.1 U	0.016U	ND	ND	0.013 U	7.4 U	0.0075 U	0.013 UB	0.23 B	0.0061 UB	NA	NA	NA	0.029	0.051
Mercury	7439-97-6	NL	0.2	NL	.00030 U	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Selenium	7782-49-2	NL	1	NL	0.5 U	0.038U	0.044U	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Silver	7440-22-4	NL	5	NL	0.1 U	ND	0.011U	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Cyanide (mg/Kg)																			
Total Cyanide	57-12-5	27	NL	NL	0.17 U	0.81	140	1.73	NA	NA	ND	NA	NA	NA	0.03	0.0082 U	0.012	3.9	32.6
PCBs (ug/kg)																			
Aroclor 1016	12674-11-2	NL	NL	NL	59 U	48 U	53 U	45 U	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Aroclor 1221	11104-28-2	NL	NL	NL	120 U	98 U	110 U	92 U	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Aroclor 1232	11141-16-5	NL	NL	NL	59 U	48 U	53 U	45 U	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Aroclor 1242	53469-21-9	NL	NL	NL	59 U	48 U	53 U	45 U	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Aroclor 1248	12672-29-6	NL	NL	NL	59 U	48 U	53 U	45 U	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Aroclor 1254	11097-69-1	NL	NL	NL	59 U	48 U	53 U	45 U	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Aroclor 1260	11096-82-5	NL	NL	NL	59 U	48 U	53 U	45 U	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Total PCB	CALC-PCB	1000	NL	50000	59 U	48 U	53 U	45 U	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Pesticides-TCLP (ug/L)																			
Chlordane	57-74-9	NL	30	NL	< 0.0025	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Endrin	72-20-8	NL	20	NL	< 0.00050	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Gamma BHC - Lindane	58-89-9	NL	400	NL	< 0.00050	ND	ND	ND	ND	ND	ND	ND	0.00038 U	ND	NA	NA	NA	ND	ND
Heptachlor	76-44-8	NL	8	NL	< 0.00050	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Heptachlor Epoxide	1024-57-3	NL	NL	NL	< 0.00050	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Methoxychlor	72-43-5	NL	10000	NL	< 0.00050	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Toxaphene	8001-35-2	NL	500	NL	< 0.0050	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Herbicides-TCLP (ug/L)																			
2,4-D	94-75-7	NL	10000	NL	< 0.0050	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
2,4,5-TP		58000	1000	20000	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Silvex	93-72-1	NL	1000	NL	< 0.0050	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Reactivity (mg/Kg)																			
Cyanide (Reactivity)	57-12-5-R	NL	NL	NL	NA	27 U	31 U	27 U	ND	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND
Sulfide (Reactivity)	18496-25-8-R	NL	NL	NL	NA	140 U	150 U	130 U	ND	ND	ND	ND	60	ND	NA	NA	NA	ND	80.1
Fuels (mg/Kg)																			
Diesel fuels	68334-30-5	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate (mg/Kg)																			
Sulfate	14808-79-8	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	532	967
Flashpoint (deg C)																			
Flashpoint	Flashpoint	NL	NL	>60	> 100	>100	>100	>100	>176.0	> 180.0	> 180.0	> 176.0	> 176.0	> 176.0	NA	NA	NA	>176.0	>176.0
Free Liquid																			
Free Liquid	FREE LIQUID	NL	NL	None	Absent	Absent	Absent	Absent	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heat of Combustion																			
Heat of Combustion	HOC	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PH																			
pH	pH	NL	NL	2 - 12.5	7.21	12.3	12.4	12.41	12.8	12.7	12.7	9.8	7.4	8.3	NA	NA	NA	8.1	7.4
Solids																			
Total Solids	TSOLIDS	NL	NL	+20%	63.3	68.5	62.8	69.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfur																			
% Sulfur	%	NL	NL	NL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diesel and Residual Range Organics (ug/kg)																			
Gasoline Range Organics		NL	NL	NL	NA	54600	76600	59400	29000	18000	13000	6.3	110	ND	NA	NA	NA	57000	ND
Diesel Range Organics (DRO) as C10-C28 Alkanes		NL	NL	NL	570000	3100000	4000000	3300000	690000	45000									

SUPERSEDED

Notes:

NA = Not Analyzed

NL = Not Listed

ND = Not Detected

U = Not detected above given laboratory reporting limit.

Bold = Detected above reporting limit.

Grey highlighted cells exceed the NYSDEC Part 375-6 Restricted Residential Use Level

Orange highlighted cells exceed the Seneca Meadows Landfill Waste Approval Analytical Screenin

ug/kg = Micrograms per kilogram

ug/L = Micrograms per Liter

PDI and SS samples are presented in predesign investigation report dated XX.

Table 3C: Waste Characterization Sample Analytical Results - Inorganics

Location ID Sample Date Lab Sample ID	CAS #	NYSDEC Part 375-6 Restricted- Res	Seneca Meadows TCLP Waste Criteria	Seneca Meadows Waste Acceptance	PWTPWS04084 5/31/2017 480-118820-1	PWTPWS04085 5/31/2017 480-118820-2	PWEXWSNA074 1/3/2019 460-172817-1	PWEXWSNA075 1/4/2019 460-172817-2
Metals (mg/Kg)								
Antimony	7440-36-0	NL	NL	NL	NA	NA	NA	NA
Arsenic	7440-38-2	16	NL	100	NA	NA	NA	NA
Barium	7440-39-3	400	NL	2000	NA	NA	NA	NA
Beryllium	7440-41-7	72	NL	NL	NA	NA	NA	NA
Cadmium	7440-43-9	4.3	NL	20	NA	NA	NA	NA
Chromium	7440-47-3	180	NL	100	NA	NA	NA	NA
Lead	7439-92-1	400	NL	100	NA	NA	NA	NA
Mercury	7439-97-6	0.81	NL	4	NA	NA	NA	NA
Nickel	7440-02-0	310	NL	NL	NA	NA	NA	NA
Selenium	7782-49-2	180	NL	20	NA	NA	NA	NA
Silver	7440-22-4	180	NL	100	NA	NA	NA	NA
Thallium	7440-28-0	NL	NL	NL	NA	NA	NA	NA
Vanadium	7440-62-2	NL	NL	NL	NA	NA	NA	NA
Zinc	7440-66-6	10000	NL	NL	NA	NA	NA	NA
Metals-TCLP (mg/L)								
Arsenic	7440-38-2	NL	5	NL	NA	NA	ND	ND
Barium	7440-39-3	NL	100	NL	NA	NA	0.2 U	0.47 U
Cadmium	7440-43-9	NL	1	NL	NA	NA	ND	0.0018 U
Chromium	7440-47-3	NL	5	NL	NA	NA	ND	ND
Lead	7439-92-1	NL	5	NL	NA	NA	0.18	0.024 U
Mercury	7439-97-6	NL	0.2	NL	NA	NA	ND	ND
Selenium	7782-49-2	NL	1	NL	NA	NA	ND	ND
Silver	7440-22-4	NL	5	NL	NA	NA	ND	ND
Cyanide (mg/Kg)								
Total Cyanide	57-12-5	27	NL	NL	NA	NA	NA	NA
PCBs (ug/kg)								
Aroclor 1016	12674-11-2	NL	NL	NL	NA	NA	ND	ND
Aroclor 1221	11104-28-2	NL	NL	NL	NA	NA	ND	ND
Aroclor 1232	11141-16-5	NL	NL	NL	NA	NA	ND	ND
Aroclor 1242	53469-21-9	NL	NL	NL	NA	NA	ND	ND
Aroclor 1248	12672-29-6	NL	NL	NL	NA	NA	ND	ND
Aroclor 1254	11097-69-1	NL	NL	NL	NA	NA	ND	ND
Aroclor 1260	11096-82-5	NL	NL	NL	NA	NA	ND	ND
Total PCB	CALC-PCB	1000	NL	50000	NA	NA	ND	ND
Pesticides-TCLP (ug/L)								
Chlordane	57-74-9	NL	30	NL	NA	NA	ND	ND
Endrin	72-20-8	NL	20	NL	NA	NA	ND	ND
Gamma BHC - Lindane	58-89-9	NL	400	NL	NA	NA	ND	ND
Heptachlor	76-44-8	NL	8	NL	NA	NA	ND	ND
Heptachlor Epoxide	1024-57-3	NL	NL	NL	NA	NA	ND	ND
Methoxychlor	72-43-5	NL	10000	NL	NA	NA	ND	ND
Toxaphene	8001-35-2	NL	500	NL	NA	NA	ND	ND
Herbicides-TCLP (ug/L)								
2,4-D	94-75-7	NL	10000	NL	NA	NA	ND	ND
2,4,5-TP		58000	1000	20000	NA	NA	ND	ND
Silvex	93-72-1	NL	1000	NL	NA	NA		
Reactivity (mg/Kg)								
Cyanide (Reactivity)	57-12-5-R	NL	NL	NL	NA	NA	ND	ND
Sulfide (Reactivity)	18496-25-8-R	NL	NL	NL	NA	NA	ND	ND
Fuels (mg/Kg)								
Diesel fuels	68334-30-5	NL	NL	NL	NA	NA	NA	NA
Sulfate (mg/Kg)								
Sulfate	14808-79-8	NL	NL	NL	NA	NA	NA	NA
Flashpoint (deg C)								
Flashpoint	Flashpoint	NL	NL	>60	NA	NA	NA	NA
Free Liquid								
Free Liquid	FREE LIQUID	NL	NL	None	NA	NA	NA	NA
Heat of Combustion								
Heat of Combustion	HOC	NL	NL	NL	NA	NA	NA	NA
PH								
pH	pH	NL	NL	2 - 12.5	NA	NA	9	7.4
Soilds								
Total Solids	TSOLIDS	NL	NL	+20%	NA	NA	83.7	82.6
Sulfur								
% Sulfur	%	NL	NL	NL	NA	NA	NA	NA
Diesel and Residual Range Organics (ug/kg)								
Gasoline Range Organics		NL	NL	NL	NA	NA	NA	NA
Diesel Range Organics (DRO) as C10-C28 Alkanes		NL	NL	NL	NA	NA	NA	NA
C28 - C40 ORO		NL	NL	NL	NA	NA	NA	NA

Notes:
NA = Not Analyzed
NL = Not Listed
ND = Not Detected
U = Not detected above given laboratory reporting limit.
Bold = Detected above reporting limit.
Grey highlighted cells exceed the NYSDEC Part 375-6 Restricted Residential Use Level
Orange highlighted cells exceed the Seneca Meadows Landfill Waste Approval Analytical Screening
ug/kg = Micrograms per kilogram
ug/L = Micrograms per Liter
PDI and SS samples are presented in predesign investigation report dated XX.

Table 4A: Wastewater Sample Analytical Results - Metals and VOCs

Location ID Sample Date Sample ID	CAS #	Daily Maximum Effluent Concentration Limit (mg/L)	PWFTWWNA022	PWFTWWNA029	PWFTWWNA041	PWFTWWNA075
			42583	42648	42684	42842
			R1607992	R1610583	R1612015	480-116408-1
Metals (mg/L)						
Arsenic	7440-38-2	0.05	ND	0.021	0.018	0.011
Barium	7440-39-3	1	NA	NA	NA	NA
Boron	7440-42-8	1	NA	NA	NA	NA
Cadmium	7440-43-9	0.1	ND	ND	ND	ND
Chlorine	7782-50-5	20	NA	NA	NA	NA
Chromium	7440-47-3	0.25	ND	ND	NA	ND
Copper	7440-50-8	0.2	ND	ND	ND	ND
Cyanide (Total)	57-12-5	0.1	NA	NA	NA	0.0066
Iron	7439-89-6	5	NA	NA	NA	NA
Lead	7439-92-1	0.05	ND	ND	ND	0.0057
Maganese	7439-96-5	1	NA	NA	NA	ND
Mercury	7439-97-6	0.005	ND	ND	NA	ND
Molybdenum	7439-98-7	1	ND	ND	ND	NA
Nickel	7440-02-0	1	ND	ND	ND	0.0046
Selenium	7782-49-2	0.02	ND	ND	ND	ND
Silver	7440-22-4	0.05	NA	NA	NA	ND
Zinc	7440-66-6	0.5	ND	ND	0.07	0.14
Volatile Organic Compounds (ug/L)						
1,1,1-Trichloroethane	71-55-6		ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	ND	ND
1,1,2-Trichloroethane	79-00-5		ND	ND	ND	ND
1,1-Dichloroethane	75-34-3		ND	ND	ND	ND
1,1-Dichloroethene	75-35-4		ND	ND	ND	ND
1,2,4-Trichlorobenzene	120-82-1		ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	96-12-8		ND	ND	ND	ND
1,2-Dibromoethane	106-93-4		ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1		ND	ND	ND	ND
1,2-Dichloroethane	107-06-2		ND	ND	ND	ND
1,2-Dichloropropane	78-87-5		ND	ND	ND	ND
1,3-Dichlorobenzene	541-73-1		ND	ND	ND	ND
1,4-Dichlorobenzene	106-46-7		ND	ND	ND	ND
2-Butanone	78-93-3		ND	ND	ND	ND
2-Hexanone	591-78-6		ND	ND	ND	ND
4-Methyl-2-pentanone	108-10-1		ND	ND	ND	11
Acetone	67-64-1		ND	ND	ND	8.3
Benzene	71-43-2		ND	ND	ND	ND
Bromodichloromethane	75-27-4		ND	ND	ND	ND
Bromoform	75-25-2		ND	ND	ND	ND
Bromomethane	74-83-9		ND	ND	ND	ND
Carbon disulfide	75-15-0		ND	ND	ND	2.2
Carbon tetrachloride	56-23-5		ND	ND	ND	ND
Chlorobenzene	108-90-7		ND	ND	ND	ND
Chloroethane	75-00-3		ND	ND	ND	ND
Chloroform	67-66-3		ND	ND	ND	ND
Chloromethane	74-87-3		ND	ND	ND	ND
cis-1,2-Dichloroethene	156-59-2		ND	ND	ND	ND
cis-1,3-Dichloropropene	10061-01-5		ND	ND	ND	ND
Cyclohexane	110-82-7		ND	ND	ND	ND
Dibromochloromethane	124-48-1		ND	ND	ND	ND
Dichlorodifluoromethane	75-71-8		ND	ND	ND	ND
Ethylbenzene	100-41-4		ND	ND	ND	ND
Isopropylbenzene	98-82-8		ND	ND	ND	ND
Methyl acetate	79-20-9		ND	ND	ND	ND
Methyl tert-butyl ether	1634-04-4		ND	ND	ND	ND
Methylcyclohexane	108-87-2		ND	ND	ND	ND
Methylene Chloride	75-09-2		ND	ND	ND	ND
Styrene	100-42-5		ND	ND	ND	ND
Tetrachloroethene	127-18-4		ND	ND	ND	ND
Toluene	108-88-3		ND	ND	ND	ND
trans-1,2-Dichloroethene	156-60-5		ND	ND	ND	ND
trans-1,3-Dichloropropene	10061-02-6		ND	ND	ND	ND
Trichloroethene	79-01-6		ND	ND	ND	ND
Trichlorofluoromethane	75-69-4		ND	ND	ND	ND
Vinyl chloride	75-01-4		ND	ND	ND	ND
Xylenes, Total	1330-20-7		ND	ND	ND	ND

Notes:

This is a summary table. Only detected analytes are presented.

U = Not detected above given laboratory reporting limit.

NA = Not Analyzed

Bold = Detected above reporting limit.

Grey highlighted cells exceed the Daily Maximum Effluent

mg/L = Milligrams per liter

ug/L = Micrograms per liter

Table 4A: Wastewater Sample Analytical Results - Metals and VOCs

Location ID Sample Date Sample ID	CAS #	Daily Maximum Effluent Concentration Limit (mg/L)	PWFTWWNA079	PWFTWWNA080	PWFTWWNA081	PWFTWWNA082
			42867	42870	42870	43502
			480-118029-1	480-118059-1	480-118059-3	480-148768-1
Metals (mg/L)						
Arsenic	7440-38-2	0.05	0.019	0.018	0.017	ND
Barium	7440-39-3	1	NA	NA	NA	NA
Boron	7440-42-8	1	NA	NA	NA	NA
Cadmium	7440-43-9	0.1	ND	ND	ND	ND
Chlorine	7782-50-5	20	NA	NA	NA	NA
Chromium	7440-47-3	0.25	0.0051	0.0085	0.0045	NA
Copper	7440-50-8	0.2	ND	ND	ND	ND
Cyanide (Total)	57-12-5	0.1	0.03	0.0082	0.012	ND
Iron	7439-89-6	5	ND	ND	ND	NA
Lead	7439-92-1	0.05	0.0049	0.004	ND	ND
Maganese	7439-96-5	1	NA	ND	ND	NA
Mercury	7439-97-6	0.005	ND	ND	ND	ND
Molybdenum	7439-98-7	1	NA	NA	NA	ND
Nickel	7440-02-0	1	ND	ND	ND	0.0041
Selenium	7782-49-2	0.02	ND	ND	ND	ND
Silver	7440-22-4	0.05	ND	ND	ND	NA
Zinc	7440-66-6	0.5	0.0083	ND	0.0048	0.0071
Volatile Organic Compounds (ug/L)						
1,1,1-Trichloroethane	71-55-6		ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	ND	ND
1,1,2-Trichloroethane	79-00-5		ND	ND	ND	ND
1,1-Dichloroethane	75-34-3		ND	ND	ND	ND
1,1-Dichloroethene	75-35-4		ND	ND	ND	ND
1,2,4-Trichlorobenzene	120-82-1		ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	96-12-8		ND	ND	ND	ND
1,2-Dibromoethane	106-93-4		ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1		ND	ND	ND	ND
1,2-Dichloroethane	107-06-2		ND	ND	ND	ND
1,2-Dichloropropane	78-87-5		ND	ND	ND	ND
1,3-Dichlorobenzene	541-73-1		ND	ND	ND	ND
1,4-Dichlorobenzene	106-46-7		ND	ND	ND	ND
2-Butanone	78-93-3		ND	ND	ND	ND
2-Hexanone	591-78-6		ND	ND	ND	ND
4-Methyl-2-pentanone	108-10-1		ND	ND	ND	ND
Acetone	67-64-1		ND	ND	ND	ND
Benzene	71-43-2		ND	ND	ND	ND
Bromodichloromethane	75-27-4		ND	ND	ND	ND
Bromoform	75-25-2		ND	ND	ND	ND
Bromomethane	74-83-9		ND	ND	ND	ND
Carbon disulfide	75-15-0		0.47	ND	ND	ND
Carbon tetrachloride	56-23-5		ND	ND	ND	ND
Chlorobenzene	108-90-7		ND	ND	ND	ND
Chloroethane	75-00-3		ND	ND	ND	ND
Chloroform	67-66-3		ND	ND	ND	ND
Chloromethane	74-87-3		ND	ND	ND	ND
cis-1,2-Dichloroethene	156-59-2		ND	ND	ND	ND
cis-1,3-Dichloropropene	10061-01-5		ND	ND	ND	ND
Cyclohexane	110-82-7		ND	ND	ND	ND
Dibromochloromethane	124-48-1		ND	ND	ND	ND
Dichlorodifluoromethane	75-71-8		ND	ND	ND	ND
Ethylbenzene	100-41-4		ND	ND	ND	ND
Isopropylbenzene	98-82-8		ND	ND	ND	ND
Methyl acetate	79-20-9		ND	ND	ND	ND
Methyl tert-butyl ether	1634-04-4		ND	ND	ND	ND
Methylcyclohexane	108-87-2		ND	ND	ND	ND
Methylene Chloride	75-09-2		ND	ND	ND	ND
Styrene	100-42-5		ND	ND	ND	ND
Tetrachloroethene	127-18-4		ND	ND	ND	ND
Toluene	108-88-3		ND	ND	ND	ND
trans-1,2-Dichloroethene	156-60-5		ND	ND	ND	ND
trans-1,3-Dichloropropene	10061-02-6		ND	ND	ND	ND
Trichloroethene	79-01-6		ND	ND	ND	ND
Trichlorofluoromethane	75-69-4		ND	ND	ND	ND
Vinyl chloride	75-01-4		ND	ND	ND	ND
Xylenes, Total	1330-20-7		ND	ND	ND	ND

Notes:

This is a summary table. Only detected analytes are presented.

U = Not detected above given laboratory reporting limit.

NA = Not Analyzed

Bold = Detected above reporting limit.

Grey highlighted cells exceed the Daily Maximum Effluent

mg/L = Milligrams per liter

ug/L = Micrograms per liter

Table 4A: Wastewater Sample Analytical Results - Metals and VOCs

Location ID Sample Date Sample ID	CAS #	Daily Maximum Effluent Concentration Limit (mg/L)	PWFTWWNA083	PWFTWWNA084	PWFTWWNA085	PWFTWWNA086
			43544	43572	43599	43602
			480-150601-1	480-152105-1	460-181968-1	460-182352-1
Metals (mg/L)						
Arsenic	7440-38-2	0.05	ND	ND	ND	ND
Barium	7440-39-3	1	NA	NA	NA	NA
Boron	7440-42-8	1	NA	NA	NA	NA
Cadmium	7440-43-9	0.1	ND	ND	ND	ND
Chlorine	7782-50-5	20	NA	NA	NA	NA
Chromium	7440-47-3	0.25	ND	ND	ND	ND
Copper	7440-50-8	0.2	ND	ND	ND	ND
Cyanide (Total)	57-12-5	0.1	0.012	0.0065	0.0088	ND
Iron	7439-89-6	5	NA	NA	NA	NA
Lead	7439-92-1	0.05	ND	ND	ND	ND
Maganese	7439-96-5	1	NA	NA	NA	NA
Mercury	7439-97-6	0.005	ND	ND	ND	ND
Molybdenum	7439-98-7	1	ND	ND	ND	ND
Nickel	7440-02-0	1	0.0034	0.0042	ND	ND
Selenium	7782-49-2	0.02	ND	ND	ND	ND
Silver	7440-22-4	0.05	NA	NA	NA	NA
Zinc	7440-66-6	0.5	0.0021	ND	ND	ND
Volatile Organic Compounds (ug/L)						
1,1,1-Trichloroethane	71-55-6		ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	ND	ND
1,1,2-Trichloroethane	79-00-5		ND	ND	ND	ND
1,1-Dichloroethane	75-34-3		ND	ND	ND	ND
1,1-Dichloroethene	75-35-4		ND	ND	ND	ND
1,2,4-Trichlorobenzene	120-82-1		ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	96-12-8		ND	ND	ND	ND
1,2-Dibromoethane	106-93-4		ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1		ND	ND	ND	ND
1,2-Dichloroethane	107-06-2		ND	ND	ND	ND
1,2-Dichloropropane	78-87-5		ND	ND	ND	ND
1,3-Dichlorobenzene	541-73-1		ND	ND	ND	ND
1,4-Dichlorobenzene	106-46-7		ND	ND	ND	ND
2-Butanone	78-93-3		ND	ND	ND	ND
2-Hexanone	591-78-6		ND	ND	ND	ND
4-Methyl-2-pentanone	108-10-1		ND	ND	ND	ND
Acetone	67-64-1		ND	ND	ND	ND
Benzene	71-43-2		ND	ND	ND	ND
Bromodichloromethane	75-27-4		ND	ND	ND	ND
Bromoform	75-25-2		ND	ND	ND	ND
Bromomethane	74-83-9		ND	ND	ND	ND
Carbon disulfide	75-15-0		ND	ND	ND	ND
Carbon tetrachloride	56-23-5		ND	ND	ND	ND
Chlorobenzene	108-90-7		ND	ND	ND	ND
Chloroethane	75-00-3		ND	ND	ND	ND
Chloroform	67-66-3		ND	ND	ND	ND
Chloromethane	74-87-3		ND	ND	ND	ND
cis-1,2-Dichloroethene	156-59-2		ND	ND	ND	ND
cis-1,3-Dichloropropene	10061-01-5		ND	ND	ND	ND
Cyclohexane	110-82-7		ND	ND	ND	ND
Dibromochloromethane	124-48-1		ND	ND	ND	ND
Dichlorodifluoromethane	75-71-8		ND	ND	ND	ND
Ethylbenzene	100-41-4		ND	ND	ND	ND
Isopropylbenzene	98-82-8		ND	ND	ND	ND
Methyl acetate	79-20-9		ND	ND	ND	ND
Methyl tert-butyl ether	1634-04-4		ND	ND	ND	ND
Methylcyclohexane	108-87-2		ND	ND	ND	ND
Methylene Chloride	75-09-2		ND	ND	ND	ND
Styrene	100-42-5		ND	ND	ND	ND
Tetrachloroethene	127-18-4		ND	ND	ND	ND
Toluene	108-88-3		ND	ND	ND	ND
trans-1,2-Dichloroethene	156-60-5		ND	ND	ND	ND
trans-1,3-Dichloropropene	10061-02-6		ND	ND	ND	ND
Trichloroethene	79-01-6		ND	ND	ND	ND
Trichlorofluoromethane	75-69-4		ND	ND	ND	ND
Vinyl chloride	75-01-4		ND	ND	ND	ND
Xylenes, Total	1330-20-7		ND	ND	ND	ND

Notes:

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Grey highlighted cells exceed the Daily Maximum Effluent

mg/L = Milligrams per liter

ug/L = Micrograms per liter

Table 4A: Wastewater Sample Analytical Results - Metals and VOCs

Location ID Sample Date Sample ID	CAS #	Daily Maximum Effluent Concentration Limit (mg/L)	PWFTWWNA087	PWFTWWNA088	PWFTWWNA089	PWFTWWNA090
			43642	43655	43658	43669
			460-185354-1	460-186235-1	460-186578-1	460-186578-1
Metals (mg/L)						
Arsenic	7440-38-2	0.05	ND	ND	ND	ND
Barium	7440-39-3	1	NA	NA	NA	NA
Boron	7440-42-8	1	NA	NA	NA	NA
Cadmium	7440-43-9	0.1	ND	ND	ND	ND
Chlorine	7782-50-5	20	NA	NA	NA	NA
Chromium	7440-47-3	0.25	ND	ND	ND	ND
Copper	7440-50-8	0.2	ND	ND	ND	ND
Cyanide (Total)	57-12-5	0.1	ND	ND	ND	0.28
Iron	7439-89-6	5	NA	NA	NA	NA
Lead	7439-92-1	0.05	ND	ND	ND	ND
Maganese	7439-96-5	1	NA	NA	NA	NA
Mercury	7439-97-6	0.005	ND	ND	ND	ND
Molybdenum	7439-98-7	1	ND	ND	ND	0.0094
Nickel	7440-02-0	1	ND	ND	ND	ND
Selenium	7782-49-2	0.02	ND	ND	ND	ND
Silver	7440-22-4	0.05	NA	NA	NA	NA
Zinc	7440-66-6	0.5	ND	ND	ND	ND
Volatile Organic Compounds (ug/L)						
1,1,1-Trichloroethane	71-55-6		ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	79-34-5		ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		ND	ND	ND	ND
1,1,2-Trichloroethane	79-00-5		ND	ND	ND	ND
1,1-Dichloroethane	75-34-3		ND	ND	ND	ND
1,1-Dichloroethene	75-35-4		ND	ND	ND	ND
1,2,4-Trichlorobenzene	120-82-1		ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	96-12-8		ND	ND	ND	ND
1,2-Dibromoethane	106-93-4		ND	ND	ND	ND
1,2-Dichlorobenzene	95-50-1		ND	ND	ND	ND
1,2-Dichloroethane	107-06-2		ND	ND	ND	ND
1,2-Dichloropropane	78-87-5		ND	ND	ND	ND
1,3-Dichlorobenzene	541-73-1		ND	ND	ND	ND
1,4-Dichlorobenzene	106-46-7		ND	ND	ND	ND
2-Butanone	78-93-3		ND	ND	ND	ND
2-Hexanone	591-78-6		ND	ND	ND	ND
4-Methyl-2-pentanone	108-10-1		ND	ND	ND	ND
Acetone	67-64-1		ND	ND	ND	5.2
Benzene	71-43-2		ND	ND	ND	ND
Bromodichloromethane	75-27-4		9.3	13	12	ND
Bromoform	75-25-2		ND	ND	ND	ND
Bromomethane	74-83-9		ND	ND	ND	ND
Carbon disulfide	75-15-0		ND	7.1	ND	ND
Carbon tetrachloride	56-23-5		ND	ND	ND	ND
Chlorobenzene	108-90-7		ND	ND	ND	ND
Chloroethane	75-00-3		ND	ND	ND	ND
Chloroform	67-66-3		31	51	52	ND
Chloromethane	74-87-3		ND	ND	ND	ND
cis-1,2-Dichloroethene	156-59-2		ND	ND	ND	ND
cis-1,3-Dichloropropene	10061-01-5		ND	ND	ND	ND
Cyclohexane	110-82-7		ND	ND	ND	ND
Dibromochloromethane	124-48-1		2	3.1	2.4	ND
Dichlorodifluoromethane	75-71-8		ND	ND	ND	ND
Ethylbenzene	100-41-4		ND	ND	ND	ND
Isopropylbenzene	98-82-8		ND	ND	ND	ND
Methyl acetate	79-20-9		ND	ND	ND	ND
Methyl tert-butyl ether	1634-04-4		ND	ND	ND	ND
Methylcyclohexane	108-87-2		ND	ND	ND	ND
Methylene Chloride	75-09-2		ND	ND	ND	ND
Styrene	100-42-5		ND	ND	ND	ND
Tetrachloroethene	127-18-4		ND	ND	ND	ND
Toluene	108-88-3		ND	ND	ND	ND
trans-1,2-Dichloroethene	156-60-5		ND	ND	ND	ND
trans-1,3-Dichloropropene	10061-02-6		ND	ND	ND	ND
Trichloroethene	79-01-6		ND	ND	ND	ND
Trichlorofluoromethane	75-69-4		ND	ND	ND	ND
Vinyl chloride	75-01-4		ND	ND	ND	ND
Xylenes, Total	1330-20-7		ND	ND	ND	ND

Notes:

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Grey highlighted cells exceed the Daily Maximum Effluent

mg/L = Milligrams per liter

ug/L = Micrograms per liter

Table 4A: Wastewater Sample Analytical Results - Metals and VOCs

Location ID Sample Date Sample ID	CAS #	Daily Maximum Effluent Concentration Limit (mg/L)	PWFTWWNA091
			43683
			460-188418-1
Metals (mg/L)			
Arsenic	7440-38-2	0.05	NA
Barium	7440-39-3	1	NA
Boron	7440-42-8	1	NA
Cadmium	7440-43-9	0.1	NA
Chlorine	7782-50-5	20	NA
Chromium	7440-47-3	0.25	NA
Copper	7440-50-8	0.2	NA
Cyanide (Total)	57-12-5	0.1	0.34
Iron	7439-89-6	5	NA
Lead	7439-92-1	0.05	NA
Maganese	7439-96-5	1	NA
Mercury	7439-97-6	0.005	NA
Molybdenum	7439-98-7	1	NA
Nickel	7440-02-0	1	NA
Selenium	7782-49-2	0.02	NA
Silver	7440-22-4	0.05	NA
Zinc	7440-66-6	0.5	NA
Volatile Organic Compounds (ug/L)			
1,1,1-Trichloroethane	71-55-6		NA
1,1,2,2-Tetrachloroethane	79-34-5		NA
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		NA
1,1,2-Trichloroethane	79-00-5		NA
1,1-Dichloroethane	75-34-3		NA
1,1-Dichloroethene	75-35-4		NA
1,2,4-Trichlorobenzene	120-82-1		NA
1,2-Dibromo-3-Chloropropane	96-12-8		NA
1,2-Dibromoethane	106-93-4		NA
1,2-Dichlorobenzene	95-50-1		NA
1,2-Dichloroethane	107-06-2		NA
1,2-Dichloropropane	78-87-5		NA
1,3-Dichlorobenzene	541-73-1		NA
1,4-Dichlorobenzene	106-46-7		NA
2-Butanone	78-93-3		NA
2-Hexanone	591-78-6		NA
4-Methyl-2-pentanone	108-10-1		NA
Acetone	67-64-1		NA
Benzene	71-43-2		NA
Bromodichloromethane	75-27-4		NA
Bromoform	75-25-2		NA
Bromomethane	74-83-9		NA
Carbon disulfide	75-15-0		NA
Carbon tetrachloride	56-23-5		NA
Chlorobenzene	108-90-7		NA
Chloroethane	75-00-3		NA
Chloroform	67-66-3		NA
Chloromethane	74-87-3		NA
cis-1,2-Dichloroethene	156-59-2		NA
cis-1,3-Dichloropropene	10061-01-5		NA
Cyclohexane	110-82-7		NA
Dibromochloromethane	124-48-1		NA
Dichlorodifluoromethane	75-71-8		NA
Ethylbenzene	100-41-4		NA
Isopropylbenzene	98-82-8		NA
Methyl acetate	79-20-9		NA
Methyl tert-butyl ether	1634-04-4		NA
Methylcyclohexane	108-87-2		NA
Methylene Chloride	75-09-2		NA
Styrene	100-42-5		NA
Tetrachloroethene	127-18-4		NA
Toluene	108-88-3		NA
trans-1,2-Dichloroethene	156-60-5		NA
trans-1,3-Dichloropropene	10061-02-6		NA
Trichloroethene	79-01-6		NA
Trichlorofluoromethane	75-69-4		NA
Vinyl chloride	75-01-4		NA
Xylenes, Total	1330-20-7		NA

Notes:

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Grey highlighted cells exceed the Daily Maximum Effluent

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ug/L = Micrograms per liter

Table 4B: Wastewater Sample Analytical Results - SVOCs

Location ID Sample Date	CAS #	Daily Maximum Effluent Concentration Limit (mg/L)	PWFTWWNA022	PWFTWWNA029	PWFTWWNA041	PWFTWWNA075
			8/1/2016	10/5/2016	11/10/2016	4/17/2017
			R1607992	R1610583	R1612015	480-116408-1
Semivolatile Organic Compounds (ug/L)						
2,4,5-Trichlorophenol	95-95-4		ND	ND	ND	ND
2,4,6-Trichlorophenol	88-06-2		ND	ND	ND	ND
2,4-Dichlorophenol	120-83-2		ND	ND	ND	ND
2,4-Dimethylphenol	105-67-9		ND	ND	ND	ND
2,4-Dinitrophenol	51-28-5		ND	ND	ND	ND
2,4-Dinitrotoluene	121-14-2		ND	ND	ND	ND
2,6-Dinitrotoluene	606-20-2		ND	ND	ND	ND
2-Chloronaphthalene	91-58-7		ND	ND	ND	ND
2-Chlorophenol	95-57-8		ND	ND	ND	ND
2-Methylnaphthalene	91-57-6		ND	ND	ND	ND
2-Methylphenol	95-48-7		ND	ND	ND	ND
2-Nitroaniline	88-74-4		ND	ND	ND	ND
2-Nitrophenol	88-75-5		ND	ND	ND	ND
3,3'-Dichlorobenzidine	91-94-1		ND	ND	ND	ND
3&4-Methyl Phenol	782-06-0		ND	ND	ND	ND
3-Nitroaniline	99-09-2		ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	534-52-1		ND	ND	ND	ND
4-Bromophenyl phenyl ether	101-55-3		ND	ND	ND	ND
4-Chloro-3-methylphenol	59-50-7		ND	ND	ND	ND
4-Chloroaniline	106-47-8		ND	ND	ND	ND
4-Chlorophenyl phenyl ether	7005-72-3		ND	ND	ND	ND
4-Methylphenol	106-44-5		ND	ND	ND	ND
4-Nitroaniline	100-01-6		ND	ND	ND	ND
4-Nitrophenol	100-02-7		ND	ND	ND	ND
Acenaphthene	83-32-9		ND	ND	ND	ND
Acenaphthylene	208-96-8		ND	ND	ND	ND
Acetophenone	98-86-2		ND	ND	ND	0.84 U
Anthracene	120-12-7		ND	ND	ND	ND
Atrazine	1912-24-9		ND	ND	ND	ND
Benzaldehyde	100-52-7		ND	ND	ND	ND
Benzo[a]anthracene	56-55-3		ND	ND	ND	ND
Benzo[a]pyrene	50-32-8		ND	ND	ND	ND
Benzo[b]fluoranthene	205-99-2		ND	ND	ND	ND
Benzo[g,h,i]perylene	191-24-2		ND	ND	ND	ND
Benzo[k]fluoranthene	207-08-9		ND	ND	ND	ND
Biphenyl	92-52-4		ND	ND	ND	ND
bis (2-chloroisopropyl) ether	108-60-1		ND	ND	ND	ND
Bis(2-chloroethoxy)methane	111-91-1		ND	ND	ND	ND
Bis(2-chloroethyl)ether	111-44-4		ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	117-81-7		ND	ND	ND	ND
Butyl benzyl phthalate	85-68-7		ND	ND	ND	ND
Caprolactam	105-60-2		ND	ND	ND	ND
Carbazole	86-74-8		ND	ND	ND	ND
Chrysene	218-01-9		ND	ND	ND	ND
Dibenz(a,h)anthracene	53-70-3		ND	ND	ND	ND
Dibenzofuran	132-64-9		ND	ND	ND	ND
Diethyl phthalate	131-11-3		ND	ND	ND	ND
Dimethyl phthalate	84-66-2		ND	ND	ND	ND
Di-n-butyl phthalate	84-74-2		ND	ND	ND	0.31 U
Di-n-octyl phthalate	117-84-0		ND	ND	ND	ND
Fluoranthene	206-44-0		ND	ND	ND	ND
Fluorene	86-73-7		ND	ND	ND	ND
Hexachlorobenzene	118-74-1		ND	ND	ND	ND
Hexachlorobutadiene	87-68-3		ND	ND	ND	ND
Hexachlorocyclopentadiene	77-47-4		ND	ND	ND	ND
Hexachloroethane	67-72-1		ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	193-39-5		ND	ND	ND	ND
Isophorone	78-59-1		ND	ND	ND	ND
Naphthalene	91-20-3		ND	ND	ND	ND
Nitrobenzene	98-95-3		ND	ND	ND	ND
N-Nitrosodi-n-propylamine	621-64-7		ND	ND	ND	ND
N-Nitrosodiphenylamine	86-30-6		ND	ND	ND	ND
Pentachlorophenol	87-86-5		ND	ND	ND	ND
Phenanthrene	85-01-8		ND	ND	ND	ND
Phenol	108-95-2		ND	ND	ND	ND
Pyrene	129-00-0		ND	ND	ND	ND
Biochemical Oxygen Demand (mg/L)			ND	ND	4.8	3.4

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Grey highlighted cells exceed the Daily Maximum Effluent

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Table 4B: Wastewater Sample Analytical Results - SVOCs

Location ID Sample Date	CAS #	Daily Maximum Effluent Concentration Limit (mg/L)	PWFTWWNA079	PWFTWWNA080	PWFTWWNA081	PWFTWWNA082
			5/12/2017	5/15/2017	5/15/2017	2/6/2019
			480-118029-1	480-118059-1	480-118059-3	480-148768-1
Semivolatile Organic Compounds (ug/L)						
2,4,5-Trichlorophenol	95-95-4		ND	ND	ND	ND
2,4,6-Trichlorophenol	88-06-2		ND	ND	ND	ND
2,4-Dichlorophenol	120-83-2		ND	ND	ND	ND
2,4-Dimethylphenol	105-67-9		ND	ND	ND	ND
2,4-Dinitrophenol	51-28-5		ND	ND	ND	ND
2,4-Dinitrotoluene	121-14-2		ND	ND	ND	ND
2,6-Dinitrotoluene	606-20-2		ND	ND	ND	ND
2-Chloronaphthalene	91-58-7		ND	ND	ND	ND
2-Chlorophenol	95-57-8		ND	ND	ND	ND
2-Methylnaphthalene	91-57-6		ND	ND	ND	ND
2-Methylphenol	95-48-7		ND	ND	ND	ND
2-Nitroaniline	88-74-4		ND	ND	ND	ND
2-Nitrophenol	88-75-5		ND	ND	ND	ND
3,3'-Dichlorobenzidine	91-94-1		ND	ND	ND	ND
3&4-Methyl Phenol	782-06-0		ND	ND	ND	ND
3-Nitroaniline	99-09-2		ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	534-52-1		ND	ND	ND	ND
4-Bromophenyl phenyl ether	101-55-3		ND	ND	ND	ND
4-Chloro-3-methylphenol	59-50-7		ND	ND	ND	ND
4-Chloroaniline	106-47-8		ND	ND	ND	ND
4-Chlorophenyl phenyl ether	7005-72-3		ND	ND	ND	ND
4-Methylphenol	106-44-5		ND	ND	2	ND
4-Nitroaniline	100-01-6		ND	ND	ND	ND
4-Nitrophenol	100-02-7		ND	ND	ND	ND
Acenaphthene	83-32-9		ND	ND	ND	ND
Acenaphthylene	208-96-8		ND	ND	ND	ND
Acetophenone	98-86-2		ND	ND	ND	ND
Anthracene	120-12-7		ND	ND	ND	ND
Atrazine	1912-24-9		ND	ND	ND	ND
Benzaldehyde	100-52-7		ND	ND	ND	ND
Benzo[a]anthracene	56-55-3		ND	ND	ND	ND
Benzo[a]pyrene	50-32-8		ND	ND	ND	ND
Benzo[b]fluoranthene	205-99-2		ND	ND	ND	ND
Benzo[g,h,i]perylene	191-24-2		ND	ND	ND	ND
Benzo[k]fluoranthene	207-08-9		ND	ND	ND	ND
Biphenyl	92-52-4		ND	ND	ND	ND
bis (2-chloroisopropyl) ether	108-60-1		ND	ND	ND	ND
Bis(2-chloroethoxy)methane	111-91-1		ND	ND	ND	ND
Bis(2-chloroethyl)ether	111-44-4		ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	117-81-7		ND	2.6	2.6	ND
Butyl benzyl phthalate	85-68-7		ND	ND	ND	ND
Caprolactam	105-60-2		ND	ND	ND	ND
Carbazole	86-74-8		ND	ND	ND	ND
Chrysene	218-01-9		ND	ND	ND	ND
Dibenz(a,h)anthracene	53-70-3		ND	ND	ND	ND
Dibenzofuran	132-64-9		ND	ND	ND	ND
Diethyl phthalate	131-11-3		ND	0.29	0.31	ND
Dimethyl phthalate	84-66-2		ND	ND	ND	ND
Di-n-butyl phthalate	84-74-2		ND	0.79	0.33	0.41
Di-n-octyl phthalate	117-84-0		ND	ND	0.65	ND
Fluoranthene	206-44-0		ND	ND	ND	ND
Fluorene	86-73-7		ND	ND	ND	ND
Hexachlorobenzene	118-74-1		ND	ND	ND	ND
Hexachlorobutadiene	87-68-3		ND	ND	ND	ND
Hexachlorocyclopentadiene	77-47-4		ND	ND	ND	ND
Hexachloroethane	67-72-1		ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	193-39-5		ND	ND	ND	ND
Isophorone	78-59-1		ND	ND	0.8	ND
Naphthalene	91-20-3		ND	ND	ND	ND
Nitrobenzene	98-95-3		ND	ND	ND	ND
N-Nitrosodi-n-propylamine	621-64-7		ND	ND	ND	ND
N-Nitrosodiphenylamine	86-30-6		ND	ND	ND	ND
Pentachlorophenol	87-86-5		ND	ND	ND	ND
Phenanthrene	85-01-8		ND	ND	ND	ND
Phenol	108-95-2		ND	ND	0.91	0.45
Pyrene	129-00-0		ND	ND	ND	ND
Biochemical Oxygen Demand (mg/L)			ND	ND	ND	3

Notes:

This is a summary table. Only detected analytes are presented.

U = Not detected above given laboratory reporting limit.

NA = Not Analyzed

Bold = Detected above reporting limit.

Grey highlighted cells exceed the Daily Maximum Effluent

mg/L = Milligrams per liter

ug/kg = Micrograms per liter

Table 4B: Wastewater Sample Analytical Results - SVOCs

Location ID Sample Date	CAS #	Daily Maximum Effluent Concentration Limit (mg/L)	PWFTWWNA083	PWFTWWNA084	PWFTWWNA085	PWFTWWNA086
			3/20/2019	4/17/2019	5/14/2019	5/17/2019
			480-150601-1	480-152105-1	460-181968-1	460-182352-1
Sample ID						
Semivolatile Organic Compounds (ug/L)						
2,4,5-Trichlorophenol	95-95-4		ND	ND	ND	ND
2,4,6-Trichlorophenol	88-06-2		ND	ND	ND	ND
2,4-Dichlorophenol	120-83-2		ND	ND	ND	ND
2,4-Dimethylphenol	105-67-9		ND	ND	ND	ND
2,4-Dinitrophenol	51-28-5		ND	ND	ND	ND
2,4-Dinitrotoluene	121-14-2		ND	ND	ND	ND
2,6-Dinitrotoluene	606-20-2		ND	ND	ND	ND
2-Chloronaphthalene	91-58-7		ND	ND	ND	ND
2-Chlorophenol	95-57-8		ND	ND	ND	ND
2-Methylnaphthalene	91-57-6		ND	ND	ND	ND
2-Methylphenol	95-48-7		ND	ND	ND	ND
2-Nitroaniline	88-74-4		ND	ND	ND	ND
2-Nitrophenol	88-75-5		ND	ND	ND	ND
3,3'-Dichlorobenzidine	91-94-1		ND	ND	ND	ND
3&4-Methyl Phenol	782-06-0		ND	ND	ND	ND
3-Nitroaniline	99-09-2		ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	534-52-1		ND	ND	ND	ND
4-Bromophenyl phenyl ether	101-55-3		ND	ND	ND	ND
4-Chloro-3-methylphenol	59-50-7		ND	ND	ND	ND
4-Chloroaniline	106-47-8		ND	ND	ND	ND
4-Chlorophenyl phenyl ether	7005-72-3		ND	ND	ND	ND
4-Methylphenol	106-44-5		ND	ND	ND	ND
4-Nitroaniline	100-01-6		ND	ND	ND	ND
4-Nitrophenol	100-02-7		ND	ND	ND	ND
Acenaphthene	83-32-9		ND	ND	ND	ND
Acenaphthylene	208-96-8		ND	ND	ND	ND
Acetophenone	98-86-2		ND	ND	ND	ND
Anthracene	120-12-7		ND	ND	ND	ND
Atrazine	1912-24-9		ND	ND	ND	ND
Benzaldehyde	100-52-7		ND	ND	ND	ND
Benzo[a]anthracene	56-55-3		ND	ND	ND	ND
Benzo[a]pyrene	50-32-8		ND	ND	ND	ND
Benzo[b]fluoranthene	205-99-2		ND	ND	ND	ND
Benzo[g,h,i]perylene	191-24-2		ND	ND	ND	ND
Benzo[k]fluoranthene	207-08-9		ND	ND	ND	ND
Biphenyl	92-52-4		ND	ND	ND	ND
bis (2-chloroisopropyl) ether	108-60-1		ND	ND	ND	ND
Bis(2-chloroethoxy)methane	111-91-1		ND	ND	ND	ND
Bis(2-chloroethyl)ether	111-44-4		ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	117-81-7		ND	ND	ND	ND
Butyl benzyl phthalate	85-68-7		ND	ND	ND	ND
Caprolactam	105-60-2		ND	ND	ND	ND
Carbazole	86-74-8		ND	ND	ND	ND
Chrysene	218-01-9		ND	ND	ND	ND
Dibenz(a,h)anthracene	53-70-3		ND	ND	ND	ND
Dibenzofuran	132-64-9		ND	ND	ND	ND
Diethyl phthalate	131-11-3		ND	ND	ND	ND
Dimethyl phthalate	84-66-2		ND	ND	ND	ND
Di-n-butyl phthalate	84-74-2		ND	0.43	ND	ND
Di-n-octyl phthalate	117-84-0		ND	ND	ND	ND
Fluoranthene	206-44-0		ND	ND	ND	ND
Fluorene	86-73-7		ND	ND	ND	ND
Hexachlorobenzene	118-74-1		ND	ND	ND	ND
Hexachlorobutadiene	87-68-3		ND	ND	ND	ND
Hexachlorocyclopentadiene	77-47-4		ND	ND	ND	ND
Hexachloroethane	67-72-1		ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	193-39-5		ND	ND	ND	ND
Isophorone	78-59-1		ND	ND	ND	ND
Naphthalene	91-20-3		ND	ND	ND	ND
Nitrobenzene	98-95-3		ND	ND	ND	ND
N-Nitrosodi-n-propylamine	621-64-7		ND	ND	ND	ND
N-Nitrosodiphenylamine	86-30-6		ND	ND	ND	ND
Pentachlorophenol	87-86-5		ND	ND	ND	ND
Phenanthrene	85-01-8		ND	ND	ND	ND
Phenol	108-95-2		ND	ND	ND	ND
Pyrene	129-00-0		ND	ND	ND	ND
Biochemical Oxygen Demand (mg/L)			2.4	ND	ND	ND

Notes:

This is a summary table. Only detected analytes are presented.

U = Not detected above given laboratory reporting limit.

NA = Not Analyzed

Bold = Detected above reporting limit.

Grey highlighted cells exceed the Daily Maximum Effluent

mg/L = Milligrams per liter

ug/kg = Micrograms per liter

Table 4B: Wastewater Sample Analytical Results - SVOCs

Location ID Sample Date Sample ID	CAS #	Daily Maximum Effluent Concentration Limit (mg/L)	PWFTWWNA087	PWFTWWNA088	PWFTWWNA089	PWFTWWNA090
			6/26/2019	7/9/2019	7/12/2019	7/23/2019
			460-185354-1	460-186235-1	460-186578-1	460-186578-1
Semivolatile Organic Compounds (ug/L)						
2,4,5-Trichlorophenol	95-95-4		ND	ND	ND	ND
2,4,6-Trichlorophenol	88-06-2		ND	ND	ND	ND
2,4-Dichlorophenol	120-83-2		ND	ND	ND	ND
2,4-Dimethylphenol	105-67-9		ND	ND	ND	ND
2,4-Dinitrophenol	51-28-5		ND	ND	ND	ND
2,4-Dinitrotoluene	121-14-2		ND	ND	ND	ND
2,6-Dinitrotoluene	606-20-2		ND	ND	ND	ND
2-Chloronaphthalene	91-58-7		ND	ND	ND	ND
2-Chlorophenol	95-57-8		ND	ND	ND	ND
2-Methylnaphthalene	91-57-6		ND	ND	ND	ND
2-Methylphenol	95-48-7		ND	ND	ND	ND
2-Nitroaniline	88-74-4		ND	ND	ND	ND
2-Nitrophenol	88-75-5		ND	ND	ND	ND
3,3'-Dichlorobenzidine	91-94-1		ND	ND	ND	ND
3&4-Methyl Phenol	782-06-0		ND	ND	ND	ND
3-Nitroaniline	99-09-2		ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	534-52-1		ND	ND	ND	ND
4-Bromophenyl phenyl ether	101-55-3		ND	ND	ND	ND
4-Chloro-3-methylphenol	59-50-7		ND	ND	ND	ND
4-Chloroaniline	106-47-8		ND	ND	ND	ND
4-Chlorophenyl phenyl ether	7005-72-3		ND	ND	ND	ND
4-Methylphenol	106-44-5		ND	ND	ND	ND
4-Nitroaniline	100-01-6		ND	ND	ND	ND
4-Nitrophenol	100-02-7		ND	ND	ND	ND
Acenaphthene	83-32-9		ND	ND	ND	ND
Acenaphthylene	208-96-8		ND	ND	ND	ND
Acetophenone	98-86-2		ND	ND	ND	ND
Anthracene	120-12-7		ND	ND	ND	ND
Atrazine	1912-24-9		ND	ND	ND	ND
Benzaldehyde	100-52-7		ND	ND	ND	ND
Benzo[a]anthracene	56-55-3		ND	ND	ND	ND
Benzo[a]pyrene	50-32-8		ND	ND	ND	ND
Benzo[b]fluoranthene	205-99-2		ND	ND	ND	ND
Benzo[g,h,i]perylene	191-24-2		ND	ND	ND	ND
Benzo[k]fluoranthene	207-08-9		ND	ND	ND	ND
Biphenyl	92-52-4		ND	ND	ND	ND
bis (2-chloroisopropyl) ether	108-60-1		ND	ND	ND	ND
Bis(2-chloroethoxy)methane	111-91-1		ND	ND	ND	ND
Bis(2-chloroethyl)ether	111-44-4		ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	117-81-7		ND	ND	ND	ND
Butyl benzyl phthalate	85-68-7		ND	ND	ND	ND
Caprolactam	105-60-2		ND	ND	ND	ND
Carbazole	86-74-8		ND	ND	ND	ND
Chrysene	218-01-9		ND	ND	ND	ND
Dibenz(a,h)anthracene	53-70-3		ND	ND	ND	ND
Dibenzofuran	132-64-9		ND	ND	ND	ND
Diethyl phthalate	131-11-3		ND	ND	ND	ND
Dimethyl phthalate	84-66-2		ND	ND	ND	ND
Di-n-butyl phthalate	84-74-2		ND	ND	ND	ND
Di-n-octyl phthalate	117-84-0		ND	ND	ND	ND
Fluoranthene	206-44-0		ND	ND	ND	ND
Fluorene	86-73-7		ND	ND	ND	ND
Hexachlorobenzene	118-74-1		ND	ND	ND	ND
Hexachlorobutadiene	87-68-3		ND	ND	ND	ND
Hexachlorocyclopentadiene	77-47-4		ND	ND	ND	ND
Hexachloroethane	67-72-1		ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	193-39-5		ND	ND	ND	ND
Isophorone	78-59-1		ND	ND	ND	ND
Naphthalene	91-20-3		ND	ND	ND	ND
Nitrobenzene	98-95-3		ND	ND	ND	ND
N-Nitrosodi-n-propylamine	621-64-7		ND	ND	ND	ND
N-Nitrosodiphenylamine	86-30-6		ND	ND	ND	ND
Pentachlorophenol	87-86-5		ND	ND	ND	ND
Phenanthrene	85-01-8		ND	ND	ND	ND
Phenol	108-95-2		ND	ND	ND	ND
Pyrene	129-00-0		ND	ND	ND	ND
Biochemical Oxygen Demand (mg/L)			ND	ND	ND	ND

Notes:

This is a summary table. Only detected analytes are presented.

U = Not detected above given laboratory reporting limit.

NA = Not Analyzed

Bold = Detected above reporting limit.

Grey highlighted cells exceed the Daily Maximum Effluent

mg/L = Milligrams per liter

ug/kg = Micrograms per liter

Table 4B: Wastewater Sample Analytical Results - SVOCs

Location ID Sample Date Sample ID	CAS #	Daily Maximum Effluent Concentration Limit (mg/L)	PWFTWWNA091
			8/6/2019
			460-188418-1
Semivolatile Organic Compounds (ug/L)			
2,4,5-Trichlorophenol	95-95-4		NA
2,4,6-Trichlorophenol	88-06-2		NA
2,4-Dichlorophenol	120-83-2		NA
2,4-Dimethylphenol	105-67-9		NA
2,4-Dinitrophenol	51-28-5		NA
2,4-Dinitrotoluene	121-14-2		NA
2,6-Dinitrotoluene	606-20-2		NA
2-Chloronaphthalene	91-58-7		NA
2-Chlorophenol	95-57-8		NA
2-Methylnaphthalene	91-57-6		NA
2-Methylphenol	95-48-7		NA
2-Nitroaniline	88-74-4		NA
2-Nitrophenol	88-75-5		NA
3,3'-Dichlorobenzidine	91-94-1		NA
3&4-Methyl Phenol	782-06-0		NA
3-Nitroaniline	99-09-2		NA
4,6-Dinitro-2-methylphenol	534-52-1		NA
4-Bromophenyl phenyl ether	101-55-3		NA
4-Chloro-3-methylphenol	59-50-7		NA
4-Chloroaniline	106-47-8		NA
4-Chlorophenyl phenyl ether	7005-72-3		NA
4-Methylphenol	106-44-5		NA
4-Nitroaniline	100-01-6		NA
4-Nitrophenol	100-02-7		NA
Acenaphthene	83-32-9		NA
Acenaphthylene	208-96-8		NA
Acetophenone	98-86-2		NA
Anthracene	120-12-7		NA
Atrazine	1912-24-9		NA
Benzaldehyde	100-52-7		NA
Benzo[a]anthracene	56-55-3		NA
Benzo[a]pyrene	50-32-8		NA
Benzo[b]fluoranthene	205-99-2		NA
Benzo[g,h,i]perylene	191-24-2		NA
Benzo[k]fluoranthene	207-08-9		NA
Biphenyl	92-52-4		NA
bis (2-chloroisopropyl) ether	108-60-1		NA
Bis(2-chloroethoxy)methane	111-91-1		NA
Bis(2-chloroethyl)ether	111-44-4		NA
Bis(2-ethylhexyl) phthalate	117-81-7		NA
Butyl benzyl phthalate	85-68-7		NA
Caprolactam	105-60-2		NA
Carbazole	86-74-8		NA
Chrysene	218-01-9		NA
Dibenz(a,h)anthracene	53-70-3		NA
Dibenzofuran	132-64-9		NA
Diethyl phthalate	131-11-3		NA
Dimethyl phthalate	84-66-2		NA
Di-n-butyl phthalate	84-74-2		NA
Di-n-octyl phthalate	117-84-0		NA
Fluoranthene	206-44-0		NA
Fluorene	86-73-7		NA
Hexachlorobenzene	118-74-1		NA
Hexachlorobutadiene	87-68-3		NA
Hexachlorocyclopentadiene	77-47-4		NA
Hexachloroethane	67-72-1		NA
Indeno[1,2,3-cd]pyrene	193-39-5		NA
Isophorone	78-59-1		NA
Naphthalene	91-20-3		NA
Nitrobenzene	98-95-3		NA
N-Nitrosodi-n-propylamine	621-64-7		NA
N-Nitrosodiphenylamine	86-30-6		NA
Pentachlorophenol	87-86-5		NA
Phenanthrene	85-01-8		NA
Phenol	108-95-2		NA
Pyrene	129-00-0		NA
Biochemical Oxygen Demand (mg/L)			NA

Notes:

This is a summary table. Only detected analytes are presented.

U = Not detected above given laboratory reporting limit.

NA = Not Analyzed

Bold = Detected above reporting limit.

Grey highlighted cells exceed the Daily Maximum Effluent

mg/L = Milligrams per liter

ug/kg = Micrograms per liter

Table 5A: Confirmation Sample Analytical Results - VOCs

Location ID	NYSDEC Part 375-6 Restricted- Res*	Upland Excavation		SOUTHEAST ROOM										
		PWEXBM05009	PWEXBM05010	PWEXSWNA076	PWEXSWNA077	PWEXSWNA078	PWEXSWNA079	PWEXSWNA080	PWEXSWNA081	PWEXSWNA082	PWEXSWNA083	PWEXSWNA084	PWEXSWNA085	PWEXSWNA086
		3/30/2016	3/30/2016	4/3/2019	4/3/2019	4/4/2019	4/4/2019	4/4/2019	4/4/2019	4/4/2019	4/4/2019	4/4/2019	4/4/2019	4/4/2019
Sample ID		R1602989-1	R1602989-2	480-151412-1	480-151412-2	480-151412-3	480-151412-4	480-151412-5	480-151412-6	480-151412-7	480-151412-8	480-151412-9	480-151412-10	480-151412-11
Volatile Organic Compounds (ppm)														
1,1,1-Trichloroethane	100	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	26	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	100	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	100	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	3.1	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	49	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	13	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	100	NA	NA	0.018	0.8	0.023	0.042	0.046	0.029	0.061	0.018	0.0067	0.03	0.061
Benzene	4.8	ND	ND	0.0004	ND	ND	ND	ND	ND	0.01	ND	ND	ND	ND
Bromodichloromethane		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	2.4	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	100	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	49	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	41	ND	ND	0.00048	ND	ND	ND	0.012	ND	0.014	ND	ND	ND	ND
Isopropylbenzene		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	100	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	100	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.0028	ND	0.0031
Styrene		NA	NA	ND	ND	ND	ND	ND	ND	ND	0.00035	ND	ND	ND
Tetrachloroethene	19	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100000	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	21	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.9	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	100	ND	ND	ND	ND	ND	ND	0.014	ND	0.02	ND	ND	ND	ND
Total Conc	10 (from ROD)	ND	ND	0.01888	0.8	0.023	0.042	0.072	0.029	0.105	0.01835	0.0095	0.03	0.0641
Total Estimated Conc. (TICs)		-	-	0.3683	-	-	-	1.766	-	1.769	0.3415	-	-	-

Notes:
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
* Values provided for reference only. SCO's for subsurface soil established in the ROD are <500mg/kg total SVOCs, 10mg/kg total VOCs
Entries in gray text were superseded following additional excavation/disposal at the sample location

Table 5A: Confirmation Sample Analytical Results - VOCs

Location ID		NYSDEC Part 375-6 Restricted- Res*	PWEXSWNA126	PWEXBM04072	PWEXBM07079	PWEXSWNA127	PWEXSWNA128
Sample Date			4/4/2019	4/5/2019	4/5/2019	4/4/2019	4/4/2019
Sample ID			480-151412-12	480-151436-1	480-151436-2	480-151436-3	480-151436-4
Volatile Organic Compounds (ppm)							
1,1,1-Trichloroethane	100	ND	ND	ND	ND	ND	
1,1,2,2-Tetrachloroethane		ND	ND	ND	ND	ND	
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	ND	ND	ND	ND	
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	
1,1-Dichloroethane	26	ND	ND	ND	ND	ND	
1,1-Dichloroethene	100	ND	ND	ND	ND	ND	
1,2,4-Trichlorobenzene		ND	ND	ND	ND	ND	
1,2-Dibromo-3-Chloropropane		ND	ND	ND	ND	ND	
1,2-Dibromoethane		ND	ND	ND	ND	ND	
1,2-Dichlorobenzene	100	ND	ND	ND	ND	ND	
1,2-Dichloroethane	3.1	ND	ND	ND	ND	ND	
1,2-Dichloropropane		ND	ND	ND	ND	ND	
1,3-Dichlorobenzene	49	ND	ND	ND	ND	ND	
1,4-Dichlorobenzene	13	ND	ND	ND	ND	ND	
2-Butanone (MEK)		ND	ND	ND	ND	ND	
2-Hexanone		ND	ND	ND	ND	ND	
4-Methyl-2-pentanone (MIBK)		ND	ND	ND	ND	ND	
Acetone	100	0.0059	0.013	0.016	ND	ND	
Benzene	4.8	ND	ND	ND	ND	ND	
Bromodichloromethane		ND	ND	ND	ND	ND	
Bromoform		ND	ND	ND	ND	ND	
Bromomethane		ND	ND	ND	ND	ND	
Carbon disulfide		ND	ND	ND	ND	ND	
Carbon tetrachloride	2.4	ND	ND	ND	ND	ND	
Chlorobenzene	100	ND	ND	ND	ND	ND	
Chloroethane		ND	ND	ND	ND	ND	
Chloroform	49	ND	ND	ND	ND	ND	
Chloromethane		ND	ND	ND	ND	ND	
cis-1,2-Dichloroethene		ND	ND	ND	ND	ND	
cis-1,3-Dichloropropene		ND	ND	ND	ND	ND	
Cyclohexane		ND	ND	ND	ND	ND	
Dibromochloromethane		ND	ND	ND	ND	ND	
Dichlorodifluoromethane		ND	ND	ND	ND	ND	
Ethylbenzene	41	ND	ND	ND	ND	ND	
Isopropylbenzene		ND	ND	ND	ND	ND	
Methyl acetate		ND	ND	ND	ND	ND	
Methyl tert-butyl ether	100	ND	ND	ND	ND	ND	
Methylcyclohexane		ND	ND	ND	ND	ND	
Methylene Chloride	100	ND	ND	ND	ND	ND	
Styrene		ND	ND	ND	ND	ND	
Tetrachloroethene	19	ND	ND	ND	ND	ND	
Toluene	100	ND	ND	ND	ND	ND	
trans-1,2-Dichloroethene	100000	ND	ND	ND	ND	ND	
trans-1,3-Dichloropropene		ND	ND	ND	ND	ND	
Trichloroethene	21	ND	ND	ND	ND	ND	
Trichlorofluoromethane		ND	ND	ND	ND	ND	
Vinyl chloride	0.9	ND	ND	ND	ND	ND	
Xylenes, Total	100	ND	ND	ND	ND	ND	
Total Conc	10 (from ROD)	0.0059	0.013	0.016	ND	ND	
Total Estimated Conc. (TICs)		-	0.039	-	-	-	

Notes:
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
* Values provided for reference only. SCO's for subsurface s
Entries in gray text were superseded following additional exc

Table 5A: Confirmation Sample Analytical Results - VOCs

Location ID	NYSDEC Part 375-6 Restricted- Res*	SOUTHWEST ROOM													DUP01
		PWEXSWNA115	PWEXSWNA116	PWEXSWNA117	PWEXSWNA118	PWEXSWNA119	PWEXSWNA120	PWEXSWNA123	PWEXSWNA124	PWEXSWNA125	PWEXBM04077	PWEXSWNA121	PWEXBM04078	PWEXSWNA122	
		4/8/2019	4/8/2019	4/8/2019	4/8/2019	4/8/2019	4/8/2019	4/8/2019	4/8/2019	4/8/2019	4/8/2019	4/9/2019	4/9/2019	4/9/2019	
Sample Date	Sample ID	480-151556-1	480-151556-2	480-151556-3	480-151556-4	480-151556-5	480-151556-6	480-151556-7	480-151556-8	480-151556-9	480-151605-2	480-151605-4	480-151605-5	480-151605-18	480-151605-17
Volatile Organic Compounds (ppm)															
1,1,1-Trichloroethane	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	100	0.067	0.022	0.035	0.014	0.0085	0.01	0.018	0.0078	0.025	0.0051	ND	ND	ND	ND
Benzene	4.8	ND	ND	0.00061	ND	ND	0.0011	ND	ND	ND	ND	BM	ND	ND	ND
Bromodichloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	49	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00038	0.00045	0.00047	0.00045	0.0058
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	41	ND	ND	0.0024	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	100	ND	0.0028	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	100	ND	ND	ND	ND	ND	0.00061	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	100	ND	ND	0.0041	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Conc	10 (from ROD)	0.067	0.0248	0.04211	0.014	0.0085	0.01171	0.018	0.0078	0.025	0.00548	0.00045	0.00047	0.00045	0.00058
Total Estimated Conc. (TICs)		-	-	0.275	-	-	-	-	-	-	0.0222	-	-	-	0.00179

Notes:
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Entries in gray text were superseded following additional exc

Table 5A: Confirmation Sample Analytical Results - VOCs

		SMALL NORTHEAST ROOM				
Location ID	NYSDEC Part 375-6 Restricted- Res*	PWEXSWNA087	PWEXSWNA088	PWEXSWNA089	PWEXSWNA051	PWEXBM04073
Sample Date		4/9/2019	4/9/2019	4/9/2019	4/9/2019	4/18/2019
Sample ID		480-151605-15	480-151605-16	480-151605-14	480-151605-6	480-152236-1
Volatile Organic Compounds (ppm)						
1,1,1-Trichloroethane	100	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND	ND
1,1-Dichloroethane	26	ND	ND	ND	ND	ND
1,1-Dichloroethene	100	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene		ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane		ND	ND	ND	ND	ND
1,2-Dibromoethane		ND	ND	ND	ND	ND
1,2-Dichlorobenzene	100	ND	ND	ND	ND	ND
1,2-Dichloroethane	3.1	ND	ND	ND	ND	ND
1,2-Dichloropropane		ND	ND	ND	ND	ND
1,3-Dichlorobenzene	49	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	13	ND	ND	ND	ND	ND
2-Butanone (MEK)		ND	ND	ND	ND	ND
2-Hexanone		ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)		ND	ND	ND	ND	ND
Acetone	100	0.013	ND	0.01	ND	ND
Benzene	4.8	ND	ND	ND	ND	ND
Bromodichloromethane		ND	ND	ND	ND	ND
Bromoform		ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND
Carbon disulfide		ND	ND	ND	ND	ND
Carbon tetrachloride	2.4	ND	ND	ND	ND	ND
Chlorobenzene	100	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND
Chloroform	49	0.00047	ND	0.00049	0.00051	ND
Chloromethane		ND	ND	ND	ND	ND
cis-1,2-Dichloroethene		ND	ND	ND	ND	ND
cis-1,3-Dichloropropene		ND	ND	ND	ND	ND
Cyclohexane		ND	ND	ND	ND	ND
Dibromochloromethane		ND	ND	ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND	ND	ND
Ethylbenzene	41	0.0013	0.2	ND	ND	ND
Isopropylbenzene		ND	ND	ND	ND	ND
Methyl acetate		ND	ND	ND	ND	ND
Methyl tert-butyl ether	100	ND	ND	ND	ND	ND
Methylcyclohexane		ND	ND	ND	ND	ND
Methylene Chloride	100	ND	ND	ND	ND	ND
Styrene		0.00029	ND	ND	ND	ND
Tetrachloroethene	19	ND	ND	ND	ND	ND
Toluene	100	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100000	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND	ND	ND
Trichloroethene	21	ND	ND	ND	ND	ND
Trichlorofluoromethane		ND	ND	ND	ND	ND
Vinyl chloride	0.9	ND	ND	ND	ND	ND
Xylenes, Total	100	ND	0.62	ND	ND	ND
Total Conc	10 (from ROD)	0.01506	0.82	0.01049	0.00051	ND
Total Estimated Conc. (TICs)		0.1011	97.2	0.42	-	-

Notes:
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NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
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Table 5A: Confirmation Sample Analytical Results - VOCs

Location ID	NYSDEC Part 375-6 Restricted- Res*	LARGE NORTHEAST ROOM					
		PWEXSWNA090	PWEXSWNA091	PWEXSWNA152	PWEXSWNA093	PWEXSWNA094	PWEXBM04074
		4/9/2019	4/9/2019	4/9/2019	4/9/2019	4/9/2019	4/8/2019
Sample ID		480-151605-10	480-151605-11	480-151605-13	480-151605-9	480-151605-12	480-151605-1
Volatile Organic Compounds (ppm)							
1,1,1-Trichloroethane	100	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	26	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	100	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene		ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane		ND	ND	ND	ND	ND	ND
1,2-Dibromoethane		ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	100	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	3.1	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane		ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	49	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	13	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)		ND	ND	ND	ND	ND	ND
2-Hexanone		ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)		ND	ND	ND	ND	ND	ND
Acetone	100	0.07	0.025	0.0059	0.032	ND	0.015
Benzene	4.8	0.0019	ND	ND	0.0022	0.12	ND
Bromodichloromethane		ND	ND	ND	ND	ND	ND
Bromoform		ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND
Carbon disulfide		ND	ND	ND	ND	ND	ND
Carbon tetrachloride	2.4	ND	ND	ND	ND	ND	ND
Chlorobenzene	100	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND
Chloroform	49	0.00063	0.00049	0.00048	0.00053	ND	0.00045
Chloromethane		ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene		ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND
Cyclohexane		ND	ND	ND	ND	ND	ND
Dibromochloromethane		ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND	ND	ND	ND
Ethylbenzene	41	0.0025	ND	0.0011	0.0051	0.73	0.00074
Isopropylbenzene		0.0011	ND	ND	0.00097	0.13	ND
Methyl acetate		ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	100	ND	ND	ND	ND	ND	ND
Methylcyclohexane		ND	ND	ND	ND	ND	ND
Methylene Chloride	100	ND	ND	ND	ND	ND	ND
Styrene		ND	ND	ND	ND	ND	ND
Tetrachloroethene	19	ND	ND	ND	ND	ND	ND
Toluene	100	0.00045	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100000	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND
Trichloroethene	21	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane		ND	ND	ND	ND	ND	ND
Vinyl chloride	0.9	ND	ND	ND	ND	ND	ND
Xylenes, Total	100	0.0011	ND	ND	0.0029	5.8	0.0062
Total Conc	10 (from ROD)	0.07768	0.02549	0.00748	0.0437	6.78	0.02239
Total Estimated Conc. (TICs)		0.221	0.023	0.0836	0.41	213.3	0.1471

Notes:
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ppm = Parts per million
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Table 5A: Confirmation Sample Analytical Results - VOCs

Location ID	NYSDEC Part 375-6 Restricted- Res*	NORTHWEST ROOM		
		PWEXSWNA099	PWEXSWNA100	PWEXSWNA101
		4/10/2019	4/10/2019	4/10/2019
Sample ID		480-151836-9	480-151836-8	480-151836-7
Volatile Organic Compounds (ppm)				
1,1,1-Trichloroethane	100	ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND
1,1-Dichloroethane	26	ND	ND	ND
1,1-Dichloroethene	100	ND	ND	ND
1,2,4-Trichlorobenzene		ND	ND	ND
1,2-Dibromo-3-Chloropropane		ND	ND	ND
1,2-Dibromoethane		ND	ND	ND
1,2-Dichlorobenzene	100	ND	ND	ND
1,2-Dichloroethane	3.1	ND	ND	ND
1,2-Dichloropropane		ND	ND	ND
1,3-Dichlorobenzene	49	ND	ND	ND
1,4-Dichlorobenzene	13	ND	ND	ND
2-Butanone (MEK)		ND	ND	ND
2-Hexanone		ND	ND	ND
4-Methyl-2-pentanone (MIBK)		ND	ND	ND
Acetone	100	ND	ND	ND
Benzene	4.8	ND	ND	0.11
Bromodichloromethane		ND	ND	ND
Bromoform		ND	ND	ND
Bromomethane		ND	ND	ND
Carbon disulfide		ND	ND	ND
Carbon tetrachloride	2.4	ND	ND	ND
Chlorobenzene	100	ND	ND	ND
Chloroethane		ND	ND	ND
Chloroform	49	0.00051	0.00047	ND
Chloromethane		ND	ND	ND
cis-1,2-Dichloroethene		ND	ND	ND
cis-1,3-Dichloropropene		ND	ND	ND
Cyclohexane		ND	ND	ND
Dibromochloromethane		ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND
Ethylbenzene	41	ND	ND	1.5
Isopropylbenzene		ND	ND	ND
Methyl acetate		ND	ND	ND
Methyl tert-butyl ether	100	ND	ND	ND
Methylcyclohexane		ND	ND	ND
Methylene Chloride	100	ND	ND	ND
Styrene		ND	ND	ND
Tetrachloroethene	19	ND	ND	ND
Toluene	100	ND	ND	ND
trans-1,2-Dichloroethene	100000	ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND
Trichloroethene	21	ND	ND	ND
Trichlorofluoromethane		ND	ND	ND
Vinyl chloride	0.9	ND	ND	ND
Xylenes, Total	100	ND	ND	10
Total Conc	10 (from ROD)	0.00051	0.00047	11.61
Total Estimated Conc. (TICs)		-	-	286.4

Notes:
Results do not include laboratory data qualifier codes.
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NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
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Entries in gray text were superseded following additional exc

Table 5A: Confirmation Sample Analytical Results - VOCs

Location ID	NYSDEC Part 375-6 Restricted- Res*	WEST CORRIDOR					
		PWEXSWNA108	PWEXSWNA109	PWEXSWNA112	PWEXSWNA113	PWEXSWNA114	PWEXBM04081
		4/11/2019	4/11/2019	4/11/2019	4/11/2019	4/11/2019	4/11/2019
Sample ID		480-151821-1	480-151821-2	480-151821-3	480-151821-4	480-151821-5	480-151821-6
Volatile Organic Compounds (ppm)							
1,1,1-Trichloroethane	100	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	26	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	100	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene		ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane		ND	ND	ND	ND	ND	ND
1,2-Dibromoethane		ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	100	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	3.1	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane		ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	49	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	13	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)		ND	ND	ND	ND	ND	ND
2-Hexanone		ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)		ND	ND	ND	ND	ND	ND
Acetone	100	0.0056	0.013	0.014	ND	0.049	0.016
Benzene	4.8	ND	ND	ND	ND	0.00037	ND
Bromodichloromethane		ND	ND	ND	ND	ND	ND
Bromoform		ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND
Carbon disulfide		ND	ND	ND	ND	ND	ND
Carbon tetrachloride	2.4	ND	ND	ND	ND	ND	ND
Chlorobenzene	100	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND
Chloroform	49	0.00048	0.00046	0.0004	0.0004	0.00043	0.0005
Chloromethane		ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene		ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND
Cyclohexane		ND	ND	ND	ND	ND	ND
Dibromochloromethane		ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND	ND	ND	ND
Ethylbenzene	41	ND	ND	ND	ND	0.006	ND
Isopropylbenzene		ND	ND	ND	ND	ND	ND
Methyl acetate		ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	100	ND	ND	ND	ND	ND	ND
Methylcyclohexane		ND	ND	ND	ND	ND	ND
Methylene Chloride	100	ND	ND	ND	ND	ND	ND
Styrene		ND	ND	ND	ND	ND	ND
Tetrachloroethene	19	ND	ND	ND	ND	0.0026	ND
Toluene	100	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100000	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND
Trichloroethene	21	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane		ND	ND	ND	ND	ND	ND
Vinyl chloride	0.9	ND	ND	ND	ND	0.046	ND
Xylenes, Total	100	ND	ND	ND	ND	ND	ND
Total Conc	10 (from ROD)	0.0608	0.01346	0.0144	0.0004	0.1044	0.0165
Total Estimated Conc. (TICs)		-	-	0.039	-	0.667	-

Notes:
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
* Values provided for reference only. SCO's for subsurface s
Entries in gray text were superseded following additional exc

Table 5A: Confirmation Sample Analytical Results - VOCs

Location ID	NYSDEC Part 375-6 Restricted- Res*	OUTSIDE E WALL OF NORTHEAST/SOUTHEAST ROOMS							OUTSIDE NORTH WALL OF NE ROOMS	
		PWEXSWNA150	PWEXSWNA129	PWEXSWNA130	PWEXSWNA131	PWEXSWNA132	PWEXSWNA133	PWEXSWNA134	PWEXSWNA135	PWEXSWNA136
		4/10/2019	4/10/2019	4/10/2019	4/9/2019	4/10/2019	4/9/2019	4/9/2019	4/10/2019	4/10/2019
Sample ID		480-151836-6	480-151836-1	480-151836-2	480-151605-3	480-151836-3	480-151605-7	480-151605-8	480-151836-4	480-151836-5
Volatile Organic Compounds (ppm)										
1,1,1-Trichloroethane	100	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	26	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	49	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	13	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)		ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone		ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)		ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	100	0.017	ND	0.015	ND	0.0094	ND	ND	ND	ND
Benzene	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform		ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide		ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	49	0.0005	0.00049	0.00045	0.00044	0.00043	0.0004	0.00047	0.00042	0.00043
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene		ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	41	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate		ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	100	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	100	0.003	ND	ND	ND	ND	ND	ND	ND	ND
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	19	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100000	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	21	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	100	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Conc	10 (from ROD)	0.0205	0.00049	0.01545	0.00044	0.00983	0.0004	0.00047	0.00042	0.00043
Total Estimated Conc. (TICs)		-	-	-	-	-	-	-	-	-

Notes:
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
* Values provided for reference only. SCO's for subsurface s
Entries in gray text were superseded following additional exc

Table 5A: Confirmation Sample Analytical Results - VOCs

		UNDERMINING BOTTOM CONFIRMATION SAMPLE												
Location ID	NYSDEC Part 375-6 Restricted- Res*	PWEXBM04095	PWEXBM04137	PWEXBM04092	PWEXBM04097	PWEXBM04141	PWEXBM04144	PWEXBM04146	PWEXBM04145	PWEXBM04143	PWEXBM04140	PWEXBM04138	PWEXBM04098	PWEXBM04101
Sample Date		4/24/2019	4/24/2019	4/25/2019	4/29/2019	4/29/2019	4/30/2029	5/1/2019	5/15/2019	5/16/2019	5/16/2019	5/17/2019	5/21/2019	5/21/2019
Sample ID		460-180464-1	460-180464-2	460-180465-1	460-180726-1	460-180726-2	460-180817-1	460-180912-1	460-182074-1	460-182200-1	460-182200-2	460-182351-1	460-182570-1	460-182570-2
Volatile Organic Compounds (ppm)														
1,1,1-Trichloroethane	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	100	0.0081	0.012	0.022	0.015	0.0098	0.0051	0.0014	0.016	0.0095	0.015	ND	0.027	ND
Benzene	4.8	ND	ND	0.0051	ND	0.00064	ND	ND	ND	ND	ND	ND	0.0022	0.3
Bromodichloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide		ND	ND	0.00036	0.00066	0.00027	ND	ND	ND	0.00029	ND	ND	0.0015	ND
Carbon tetrachloride	2.4	ND	ND	ND	0.0025	0.0016	0.0011	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	41	ND	ND	0.0083	ND	0.00049	ND	ND	ND	0.00021	ND	ND	0.0081	0.34
Isopropylbenzene		ND	ND	0.00088	ND	0.00021	ND	ND	ND	ND	ND	ND	0.0012	0.044
Methyl acetate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane		ND	ND	0.00032	ND	ND	ND	ND	ND	ND	ND	ND	0.00043	0.033
Methylene Chloride	100	0.00082	0.0013	0.0015	ND	ND	0.00047	0.00034	0.0051	0.0014	0.0028	0.00072	0.00066	ND
Styrene		ND	ND	0.0011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	100	ND	ND	0.001	ND	ND	ND	ND	ND	ND	ND	ND	0.00096	ND
trans-1,2-Dichloroethene	100000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	100	ND	ND	0.0074	0.00048	0.0017	ND	ND	0.00094	ND	ND	ND	0.041	1.4
Total Conc	10 (from ROD)	0.00892	0.0133	0.03966	0.01864	0.01471	0.00667	0.00174	0.02204	0.0114	0.0178	0.00072	0.08305	2.117
Total Estimated Conc. (TICs)		-	0.0063	0.971	0.0065	0.2377	-	-	-	-	-	-	1.784	16.9

Notes:
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NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
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Entries in gray text were superseded following additional exc

Table 5A: Confirmation Sample Analytical Results - VOCs

Location ID	NYSDEC Part 375-6 Restricted- Res*										
		PWEXSWNA096	PWEXBM04105	PWEXBM04102	PWEXBM04139	PWEXBM04075	PWEXBM04106	PWEXBM04147	PWEXBM04107	PWEXBM04076	PWEXBM04080
		5/21/2019	5/28/2019	5/29/2019	5/29/2019	5/31/2019	6/12/2019	6/26/2019	6/27/2019	6/27/2019	6/27/2019
Sample ID		460-182570-3	460-182989-1	460-183077-1	460-183077-2	460-183257-1	460-184340-3	460-185340-1	460-185424-1	460-185424-2	460-185424-3
Volatile Organic Compounds (ppm)											
1,1,1-Trichloroethane	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)		ND	0.0034	0.0061	ND	0.0014	0.0047	ND	ND	ND	ND
2-Hexanone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	100	ND	0.02	0.03	0.0081	0.0092	ND	0.015	0.015	0.011	0.03
Benzene	4.8	ND	ND	0.0011	ND	0.0031	ND	ND	ND	0.00035	ND
Bromodichloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide		ND	ND	0.0018	ND	0.00068	0.0036	ND	ND	ND	ND
Carbon tetrachloride	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane		ND	ND	ND	ND	ND	ND	7	ND	ND	ND
cis-1,2-Dichloroethene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	41	0.15	ND	ND	ND	0.0086	ND	ND	ND	ND	ND
Isopropylbenzene		ND	ND	0.00031	ND	0.0028	ND	ND	ND	ND	ND
Methyl acetate		0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane		ND	ND	ND	ND	0.00084	ND	ND	ND	ND	ND
Methylene Chloride	100	ND	ND	0.00091	0.00027	ND	ND	0.0014	0.0015	0.00099	0.0019
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	100	ND	ND	ND	ND	0.0017	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	100	0.66	ND	ND	ND	0.0096	ND	ND	ND	0.00099	ND
Total Conc	10 (from ROD)	0.99	0.0234	0.04022	0.00837	0.03792	0.0083	0.0164	0.0165	0.01333	0.0319
Total Estimated Conc. (TICs)		12.22	-	0.0141	-	0.445	-	-	-	0.03	-

Notes:
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NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
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Entries in gray text were superseded following additional exc

Table 5A: Confirmation Sample Analytical Results - VOCs

Location ID	NYSDEC Part 375-6 Restricted- Res*	UPLAND/TFS												
		PWEXBM05166	PWEXBM05167	PWEXBM05168	PWEXBM08169	PWEXBM08170	PWEXBM07171	PWEXBM07172	PWEXBM07174	PWEXBM07175	PWEXBM07176	DUP	PWEXBM07177	PWEXBM10178
		8/23/2019	8/23/2019	8/23/2019	8/27/2019	8/27/2019	8/28/2019	8/27/2019	9/11/2019	9/11/2019	10/15/2019	10/15/2019	10/16/2019	10/23/2019
Sample ID		460-189811-1	460-189811-2	460-189811-3	460-189997-1	460-189997-2	460-190126-1	460-190126-2	460-191058-1	460-191058-2	460-194375-1	460-194375-2	460-194375-3	460-194762-1
Volatile Organic Compounds (ppm)														
1,1,1-Trichloroethane	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	0.00021	ND	ND	ND	ND	ND
1,2-Dichloroethane	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)		ND	0.0048	ND	ND	ND	ND	ND	ND	ND	0.016	0.017	0.043	ND
2-Hexanone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	100	ND	0.022	ND	ND	0.0081	ND	ND	0.044	0.023	0.067	0.06	0.13	0.021
Benzene	4.8	ND	ND	ND	ND	ND	ND	ND	0.035	ND	0.00077	0.00089	ND	ND
Bromodichloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide		ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00077	0.00039	0.0014	0.00038
Carbon tetrachloride	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane		ND	ND	ND	ND	ND	ND	ND	0.0014	ND	ND	ND	ND	ND
Dibromochloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	41	0.00065	ND	ND	ND	ND	ND	ND	0.036	0.00026	0.0015	0.0021	0.0026	ND
Isopropylbenzene		ND	ND	ND	ND	ND	ND	ND	0.013	0.00016	0.0035	0.0043	0.0045	ND
Methyl acetate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane		ND	ND	ND	ND	ND	ND	ND	0.0026	ND	0.0014	0.00096	0.0015	ND
Methylene Chloride	100	0.0014	0.0015	0.00088	0.00085	0.00075	ND	ND	ND	ND	ND	ND	ND	ND
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	100	0.00036	ND	ND	ND	ND	ND	ND	0.0037	ND	0.00052	0.00067	ND	ND
trans-1,2-Dichloroethene	100000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	100	0.0019	ND	ND	ND	ND	ND	ND	0.082	0.00068	0.01	0.014	0.012	ND
Total Conc	10 (from ROD)	0.00431	0.0283	0.00088	0.00085	0.00885	ND	ND	0.21791	0.0241	0.10146	0.10031	0.195	0.02138
Total Estimated Conc. (TICs)		-	-	-	-	-	-	-	2.433	0.0.15	0.536	1.135	0.96	-

Notes:
Results do not include laboratory data qualifier codes.
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NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
* Values provided for reference only. SCO's for subsurface s
Entries in gray text were superseded following additional exc

Table 5A: Confirmation Sample Analytical Results - VOCs

Location ID	NYSDEC Part 375-6 Restricted- Res*													
Sample Date		PWEXSW08179	PWEXSW04180	PWEXSW06181	PWEXSW00182	PWEXBM08183	PWEXSW00184	PWEXBM11185	PWEXBM08186	PWEXSW04187	PWEXSW04188	PWEXSW03189	PWEXBM04190	PWEXBM11191
Sample ID		10/23/2019	10/23/2019	10/23/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/25/2019	10/25/2019	10/25/2019	10/29/2019	10/29/2019	10/29/2019
		460-194762-2	460-194762-3	460-194762-4	460-194879-1	460-194879-2	460-194879-3	460-194879-4	460-195020-1	460-195020-2	460-195020-3	460-195223-1	460-195223-2	460-195223-3
Volatile Organic Compounds (ppm)														
1,1,1-Trichloroethane	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	100	0.015	ND	0.2	ND	ND	0.017	ND	0.008	0.0068	ND	ND	0.013	0.023
Benzene	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	41	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	100	ND	ND	ND	0.0014	0.0019	0.0019	0.0018	ND	ND	ND	ND	ND	ND
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	100	ND	ND	ND	0.0025	0.0025	0.0032	ND	ND	ND	ND	ND	ND	ND
Total Conc	10 (from ROD)	0.015	ND	0.2	0.0039	0.0044	0.0221	0.0018	0.008	0.0068	ND	ND	0.013	0.023
Total Estimated Conc. (TICs)		-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
* Values provided for reference only. SCO's for subsurface s
Entries in gray text were superseded following additional exc

Table 5A: Confirmation Sample Analytical Results - VOCs

Location ID	NYSDEC Part 375-6 Restricted- Res*			
Sample Date		PWEXBM11192 10/29/2019	PWEXBM05193 10/29/2019	PWEXBM05194 10/29/2019
Sample ID		460-195223-4	460-195223-5	460-195223-6
Volatile Organic Compounds (ppm)				
1,1,1-Trichloroethane	100	ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND
1,1-Dichloroethane	26	ND	ND	ND
1,1-Dichloroethene	100	ND	ND	ND
1,2,4-Trichlorobenzene		ND	ND	ND
1,2-Dibromo-3-Chloropropane		ND	ND	ND
1,2-Dibromoethane		ND	ND	ND
1,2-Dichlorobenzene	100	ND	ND	ND
1,2-Dichloroethane	3.1	ND	ND	ND
1,2-Dichloropropane		ND	ND	ND
1,3-Dichlorobenzene	49	ND	ND	ND
1,4-Dichlorobenzene	13	ND	ND	ND
2-Butanone (MEK)		ND	ND	ND
2-Hexanone		ND	ND	ND
4-Methyl-2-pentanone (MIBK)		ND	ND	ND
Acetone	100	0.011	0.0087	0.025
Benzene	4.8	ND	ND	ND
Bromodichloromethane		ND	ND	ND
Bromoform		ND	ND	ND
Bromomethane		ND	ND	ND
Carbon disulfide		ND	ND	ND
Carbon tetrachloride	2.4	ND	ND	ND
Chlorobenzene	100	ND	ND	ND
Chloroethane		ND	ND	ND
Chloroform	49	ND	ND	ND
Chloromethane		ND	ND	ND
cis-1,2-Dichloroethene		ND	ND	ND
cis-1,3-Dichloropropene		ND	ND	ND
Cyclohexane		ND	ND	ND
Dibromochloromethane		ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND
Ethylbenzene	41	ND	ND	ND
Isopropylbenzene		ND	ND	ND
Methyl acetate		ND	ND	ND
Methyl tert-butyl ether	100	ND	ND	ND
Methylcyclohexane		ND	ND	ND
Methylene Chloride	100	ND	ND	ND
Styrene		ND	ND	ND
Tetrachloroethene	19	ND	ND	ND
Toluene	100	ND	ND	ND
trans-1,2-Dichloroethene	100000	ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND
Trichloroethene	21	ND	ND	ND
Trichlorofluoromethane		ND	ND	ND
Vinyl chloride	0.9	ND	ND	ND
Xylenes, Total	100	ND	ND	ND
Total Conc	10 (from ROD)	0.011	0.0087	0.025
Total Estimated Conc. (TICs)		-	-	0.0259

Notes:
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
* Values provided for reference only. SCO's for subsurface s
Entries in gray text were superseded following additional exc

Table 5B: Confirmation Sample Analytical Results - SVOCs

Location ID Sample Date Sample ID		NYSDEC Part 375-6 Restricted- Res*	SOUTHEAST ROOM																	
			Upland Excavation		PWEXSWNA076 4/3/2019	PWEXSWNA077 4/3/2019	PWEXSWNA078 4/4/2019	PWEXSWNA079 4/4/2019	PWEXSWNA080 4/4/2019	PWEXSWNA081 4/4/2019	PWEXSWNA082 4/4/2019	PWEXSWNA083 4/4/2019	PWEXSWNA084 4/4/2019	PWEXSWNA085 4/4/2019	PWEXSWNA086 4/4/2019	PWEXSWNA126 4/4/2019	PWEXBM04072 4/5/2019	PWEXBM07079 4/5/2019	PWEXSWNA127 4/4/2019	PWEXSWNA128 4/4/2019
			PWEXBM05009 3/30/2016	PWEXBM05010 3/30/2016																
			R1602989-1	R1602989-2	480-151412-1	480-151412-2	480-151412-3	480-151412-4	480-151412-5	480-151412-6	480-151412-7	480-151412-8	480-151412-9	480-151412-10	480-151412-11	480-151412-12	480-151436-1	480-151436-2	480-151436-3	480-151436-4
Semivolatile Organic Compounds (ppm)																				
2,4,5-Trichlorophenol			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene			ND	ND	ND	ND	ND	ND	0.48	ND	0.11	ND	ND	ND	ND	ND	ND	ND	0.073	ND
2-Methylphenol			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	100		ND	ND	0.76	ND	ND	ND	4.9	0.15	0.49	0.076	ND	0.07	0.034	0.039	ND	ND	0.12	0.067
Acetophenone			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	100		ND	ND	2.6	ND	ND	ND	19	1.4	1.6	0.13	ND	0.14	0.077	ND	ND	ND	0.17	ND
Atrazine			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzaldehyde			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	1		ND	1.1	1.7	ND	ND	ND	0.1	22	2.7	1.3	0.049	0.032	0.22	0.34	0.14	ND	0.86	0.23
Benzo[a]pyrene	1		ND	1.3	1.7	ND	ND	ND	0.044	15	2	1	0.039	0.029	0.2	0.33	0.15	0.035	ND	0.73
Benzo[b]fluoranthene	1		ND	1.5	1.7	ND	ND	ND	0.042	17	2.1	1.1	ND	ND	0.23	0.45	0.19	0.033	ND	0.68
Benzo[g,h,i]perylene	100		ND	0.96	1.2	ND	ND	ND	8.1	1.1	0.56	0.027	0.024	0.17	0.28	0.13	ND	ND	0.66	0.34
Benzo[k]fluoranthene	3.9		ND	0.58	0.88	ND	ND	ND	0.032	8.7	1.1	0.53	0.028	ND	0.14	0.17	0.094	ND	ND	0.4
bis (2-chloroisopropyl) ether			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	100		NA	NA	4.6	ND	ND	ND	3.2	0.034	0.42	0.047	ND	ND	ND	ND	ND	0.073	ND	ND
Biphenyl			NA	NA	1.1	ND	ND	ND	0.66	0.21	0.31	0.035	ND	ND	ND	ND	ND	ND	0.057	ND
Caprolactam			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole			NA	NA	5	ND	ND	ND	4	0.27	0.5	0.19	ND	0.05	0.04	0.033	ND	0.028	0.074	0.031
Chrysene	3.9		ND	0.95	1.6	ND	ND	ND	0.09	18	2.1	1	ND	ND	0.22	0.33	0.16	ND	0.92	0.3
Dibenz(a,h)anthracene	0.33		ND	ND	ND	ND	ND	ND	2.6	ND	0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	59		NA	NA	5	ND	ND	ND	12	1.1	1.2	0.18	ND	0.057	ND	ND	ND	ND	0.12	ND
Diethyl phthalate			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100		ND	1.6	5.9	0.077	0.06	0.13	53	5.2	2.6	0.14	0.076	0.47	0.37	0.25	0.078	0.079	0.9	0.3
Fluorene	100		ND	ND	4.4	ND	ND	ND	19	0.62	1.3	0.15	ND	0.064	ND	ND	ND	0.038	0.055	ND
Hexachlorobenzene			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.5		ND	0.93	0.96	ND	ND	ND	8.2	1.1	0.54	ND	ND	0.15	0.25	0.1	ND	ND	0.55	0.31
Isophorone			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	100		ND	ND	0.47	ND	0.031	ND	5.3	0.1	1.9	0.036	ND	0.038	ND	0.038	0.054	ND	0.42	0.053
Nitrobenzene			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine			NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	6.7		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100		ND	0.66	13	0.038	0.036	ND	75 D	3.2	5	0.39	0.058	0.42	0.16	0.12	0.049	ND	0.47	0.078
Phenol	100		NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100		ND	1.5	4.9	0.08	0.028	0.41	43	5.2	2.1	0.092	0.045	0.43	0.36	0.24	0.047	0.038	1.5	

Notes:
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NR = Not reported
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
D = Diluted results
* Values provided for reference only. SCO's for subsurface soil established in the ROD are <500mg/kg total SVOCs, 10mg/kg total VOCs
Entries in gray text were superseded following additional excavation/disposal at the sample location

Table 5B: Confirmation Sample Analytical Results - SVOCs

Location ID Sample Date Sample ID	NYSDEC Part 375-6 Restricted- Res*	SOUTHWEST ROOM													DUP01 4/9/2019
		PWEXSWNA115	PWEXSWNA116	PWEXSWNA117	PWEXSWNA118	PWEXSWNA119	PWEXSWNA120	PWEXSWNA123	PWEXSWNA124	PWEXSWNA125	PWEXBM04077	PWEXSWNA121	PWEXBM04078	PWEXSWNA122	
		4/8/2019	4/8/2019	4/8/2019	4/8/2019	4/8/2019	4/8/2019	4/8/2019	4/8/2019	4/8/2019	4/8/2019	4/9/2019	4/9/2019	4/9/2019	
		480-151556-1	480-151556-2	480-151556-3	480-151556-4	480-151556-5	480-151556-6	480-151556-7	480-151556-8	480-151556-9	480-151605-2	480-151605-4	480-151605-5	480-151605-18	480-151605-17
Semivolatile Organic Compounds (ppm)															
2,4,5-Trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	100	ND	ND	0.063	ND	ND	11	0.025	ND	0.06	ND	1.1	ND	ND	ND
Acetophenone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	100	ND	ND	0.12	ND	ND	49	0.14	ND	0.24	ND	9.7	0.051	0.092	ND
Atrazine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzaldehyde		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	1	ND	ND	0.067	ND	ND	46	0.66	ND	0.74	0.023	13	0.029	0.15	ND
Benzo[a]pyrene	1	ND	ND	ND	ND	ND	31	0.51	0.069	0.69	0.045	9.6	0.049	0.13	ND
Benzo[b]fluoranthene	1	ND	ND	ND	ND	ND	32	0.54	ND	0.86	ND	11	ND	0.14	ND
Benzo[g,h,i]perylene	100	ND	ND	ND	ND	ND	15	0.26	ND	0.47	ND	5.7	ND	0.065	ND
Benzo[k]fluoranthene	3.9	ND	ND	ND	ND	ND	15	0.34	0.045	0.33	0.04	5.7	ND	0.11	ND
bis (2-chloroisopropyl) ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	100	ND	ND	0.12	ND	ND	4.1	ND	ND	ND	ND	0.33	ND	ND	ND
Biphenyl		ND	ND	0.035	ND	ND	3.5	ND	ND	ND	ND	ND	ND	ND	ND
Caprolactam		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole		ND	ND	0.23	ND	ND	4.8	ND	ND	0.057	ND	0.8	ND	ND	ND
Chrysene	3.9	ND	ND	0.061	ND	ND	37	0.63	0.054	0.72	0.045	9.5	0.053	0.15	ND
Dibenz(a,h)anthracene	0.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	59	ND	ND	0.19	ND	ND	24	ND	ND	0.031	ND	2.1	ND	ND	ND
Diethyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100	ND	0.024	0.19	ND	ND	120 D	1	0.1	1.5	0.069	28	0.082	0.31	ND
Fluorene	100	ND	ND	0.2	ND	ND	30	ND	ND	0.047	ND	2.1	ND	ND	ND
Hexachlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.5	ND	ND	ND	ND	ND	15	0.24	ND	0.44	0.023	5.5	ND	0.068	ND
Isophorone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	100	ND	ND	0.061	ND	ND	1.5	ND	ND	ND	ND	0.33	ND	ND	ND
Nitrobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	6.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100	ND	ND	0.42	ND	ND	160 D	0.22	0.038	0.99	0.032	20	0.049	0.13	ND
Phenol	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100	ND	ND	0.16	ND	ND	77 D	0.88	0.12	1.3	0.032	25	0.045	0.24	ND
Total Conc	500 (from ROD)	ND	0.024	1.917	ND	ND	675.9	5.445	0.426	8.475	0.309	149.46	0.358	1.585	ND
Total Estimated Conc. (TICs)		9.19	3.23	3.4	3.8	3.2	2644.7	7.62	3.59	6.39	11.41	46	15.53	13.44	11.4

Notes:
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NR = Not reported
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
D = Diluted results
* Values provided for reference only. SCO's for subsurface soi
Entries in gray text were superseded following additional excav

Table 5B: Confirmation Sample Analytical Results - SVOCs

Location ID Sample Date Sample ID	NYSDEC Part 375-6 Restricted- Res*	SMALL NORTHEAST ROOM					LARGE NORTHEAST ROOM					
		PWEXSWNA087	PWEXSWNA088	PWEXSWNA089	PWEXSWNA051	PWEXBM04073	PWEXSWNA090	PWEXSWNA091	PWEXSWNA152	PWEXSWNA093	PWEXSWNA094	PWEXBM04074
		4/9/2019	4/9/2019	4/9/2019	4/9/2019	4/18/2019	4/9/2019	4/9/2019	4/9/2019	4/9/2019	4/9/2019	4/8/2019
		480-151605-15	480-151605-16	480-151605-14	480-151605-6	480-152236-1	480-151605-10	480-151605-11	480-151605-13	480-151605-9	480-151605-12	480-151605-1
Semivolatile Organic Compounds (ppm)												
2,4,5-Trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene		0.11	0.2	ND	ND	ND	ND	ND	ND	ND	6.4D	ND
2-Methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	100	0.079	0.31	0.032	ND	ND	0.5D	0.039	0.11	0.73	3D	0.9D
Acetophenone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	100	0.36	2.6	0.069	ND	0.13	5.7D	0.073	0.71	2.3	11D	2.7D
Atrazine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzaldehyde		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	1	0.26	2.1	0.23	ND	0.18	7.6D	0.07	1	2.2	9.9D	3.4D
Benzo[a]pyrene	1	0.2	1.3	0.18	ND	0.16	5.8D	0.083	0.79	1.7	6.7D	2.6D
Benzo[b]fluoranthene	1	0.22	1.8	0.23	ND	0.17	7D	0.065	0.9	2.2	9.2D	2.9D
Benzo[g,h,i]perylene	100	0.12	0.66	0.087	ND	ND	3.1D	0.039	0.41	1.1	3.5D	1.3D
Benzo[k]fluoranthene	3.9	0.14	0.73	0.11	ND	ND	3.4D	0.064	0.51	0.86	3.2D	1.8D
bis (2-chloroisopropyl) ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	100	0.25	1.4	0.03	ND	ND	0.22D	ND	0.082	0.4	1.4D	0.38D
Biphenyl		0.073	0.71	ND	ND	ND	1.3D	ND	0.24	0.54	3.3D	0.45D
Caprolactam		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole		0.2	0.48	ND	ND	ND	1.7D	0.034	0.29	0.64	3.7D	0.28D
Chrysene	3.9	0.21	1.5	0.21	ND	0.15	5.5D	0.091	0.74	1.8	7D	2.8D
Dibenz(a,h)anthracene	0.33	0.055	ND	ND	ND	ND	ND	ND	ND	0.32	ND	ND
Dibenzofuran	59	0.25	2.7	0.077	ND	0.095	4.8D	0.07	0.84	2.1	11D	1.9D
Diethyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100	0.56	5.1	0.39	ND	0.4	14D	0.22	1.5	5.4	23D	6.9D
Fluorene	100	0.28	3.1	ND	ND	0.11	3.3D	0.052	0.67	2	10D	2.7D
Hexachlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.5	0.11	0.68	0.091	ND	ND	3.2D	0.043	0.41	1	3.6D	1.3D
Isophorone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	100	0.44	10D	ND	ND	ND	2D	ND	0.16	0.46	58D	0.28D
Nitrobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	6.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100	0.94	10D	0.074	ND	0.46	22D	0.2	2.9	9.7D	47D	9.7D
Phenol	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100	0.47	4	0.37	ND	0.37	12D	0.17	1.4	4.4	19D	5.7D
Total Conc	500 (from ROD)	5.327	51.17	2.18	ND	2.225	103.12D	1.313	13.662	40	239.9	47.99D
Total Estimated Conc. (TICs)		13.31	44.75	11.92	11.91	4.83	37.1D	11.27	15.61	31.14	156.6	22.98D

Notes:
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NR = Not reported
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
D = Diluted results
* Values provided for reference only. SCO's for subsurface soi
Entries in gray text were superseded following additional excav

Table 5B: Confirmation Sample Analytical Results - SVOCs

Location ID Sample Date Sample ID	NYSDEC Part 375-6 Restricted- Res*	NORTHWEST ROOM		
		PWEXSWNA099	PWEXSWNA100	PWEXSWNA101
		4/10/2019	4/10/2019	4/10/2019
		480-151836-9	480-151836-8	480-151836-7
Semivolatile Organic Compounds (ppm)				
2,4,5-Trichlorophenol		ND	ND	ND
2,4,6-Trichlorophenol		ND	ND	ND
2,4-Dichlorophenol		ND	ND	ND
2,4-Dimethylphenol		ND	ND	ND
2,4-Dinitrophenol		ND	ND	ND
2,4-Dinitrotoluene		ND	ND	ND
2,6-Dinitrotoluene		ND	ND	ND
2-Chloronaphthalene		ND	ND	ND
2-Chlorophenol		ND	ND	ND
2-Methylnaphthalene		ND	ND	14
2-Methylphenol		ND	ND	ND
2-Nitroaniline		ND	ND	ND
2-Nitrophenol		ND	ND	ND
3,3'-Dichlorobenzidine		ND	ND	ND
3-Nitroaniline		ND	ND	ND
4,6-Dinitro-2-methylphenol		ND	ND	ND
4-Bromophenyl phenyl ether		ND	ND	ND
4-Chloro-3-methylphenol		ND	ND	ND
4-Chloroaniline		ND	ND	ND
4-Chlorophenyl phenyl ether		ND	ND	ND
4-Methylphenol		ND	ND	ND
4-Nitroaniline		ND	ND	ND
4-Nitrophenol		ND	ND	ND
Acenaphthylene	100	ND	ND	14
Acetophenone		ND	ND	ND
Anthracene	100	ND	ND	35
Atrazine		ND	ND	ND
Benzaldehyde		ND	ND	ND
Benzo[a]anthracene	1	ND	ND	25
Benzo[a]pyrene	1	ND	ND	17
Benzo[b]fluoranthene	1	ND	ND	20
Benzo[g,h,i]perylene	100	ND	ND	8.1
Benzo[k]fluoranthene	3.9	ND	ND	6.9
bis (2-chloroisopropyl) ether		ND	ND	ND
Bis(2-chloroethoxy)methane		ND	ND	ND
Bis(2-chloroethyl)ether		ND	ND	ND
Bis(2-ethylhexyl) phthalate		ND	ND	ND
Butyl benzyl phthalate		ND	ND	ND
Acenaphthene	100	ND	ND	13
Biphenyl		ND	ND	9.2
Caprolactam		ND	ND	ND
Carbazole		ND	ND	12
Chrysene	3.9	ND	ND	23
Dibenz(a,h)anthracene	0.33	ND	ND	ND
Dibenzofuran	59	ND	ND	32
Diethyl phthalate		ND	ND	ND
Dimethyl phthalate		ND	ND	ND
Di-n-butyl phthalate		ND	ND	ND
Di-n-octyl phthalate		ND	ND	ND
Fluoranthene	100	ND	ND	58
Fluorene	100	ND	ND	32
Hexachlorobenzene		ND	ND	ND
Hexachlorobutadiene		ND	ND	ND
Hexachlorocyclopentadiene		ND	ND	ND
Hexachloroethane		ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.5	ND	ND	8
Isophorone		ND	ND	ND
Naphthalene	100	ND	ND	180 D
Nitrobenzene		ND	ND	ND
N-Nitrosodi-n-propylamine		ND	ND	ND
N-Nitrosodiphenylamine		ND	ND	ND
Pentachlorophenol	6.7	ND	ND	ND
Phenanthrene	100	ND	ND	99
Phenol	100	ND	ND	ND
Pyrene	100	ND	ND	46
Total Conc	500 (from ROD)	ND	ND	652.2
Total Estimated Conc. (TICs)		5.08	5.51	336.8

Notes:
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NR = Not reported
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
D = Diluted results
* Values provided for reference only. SCO's for subsurface soi
Entries in gray text were superseded following additional excav

Table 5B: Confirmation Sample Analytical Results - SVOCs

Location ID Sample Date Sample ID		NYSDEC Part 375-6 Restricted- Res*	WEST CORRIDOR						OUTSIDE EAST WALL OF NORTHEAST/SOUTHEAST ROOMS								OUTSIDE NORTH WALL OF NE ROOMS	
			PWEXSWNA108	PWEXSWNA109	PWEXSWNA112	PWEXSWNA113	PWEXSWNA114	PWEXBM04081	PWEXSWNA150	PWEXSWNA129	PWEXSWNA130	PWEXSWNA131	PWEXSWNA132	PWEXSWNA133	PWEXSWNA134	PWEXSWNA135	PWEXSWNA136	
			4/11/2019	4/11/2019	4/11/2019	4/11/2019	4/11/2019	4/11/2019	4/10/2019	4/10/2019	4/10/2019	4/9/2019	4/10/2019	4/9/2019	4/9/2019	4/10/2019	4/10/2019	
			480-151821-1	480-151821-2	480-151821-3	480-151821-4	480-151821-5	480-151821-6	480-151836-6	480-151836-1	480-151836-2	480-151605-3	480-151836-3	480-151605-7	480-151605-8	480-151836-4	480-151836-5	
Semivolatile Organic Compounds (ppm)																		
2,4,5-Trichlorophenol			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2,4,6-Trichlorophenol			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2,4-Dichlorophenol			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2,4-Dimethylphenol			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2,4-Dinitrophenol			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2,4-Dinitrotoluene			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2,6-Dinitrotoluene			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Chloronaphthalene			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Chlorophenol			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Methylnaphthalene			ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Methylphenol			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Nitroaniline			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Nitrophenol			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
3,3'-Dichlorobenzidine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
3-Nitroaniline			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4,6-Dinitro-2-methylphenol			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-Bromophenyl phenyl ether			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-Chloro-3-methylphenol			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-Chloroaniline			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-Chlorophenyl phenyl ether			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-Methylphenol			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-Nitroaniline			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-Nitrophenol			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Acenaphthylene	100		ND	0.57	ND	ND	1.1	ND	0.13	0.024	ND	ND	ND	ND	ND	ND	ND	
Acetophenone			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Anthracene	100		ND	1.6	0.19	ND	1.6	ND	0.24	0.047	0.053	ND	ND	ND	0.072	ND	ND	
Atrazine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzaldehyde			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo[a]anthracene	1		ND	2.3	0.29	ND	1.8	0.036	0.89	0.19	0.45	0.019	ND	ND	0.047	ND	ND	
Benzo[a]pyrene	1		ND	1.9	0.28	ND	1.1	0.075	0.75	0.2	0.43	0.042	ND	ND	0.057	ND	ND	
Benzo[b]fluoranthene	1		ND	2.1	0.3	ND	1.4	0.055	1.1	0.3	0.62	ND	ND	ND	ND	ND	ND	
Benzo[g,h,i]perylene	100		ND	1.5	0.24	ND	0.6	0.053	0.63	0.21	0.41	0.022	ND	ND	ND	ND	ND	
Benzo[k]fluoranthene	3.9		ND	1.2	0.19	ND	0.68	0.051	0.38	0.11	0.23	0.04	ND	ND	0.05	ND	ND	
bis (2-chloroisopropyl) ether			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Bis(2-chloroethoxy)methane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Bis(2-chloroethyl)ether			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Bis(2-ethylhexyl) phthalate			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Butyl benzyl phthalate			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Acenaphthene	100		ND	0.26	0.068	ND	0.37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Biphenyl			ND	0.1	ND	ND	0.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Caprolactam			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Carbazole			ND	0.14	0.078	ND	0.62	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chrysene	3.9		ND	1.8	0.26	ND	1.2	0.064	0.85	0.2	0.45	0.045	ND	ND	0.067	ND	ND	
Dibenz(a,h)anthracene	0.33		ND	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Dibenzofuran	59		ND	1.1	0.051	ND	1.7	ND	0.065	ND	0.041	ND	ND	ND	ND	ND	ND	
Diethyl phthalate			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Dimethyl phthalate			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Di-n-butyl phthalate			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Di-n-octyl phthalate			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Fluoranthene	100		ND	5.6D	0.56	ND	3.5	0.071	1.6	0.41	0.61	0.064	ND	ND	0.11	ND	ND	
Fluorene	100		ND	0.81	0.048	ND	2	ND	0.081	ND	ND	ND	ND	ND	ND	ND	ND	
Hexachlorobenzene			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Hexachlorobutadiene			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Hexachlorocyclopentadiene			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Hexachloroethane			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Indeno[1,2,3-cd]pyrene	0.5		ND	1.3	0.21	ND	0.62	0.05	0.49	0.16	0.35	ND	ND	ND	0.025	ND	ND	
Isophorone			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Naphthalene	100		ND	0.043	0.04	ND	5.5D	ND	0.074	ND	ND	ND	ND	ND	ND	ND	ND	
Nitrobenzene			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
N-Nitrosodi-n-propylamine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
N-Nitrosodiphenylamine			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Pentachlorophenol	6.7		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Phenanthrene	100		ND	6D	0.58	ND	5.3D	0.029	1	0.24	0.26	0.034	ND	ND	0.086	ND	ND	
Phenol	100		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Pyrene	100		ND	5.4	0.55	ND	2.8	0.34	1.5	0.38	0.8	0.029	ND	ND	0.068	ND	ND	
Total Conc	500 (from ROD)		ND	34.023	3.935	ND	34.74	0.518	9.78	2.471	4.704	0.295	ND	ND	0.582	ND	ND	
Total Estimated Conc. (TICs)			10.7	53.39	10.77	10.87	60.05	10.54	7.71	4.55	4.47	12.39	3.5	10.43	12.13	4.17	3.88	

Notes:
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NR = Not reported
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
D = Diluted results
* Values provided for reference only. SCO's for subsurface soi
Entries in gray text were superseded following additional excav

Table 5B: Confirmation Sample Analytical Results - SVOCs

Location ID Sample Date Sample ID	NYSDEC Part 375-6 Restricted- Res*	UNDERMINING BOTTOM CONFIRMATION SAMPLE																
		PWEXBM04095	PWEXBM04137	PWEXBM04092	PWEXBM04097	PWEXBM04141	PWEXBM04144	PWEXBM04146	PWEXBM04145	PWEXBM04143	PWEXBM04140	PWEXBM04138	PWEXBM04098	PWEXBM04101	PWEXSWNA096	PWEXBM04105	PWEXBM04102	PWEXBM04139
		4/24/2019	4/24/2019	4/25/2019	4/29/2019	4/29/2019	4/30/2029	5/1/2019	5/15/2019	5/16/2019	5/16/2019	5/17/2019	5/21/2019	5/21/2019	5/21/2019	5/28/2019	5/29/2019	5/29/2019
		460-180464-1	460-180464-2	460-180465-1	460-180726-1	460-180726-2	460-180817-1	460-180912-1	460-182074-1	460-182200-1	460-182200-2	460-182351-1	460-182570-1	460-182570-2	460-182570-3	460-182989-1	460-183077-1	460-183077-2
Semivolatile Organic Compounds (ppm)																		
2,4,5-Trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.056	0.34	ND	ND	ND	ND
2,4-Dinitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene		ND	0.067	0.062	0.0097	0.012	ND	ND	0.0086	ND	ND	ND	0.34	1	2.3	ND	ND	ND
2-Methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.019	ND	ND	ND	ND	ND
2-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12	ND	ND	ND	ND
4-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	100	0.026	0.028	0.11	ND	ND	ND	ND	ND	ND	ND	ND	0.12	3.8	0.92	ND	0.036	ND
Acetophenone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	100	ND	0.13	0.33	ND	ND	ND	ND	0.042	0.024	ND	ND	0.64	12	2.9	ND	0.05	ND
Atrazine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzaldehyde		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	1	ND	0.028	0.084	ND	ND	ND	0.035	0.053	0.015	ND	ND	0.37	6.1	2.7	ND	0.16	ND
Benzo[a]pyrene	1	ND	ND	ND	ND	ND	ND	0.026	0.03	ND	ND	ND	0.29	4.8	2.1	ND	0.11	ND
Benzo[b]fluoranthene	1	ND	0.021	0.012	0.011	ND	ND	0.034	0.052	ND	ND	ND	0.35	5.8	2.6	ND	0.13	ND
Benzo[g,h,i]perylene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.12	2.3	0.97	ND	0.038	ND
Benzo[k]fluoranthene	3.9	ND	ND	ND	ND	ND	ND	0.014	0.027	ND	ND	ND	0.15	2	0.9	ND	0.042	ND
bis (2-chloroisopropyl) ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	100	0.11	0.044	0.11	0.046	0.048	ND	ND	0.035	ND	ND	ND	0.39	1.9	0.51	ND	0.11	ND
Biphenyl		ND	ND	0.13	ND	ND	ND	ND	ND	ND	ND	ND	0.24	2.3	0.97	ND	0.031	ND
Caprolactam		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole		ND	0.17	0.47	0.012	0.025	ND	ND	0.018	ND	ND	ND	0.91	4.7	1.6	ND	0.05	ND
Chrysene	3.9	ND	0.021	ND	ND	ND	ND	0.028	0.051	ND	ND	ND	0.3	5.9	2	ND	0.11	ND
Dibenz(a,h)anthracene	0.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.042	0.49	0.22	ND	ND	ND
Dibenzofuran	59	0.04	0.59	0.31	0.04	0.047	ND	ND	0.031	ND	ND	ND	0.95	8.7	3.6	ND	0.051	ND
Diethyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	0.13	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100	ND	0.33	0.68	0.027	0.013	ND	0.046	0.14	0.047	ND	ND	1.2	17	7.6	ND	0.42	ND
Fluorene	100	0.081	0.35	0.35	0.073	0.043	ND	ND	0.086	ND	ND	ND	0.78	8	2.8	ND	0.19	ND
Hexachlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.5	ND	ND	ND	ND	ND	ND	ND	0.019	ND	ND	ND	0.16	2.9	1.3	ND	0.053	ND
Isophorone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	100	0.037	0.22	1	0.024	0.042	ND	ND	0.021	ND	ND	ND	4.8	48	17	ND	ND	ND
Nitrobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	6.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100	ND	0.44	1.5	0.027	0.034	ND	0.04	0.12	0.013	ND	ND	2.8	29	12	ND	0.051	ND
Phenol	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100	ND	0.24	0.5	0.026	ND	ND	0.052	0.1	0.03	ND	ND	1	13	5.6	ND	0.36	ND
Total Conc	500 (from ROD)	0.294	2.679	5.648	0.2957	0.264	ND	0.275	0.6426	0.32	0.13	ND	16.027	180.15	70.59	ND	1.992	ND
Total Estimated Conc. (TICs)		-	0.45	-	0.61	-	-	-	0.55	-	-	-	3.04	59	8.4	0.91	-	-

Notes:
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NR = Not reported
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
D = Diluted results
* Values provided for reference only. SCO's for subsurface soi
Entries in gray text were superseded following additional excav

Table 5B: Confirmation Sample Analytical Results - SVOCs

Location ID Sample Date Sample ID	NYSDEC Part 375-6 Restricted- Res*							UPLAND/TFS										DUP
		PWEXBM04075	PWEXBM04106	PWEXBM04147	PWEXBM04107	PWEXBM04076	PWEXBM04080	PWEXBM05166	PWEXBM05167	PWEXBM05168	PWEXBM08169	PWEXBM08170	PWEXBM07171	PWEXBM07172	PWEXBM07174	PWEXBM07175	PWEXBM07176	
		5/31/2019	6/12/2019	6/26/2019	6/27/2019	6/27/2019	6/27/2019	8/23/2019	8/23/2019	8/23/2019	8/27/2019	8/27/2019	8/28/2019	8/27/2019	9/11/2019	9/11/2019	10/15/2019	
		460-183257-1	460-184340-3	460-185340-1	460-185424-1	460-185424-2	460-185424-3	460-189811-1	460-189811-2	460-189811-3	460-189997-1	460-189997-2	460-190126-1	460-190126-2	460-191058-1	460-191058-2	460-194375-1	460-194375-2
Semivolatile Organic Compounds (ppm)																		
2,4,5-Trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol		0.055	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene		0.024	ND	ND	ND	0.057	0.014	0.11	ND	ND	ND	0.023	ND	0.36	10	ND	0.59	0.51
2-Methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.067	0.031	ND	ND
2-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol		0.014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.04	0.53
4-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	100	0.18	ND	0.035	ND	0.085	ND	0.035	ND	ND	ND	ND	ND	ND	0.92	ND	0.089	0.065
Acetophenone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	100	0.67	ND	0.054	ND	0.41	ND	0.17	ND	ND	ND	ND	ND	0.065	6.4	0.065	0.61	0.73
Atrazine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.058	ND	ND
Benzaldehyde		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.045
Benzo[a]anthracene	1	0.48	ND	ND	ND	0.3	ND	0.23	ND	0.025	ND	ND	ND	ND	5.5	0.073	1.3	0.69
Benzo[a]pyrene	1	0.28	ND	0.035	ND	0.2	ND	0.18	ND	ND	ND	ND	ND	ND	3.6	0.057	0.91	0.43
Benzo[b]fluoranthene	1	0.35	0.012	0.045	ND	0.26	ND	0.24	ND	0.013	ND	ND	ND	ND	4.2	0.058	1.0	0.53
Benzo[g,h,i]perylene	100	0.11	ND	ND	ND	0.11	ND	0.11	ND	ND	ND	ND	ND	ND	1.8	0.04	0.43	0.18
Benzo[k]fluoranthene	3.9	0.17	ND	0.018	ND	0.11	ND	0.11	ND	ND	ND	ND	ND	ND	2.4	0.05	0.51	0.26
bis (2-chloroisopropyl) ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.029	ND	ND
Acenaphthene	100	0.38	ND	0.048	ND	0.033	ND	0.15	ND	ND	ND	ND	ND	0.18	7.9	0.045	0.55	0.65
Biphenyl		0.13	ND	ND	ND	0.023	ND	0.025	ND	ND	ND	ND	ND	0.052	1.7	ND	ND	0.075
Caprolactam		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.032	ND	ND
Carbazole		0.23	ND	0.019	ND	0.11	ND	0.064	ND	ND	ND	ND	ND	ND	2.2	0.032	0.11	0.065
Chrysene	3.9	0.4	ND	0.039	ND	0.25	ND	0.25	ND	0.016	ND	ND	ND	ND	4.6	0.068	1.1	0.64
Dibenz(a,h)anthracene	0.33	0.031	ND	ND	ND	0.03	ND	ND	ND	ND	ND	ND	ND	ND	0.67	0.028	0.11	0.051
Dibenzofuran	59	0.6	ND	0.035	ND	0.13	ND	0.11	ND	ND	ND	0.024	ND	0.18	6.4	0.03	0.27	0.38
Diethyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.022	ND	ND
Dimethyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.09	ND	ND
Di-n-octyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100	1.1	ND	0.13	ND	0.68	ND	0.66	ND	0.032	ND	0.025	ND	0.055	12	0.11	2.6	1.6
Fluorene	100	0.67	ND	0.04	ND	0.13	ND	0.11	ND	ND	ND	0.024	ND	0.15	7.4	0.046	0.42	0.59
Hexachlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.5	0.16	ND	ND	ND	0.12	ND	0.13	ND	ND	ND	ND	ND	ND	2.2	0.048	0.55	0.26
Isophorone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	100	0.27	ND	0.018	ND	0.22	ND	0.59	ND	ND	ND	0.029	ND	1.1	27	0.076	1.6	1.0
Nitrobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	6.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100	2	ND	0.11	ND	0.45	ND	0.73	ND	0.017	ND	0.07	ND	0.28	19	0.14	2.1	2.3
Phenol	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100	0.81	ND	0.099	ND	0.59	ND	0.54	ND	0.037	ND	0.017	ND	0.04	10	0.1	2.0	1.2
Total Conc	500 (from ROD)	9.114	ND	0.725	ND	4.298	0.014	4.544	ND	0.14	ND	0.212	ND	2.462	125.957	1.328	16.4	12.8
Total Estimated Conc. (TICs)		1.07	-	0.6	-	0.4	0.64	3.3	7.86	2.4	764.74	764.53	6.8	8.7	23.1	7.9	14.92	15.14

Notes:
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NR = Not reported
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
D = Diluted results
* Values provided for reference only. SCO's for subsurface soi
Entries in gray text were superseded following additional excav

Table 5B: Confirmation Sample Analytical Results - SVOCs

Location ID	NYSDEC Part 375-6 Restricted- Res*	PWEXBM07177	PWEXBM10178	PWEXSW08179	PWEXSW04180	PWEXSW06181	PWEXSW00182	PWEXBM08183	PWEXSW00184	PWEXBM11185	PWEXBM08186	PWEXSW04187	PWEXSW04188	PWEXSW03189	PWEXBM04190	PWEXBM11191	PWEXBM11192	PWEXBM05193	PWEXBM05194
Sample Date		10/16/2019	10/23/2019	10/23/2019	10/23/2019	10/23/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/25/2019	10/25/2019	10/25/2019	10/29/2019	10/29/2019	10/29/2019	10/29/2019	10/29/2019	10/29/2019
Sample ID		460-194375-3	460-194762-1	460-194762-2	460-194762-3	460-194762-4	460-194879-1	460-194879-2	460-194879-3	460-194879-4	460-195020-1	460-195020-2	460-195020-3	460-195223-1	460-195223-2	460-195223-3	460-195223-4	460-195223-5	460-195223-6
Semivolatile Organic Compounds (ppm)																			
2,4,5-Trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene		0.31	ND	ND	0.057	ND	ND	ND	ND	ND	ND	0.044	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol		ND	ND	0.034	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol		0.016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	100	0.019	ND	0.014	0.4	0.021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetophenone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	100	0.098	ND	ND	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Atrazine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzaldehyde		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	1	0.1	ND	ND	4.7	0.019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]pyrene	1	0.1	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	1	0.11	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	100	0.13	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	0.023	ND	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	3.9	0.078	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis (2-chloroisopropyl) ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	100	0.28	ND	0.12	0.064	0.086	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Biphenyl		0.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Caprolactam		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole		0.046	ND	ND	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	3.9	0.12	ND	ND	4.2	0.016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	0.33	0.075	ND	ND	0.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	59	0.084	ND	ND	0.25	0.019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.024	ND	ND	ND	ND	ND	ND
Dimethyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100	0.18	ND	ND	8.9	0.075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	100	0.09	ND	0.011	0.59	0.032	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.5	0.11	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	100	1.1	0.013	0.033	0.2	0.025	ND	ND	0.01	0.02	ND	0.052	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	6.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100	0.25	ND	ND	5.5	0.037	ND	ND	ND	ND	ND	0.02	ND	ND	ND	ND	ND	ND	ND
Phenol	100	ND	ND	0.052	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100	0.14	ND	ND	7.5	0.052	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Conc	500 (from ROD)	3.976	0.013	0.264	48.861	0.382	ND	ND	0.01	0.02	ND	0.116	ND	0.047	ND	ND	ND	ND	ND
Total Estimated Conc. (TICs)		16.07	1	1.5	13.58	0.6	2.5	3.5	3.2	2	0.69	0.34	0.39	1.2	1.3	0.93	1.4	1.1	2.8

Notes:
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NR = Not reported
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million
D = Diluted results
* Values provided for reference only. SCO's for subsurface soi
Entries in gray text were superseded following additional excav

Table 6B: Soil Documentation Sample Analytical Results - VOCs

Location ID Sample Date Sample ID	NYSDEC Part 375-6 Restricted-Res	PWRACEWAY601027 10/5/2016 R1610583	PWRACEWAY601028 10/5/2016 R1610583	PWEXBM13153 6/3/2019 460-183536-1	PWEXBM12154 6/4/2019 460-183615-1	PWEXBM09155 6/6/2019 460-183868-1	PWEXBM13156 6/6/2019 460-183868-2	PWEXBM14157 6/10/2019 460-184100-1	PWEXBM14158 6/12/2019 460-184340-1	PWEXBM14159 6/12/2019 460-184340-2	PWEXBM04106 6/12/2019 460-184340-3	PWEXBM16160 6/13/2019 460-184340-4	PWEXBM16161 6/13/2019 460-184340-5
Volatile Organic Compounds (ppm)													
1,1,1-Trichloroethane	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)		0.0044	0.028	ND	ND	0.0042	0.0033	ND	ND	ND	0.0047	ND	ND
2-Hexanone		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	100	0.019	0.011	0.013	ND	ND	0.0099	ND	0.014	0.0076	0.03	0.0097	0.01
Benzene	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide		ND	ND	ND	ND	ND	ND	ND	0.0012	ND	0.0036	0.00075	0.00085
Carbon tetrachloride	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	41	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl acetate		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	100	ND	ND	0.0013	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	100	ND	ND	ND	ND	ND	0.00031	ND	ND	ND	ND	ND	ND
Total Conc		0.0234	0.039	0.0143	ND	ND	0.01351	ND	0.0152	0.0076	0.0383	0.01045	0.01085
Total Estimated Conc. (TICs)		-	-	-	-	-	0.0055	-	-	-	-	-	-

Notes:

Results are pending data validation and DUSR preparation.

Results do not include laboratory data qualifier codes.

ND = Not detected above given laboratory reporting limit.

NR = Not reported

NA = Not Analyzed

Bold = Detected above reporting limit.

ppm = Parts per million (mg/kg)

Table 6B: Soil Documentation Sample Analytical Results - VOCs

Location ID Sample Date Sample ID	NYSDEC Part 375-6 Restricted-Res	PWEXBM15162 6/18/2019 460-184779-1	PWEXBM15163 6/18/2019 460-184779-2	PWEXBM14164 6/20/2019 460-184846-1	PWEXBM15165 6/20/2019 460-184846-2
Volatile Organic Compounds (ppm)					
1,1,1-Trichloroethane	100	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane		ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	ND	ND	ND
1,1,2-Trichloroethane		ND	ND	ND	ND
1,1-Dichloroethane	26	ND	ND	ND	ND
1,1-Dichloroethene	100	ND	ND	ND	ND
1,2,4-Trichlorobenzene		ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane		ND	ND	ND	ND
1,2-Dibromoethane		ND	ND	ND	ND
1,2-Dichlorobenzene	100	ND	ND	ND	ND
1,2-Dichloroethane	3.1	ND	ND	ND	ND
1,2-Dichloropropane		ND	ND	ND	ND
1,3-Dichlorobenzene	49	ND	ND	ND	ND
1,4-Dichlorobenzene	13	ND	ND	ND	ND
2-Butanone (MEK)		ND	ND	ND	ND
2-Hexanone		ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)		ND	ND	ND	ND
Acetone	100	0.021	ND	ND	0.009
Benzene	4.8	ND	ND	ND	ND
Bromodichloromethane		ND	ND	ND	ND
Bromoform		ND	ND	ND	ND
Bromomethane		ND	ND	ND	ND
Carbon disulfide		0.00041	ND	ND	ND
Carbon tetrachloride	2.4	ND	ND	ND	ND
Chlorobenzene	100	ND	ND	ND	ND
Chloroethane		ND	ND	ND	ND
Chloroform	49	ND	ND	ND	ND
Chloromethane		ND	ND	ND	ND
cis-1,2-Dichloroethene		ND	ND	ND	ND
cis-1,3-Dichloropropene		ND	ND	ND	ND
Cyclohexane		ND	ND	ND	ND
Dibromochloromethane		ND	ND	ND	ND
Dichlorodifluoromethane		ND	ND	ND	ND
Ethylbenzene	41	ND	ND	ND	ND
Isopropylbenzene		ND	ND	ND	ND
Methyl acetate		ND	ND	ND	ND
Methyl tert-butyl ether	100	ND	ND	ND	ND
Methylcyclohexane		ND	ND	ND	ND
Methylene Chloride	100	0.00085	0.0011	ND	ND
Styrene		ND	ND	ND	ND
Tetrachloroethene	19	ND	ND	ND	ND
Toluene	100	ND	ND	ND	ND
trans-1,2-Dichloroethene	100000	ND	ND	ND	ND
trans-1,3-Dichloropropene		ND	ND	ND	ND
Trichloroethene	21	ND	ND	ND	ND
Trichlorofluoromethane		ND	ND	ND	ND
Vinyl chloride	0.9	ND	ND	ND	ND
Xylenes, Total	100	ND	ND	ND	ND
Total Conc		0.02226	0.0011	ND	0.009
Total Estimated Conc. (TICs)		-	-	-	-

Notes:
Results are pending data validation and DUSR preparation.
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NR = Not reported
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million (mg/kg)

Table 6C: Soil Documentation Sample Analytical Results - SVOCs

Location ID Sample Date Sample ID	NYSDEC Part 375-6 Restricted- Res	PWRACEWAY601027 10/5/2016 R1610583	PWRACEWAY601028 10/5/2016 R1610583	PWEXBM13153 6/3/2019 460-183536-1	PWEXBM12154 6/4/2019 460-183615-1
Semivolatile Organic Compounds (ppm)					
2,4,5-Trichlorophenol		ND	ND	ND	ND
2,4,6-Trichlorophenol		ND	ND	ND	ND
2,4-Dichlorophenol		ND	ND	ND	ND
2,4-Dimethylphenol		ND	ND	ND	ND
2,4-Dinitrophenol		ND	ND	ND	ND
2,4-Dinitrotoluene		ND	ND	ND	ND
2,6-Dinitrotoluene		ND	ND	ND	ND
2-Chloronaphthalene		ND	ND	ND	ND
2-Chlorophenol		ND	ND	ND	ND
2-Methylnaphthalene		ND	ND	ND	ND
2-Methylphenol		ND	ND	ND	ND
2-Nitroaniline		ND	ND	ND	ND
2-Nitrophenol		ND	ND	ND	ND
3,3'-Dichlorobenzidine		ND	ND	ND	ND
3-Nitroaniline		ND	ND	ND	ND
4,6-Dinitro-2-methylphenol		ND	ND	ND	ND
4-Bromophenyl phenyl ether		ND	ND	ND	ND
4-Chloro-3-methylphenol		ND	ND	ND	ND
4-Chloroaniline		ND	ND	ND	ND
4-Chlorophenyl phenyl ether		ND	ND	ND	ND
4-Methylphenol		ND	ND	ND	ND
4-Nitroaniline		ND	ND	ND	ND
4-Nitrophenol		ND	ND	ND	ND
Acenaphthene	100	ND	ND	ND	ND
Acenaphthylene	100	ND	ND	ND	ND
Acetophenone		ND	ND	ND	ND
Anthracene	100	ND	ND	ND	ND
Atrazine		ND	ND	ND	ND
Benzaldehyde		ND	ND	ND	ND
Benzo[a]anthracene	1	ND	3.2	0.044	0.051
Benzo[a]pyrene	1	ND	ND	0.036	0.03
Benzo[b]fluoranthene	1	ND	ND	0.056	0.034
Benzo[g,h,i]perylene	100	ND	ND	0.023	0.017
Benzo[k]fluoranthene	3.9	ND	3.7	0.022	0.014
Biphenyl		ND	ND	ND	ND
bis (2-chloroisopropyl) ether		ND	ND	ND	ND
Bis(2-chloroethoxy)methane		ND	ND	ND	ND
Bis(2-chloroethyl)ether		ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate		ND	ND	ND	ND
Butyl benzyl phthalate		ND	ND	ND	ND
Caprolactam		ND	ND	ND	ND
Carbazole		ND	ND	ND	ND
Chrysene	3.9	ND	3.2	0.061	0.051
Dibenz(a,h)anthracene	0.33	ND	ND	ND	ND
Dibenzofuran	59	ND	ND	ND	0.015
Diethyl phthalate		ND	ND	ND	ND
Dimethyl phthalate		ND	ND	ND	ND
Di-n-butyl phthalate		ND	ND	ND	ND
Di-n-octyl phthalate		ND	ND	ND	ND
Fluoranthene	100	ND	6.8	0.064	0.061
Fluorene	100	ND	ND	ND	0.025
Hexachlorobenzene		ND	ND	ND	ND
Hexachlorobutadiene		ND	ND	ND	ND
Hexachlorocyclopentadiene		ND	ND	ND	ND
Hexachloroethane		ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.5	ND	ND	0.03	ND
Isophorone		ND	ND	ND	ND
Naphthalene	100	ND	ND	ND	ND
Nitrobenzene		ND	ND	ND	ND
N-Nitrosodi-n-propylamine		ND	ND	ND	ND
N-Nitrosodiphenylamine		ND	ND	ND	ND
Pentachlorophenol	6.7	ND	ND	ND	ND
Phenanthrene	100	ND	3	0.026	0.078
Phenol	100	ND	ND	ND	ND
Pyrene	100	ND	5.6	0.067	0.08
Total Conc		ND	25.5	0.429	0.456
Total Estimated Conc. (TICs)		-	-	-	252.71

Notes:
Results are pending data validation and DUSR preparation.
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NR = Not reported
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million (mg/kg)
D = Diluted results

Table 6C: Soil Documentation Sample Analytical Results - SVOCs

Location ID Sample Date Sample ID	NYSDEC Part 375-6 Restricted- Res	PWEXBM09155 6/6/2019 460-183868-1	PWEXBM13156 6/6/2019 460-183868-2	PWEXBM14157 6/10/2019 460-184100-1	PWEXBM14158 6/12/2019 460-184340-1	PWEXBM14159 6/12/2019 460-184340-2
Semivolatile Organic Compounds (ppm)						
2,4,5-Trichlorophenol		ND	ND	ND	ND	ND
2,4,6-Trichlorophenol		ND	ND	ND	ND	ND
2,4-Dichlorophenol		ND	ND	ND	ND	ND
2,4-Dimethylphenol		ND	ND	ND	ND	ND
2,4-Dinitrophenol		ND	ND	ND	ND	ND
2,4-Dinitrotoluene		ND	ND	ND	ND	ND
2,6-Dinitrotoluene		ND	ND	ND	ND	ND
2-Chloronaphthalene		ND	ND	ND	ND	ND
2-Chlorophenol		ND	ND	ND	ND	ND
2-Methylnaphthalene		ND	0.0091	ND	ND	ND
2-Methylphenol		ND	ND	ND	ND	ND
2-Nitroaniline		ND	ND	ND	ND	ND
2-Nitrophenol		ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine		ND	ND	ND	ND	ND
3-Nitroaniline		ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol		ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether		ND	ND	ND	ND	ND
4-Chloro-3-methylphenol		ND	ND	ND	ND	ND
4-Chloroaniline		ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether		ND	ND	ND	ND	ND
4-Methylphenol		ND	ND	ND	ND	ND
4-Nitroaniline		ND	ND	ND	ND	ND
4-Nitrophenol		ND	ND	ND	ND	ND
Acenaphthene	100	ND	ND	ND	ND	ND
Acenaphthylene	100	ND	ND	ND	ND	ND
Acetophenone		ND	ND	ND	ND	ND
Anthracene	100	ND	0.037	ND	ND	ND
Atrazine		ND	ND	ND	ND	ND
Benzaldehyde		ND	ND	ND	ND	ND
Benzo[a]anthracene	1	ND	0.066	ND	ND	ND
Benzo[a]pyrene	1	ND	0.049	ND	ND	ND
Benzo[b]fluoranthene	1	ND	0.063	ND	ND	ND
Benzo[g,h,i]perylene	100	ND	0.031	ND	ND	ND
Benzo[k]fluoranthene	3.9	ND	0.027	ND	ND	ND
Biphenyl		ND	ND	ND	ND	ND
bis (2-chloroisopropyl) ether		ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane		ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether		ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate		ND	ND	ND	ND	ND
Butyl benzyl phthalate		ND	ND	ND	ND	ND
Caprolactam		ND	ND	ND	ND	ND
Carbazole		ND	ND	ND	ND	ND
Chrysene	3.9	ND	0.053	ND	ND	ND
Dibenz(a,h)anthracene	0.33	ND	ND	ND	ND	ND
Dibenzofuran	59	ND	ND	ND	ND	ND
Diethyl phthalate		ND	ND	ND	ND	ND
Dimethyl phthalate		ND	ND	ND	ND	ND
Di-n-butyl phthalate		ND	ND	ND	ND	ND
Di-n-octyl phthalate		ND	ND	ND	ND	ND
Fluoranthene	100	ND	0.1	ND	ND	ND
Fluorene	100	ND	ND	ND	ND	ND
Hexachlorobenzene		ND	ND	ND	ND	ND
Hexachlorobutadiene		ND	ND	ND	ND	ND
Hexachlorocyclopentadiene		ND	ND	ND	ND	ND
Hexachloroethane		ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.5	ND	0.042	ND	ND	ND
Isophorone		ND	ND	ND	ND	ND
Naphthalene	100	ND	0.027	ND	ND	ND
Nitrobenzene		ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine		ND	ND	ND	ND	ND
N-Nitrosodiphenylamine		ND	ND	ND	ND	ND
Pentachlorophenol	6.7	ND	ND	ND	ND	ND
Phenanthrene	100	ND	0.051	ND	ND	ND
Phenol	100	ND	ND	ND	ND	ND
Pyrene	100	ND	0.082	ND	ND	ND
Total Conc		ND	0.6371	ND	ND	ND
Total Estimated Conc. (TICs)		-	-	6.06	2.99	2.49

Notes:

Results are pending data validation and DUSR preparation.
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NR = Not reported
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million (mg/kg)
D = Diluted results

Table 6C: Soil Documentation Sample Analytical Results - SVOCs

Location ID Sample Date Sample ID	NYSDEC Part 375-6 Restricted- Res	PWEXBM04106 6/12/2019 460-184340-3	PWEXBM16160 6/13/2019 460-184340-4	PWEXBM16161 6/13/2019 460-184340-5	PWEXBM15162 6/18/2019 460-184779-1	PWEXBM15163 6/18/2019 460-184779-2
Semivolatile Organic Compounds (ppm)						
2,4,5-Trichlorophenol		ND	ND	ND	ND	ND
2,4,6-Trichlorophenol		ND	ND	ND	ND	ND
2,4-Dichlorophenol		ND	ND	ND	ND	ND
2,4-Dimethylphenol		ND	ND	ND	ND	ND
2,4-Dinitrophenol		ND	ND	ND	ND	ND
2,4-Dinitrotoluene		ND	ND	ND	ND	ND
2,6-Dinitrotoluene		ND	ND	ND	ND	ND
2-Chloronaphthalene		ND	ND	ND	ND	ND
2-Chlorophenol		ND	ND	ND	ND	ND
2-Methylnaphthalene		ND	ND	ND	0.051	ND
2-Methylphenol		ND	ND	ND	ND	ND
2-Nitroaniline		ND	ND	ND	ND	ND
2-Nitrophenol		ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine		ND	ND	ND	ND	ND
3-Nitroaniline		ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol		ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether		ND	ND	ND	ND	ND
4-Chloro-3-methylphenol		ND	ND	ND	ND	ND
4-Chloroaniline		ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether		ND	ND	ND	ND	ND
4-Methylphenol		ND	ND	ND	ND	ND
4-Nitroaniline		ND	ND	ND	ND	ND
4-Nitrophenol		ND	ND	ND	ND	ND
Acenaphthene	100	ND	ND	ND	0.031	ND
Acenaphthylene	100	ND	ND	ND	0.021	ND
Acetophenone		ND	ND	ND	ND	ND
Anthracene	100	ND	ND	ND	0.13	ND
Atrazine		ND	ND	ND	ND	ND
Benzaldehyde		ND	ND	ND	ND	ND
Benzo[a]anthracene	1	ND	ND	ND	0.051	ND
Benzo[a]pyrene	1	ND	ND	ND	0.029	ND
Benzo[b]fluoranthene	1	0.0012	ND	ND	0.042	ND
Benzo[g,h,i]perylene	100	ND	ND	ND	0.019	ND
Benzo[k]fluoranthene	3.9	ND	ND	ND	0.025	ND
Biphenyl		ND	ND	ND	ND	ND
bis (2-chloroisopropyl) ether		ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane		ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether		ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate		ND	ND	ND	ND	ND
Butyl benzyl phthalate		ND	ND	ND	ND	ND
Caprolactam		ND	ND	ND	ND	ND
Carbazole		ND	ND	ND	0.028	ND
Chrysene	3.9	ND	ND	ND	0.073	0.036
Dibenz(a,h)anthracene	0.33	ND	ND	ND	ND	ND
Dibenzofuran	59	ND	ND	ND	0.04	ND
Diethyl phthalate		ND	ND	ND	ND	ND
Dimethyl phthalate		ND	ND	ND	ND	ND
Di-n-butyl phthalate		ND	ND	ND	ND	ND
Di-n-octyl phthalate		ND	ND	ND	ND	ND
Fluoranthene	100	ND	ND	ND	0.078	ND
Fluorene	100	ND	ND	ND	0.048	ND
Hexachlorobenzene		ND	ND	ND	ND	ND
Hexachlorobutadiene		ND	ND	ND	ND	ND
Hexachlorocyclopentadiene		ND	ND	ND	ND	ND
Hexachloroethane		ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.5	ND	ND	ND	ND	ND
Isophorone		ND	ND	ND	ND	ND
Naphthalene	100	ND	ND	ND	0.17	ND
Nitrobenzene		ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine		ND	ND	ND	ND	ND
N-Nitrosodiphenylamine		ND	ND	ND	ND	ND
Pentachlorophenol	6.7	ND	ND	ND	ND	ND
Phenanthrene	100	ND	ND	ND	0.14	ND
Phenol	100	ND	ND	ND	ND	ND
Pyrene	100	ND	ND	ND	0.097	ND
Total Conc		ND	ND	ND	1.073	0.036
Total Estimated Conc. (TICs)		2.05	2.3	2.8	757.16	622.93

Notes:

Results are pending data validation and DUSR preparation.
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NR = Not reported
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million (mg/kg)
D = Diluted results

Table 6C: Soil Documentation Sample Analytical Results - SVOCs

Location ID Sample Date Sample ID	NYSDEC Part 375-6 Restricted- Res	PWEXBM14164 6/20/2019 460-184846-1	PWEXBM15165 6/20/2019 460-184846-2
Semivolatile Organic Compounds (ppm)			
2,4,5-Trichlorophenol		ND	ND
2,4,6-Trichlorophenol		ND	ND
2,4-Dichlorophenol		ND	ND
2,4-Dimethylphenol		ND	ND
2,4-Dinitrophenol		ND	ND
2,4-Dinitrotoluene		ND	ND
2,6-Dinitrotoluene		ND	ND
2-Chloronaphthalene		ND	ND
2-Chlorophenol		ND	ND
2-Methylnaphthalene		ND	ND
2-Methylphenol		ND	ND
2-Nitroaniline		ND	ND
2-Nitrophenol		ND	ND
3,3'-Dichlorobenzidine		ND	ND
3-Nitroaniline		ND	ND
4,6-Dinitro-2-methylphenol		ND	ND
4-Bromophenyl phenyl ether		ND	ND
4-Chloro-3-methylphenol		ND	ND
4-Chloroaniline		ND	ND
4-Chlorophenyl phenyl ether		ND	ND
4-Methylphenol		ND	ND
4-Nitroaniline		ND	ND
4-Nitrophenol		ND	ND
Acenaphthene	100	ND	ND
Acenaphthylene	100	ND	ND
Acetophenone		ND	ND
Anthracene	100	ND	ND
Atrazine		ND	0.021
Benzaldehyde		ND	ND
Benzo[a]anthracene	1	ND	ND
Benzo[a]pyrene	1	ND	ND
Benzo[b]fluoranthene	1	ND	ND
Benzo[g,h,i]perylene	100	ND	ND
Benzo[k]fluoranthene	3.9	ND	ND
Biphenyl		ND	ND
bis (2-chloroisopropyl) ether		ND	ND
Bis(2-chloroethoxy)methane		ND	ND
Bis(2-chloroethyl)ether		ND	ND
Bis(2-ethylhexyl) phthalate		ND	ND
Butyl benzyl phthalate		ND	ND
Caprolactam		ND	ND
Carbazole		ND	ND
Chrysene	3.9	ND	ND
Dibenz(a,h)anthracene	0.33	ND	ND
Dibenzofuran	59	ND	ND
Diethyl phthalate		ND	ND
Dimethyl phthalate		ND	ND
Di-n-butyl phthalate		ND	ND
Di-n-octyl phthalate		ND	ND
Fluoranthene	100	ND	0.012
Fluorene	100	ND	0.01
Hexachlorobenzene		ND	ND
Hexachlorobutadiene		ND	ND
Hexachlorocyclopentadiene		ND	ND
Hexachloroethane		ND	ND
Indeno[1,2,3-cd]pyrene	0.5	ND	ND
Isophorone		ND	ND
Naphthalene	100	ND	ND
Nitrobenzene		ND	ND
N-Nitrosodi-n-propylamine		ND	ND
N-Nitrosodiphenylamine		ND	ND
Pentachlorophenol	6.7	ND	ND
Phenanthrene	100	ND	0.017
Phenol	100	ND	ND
Pyrene	100	0.014	ND
Total Conc		0.014	0.06
Total Estimated Conc. (TICs)		690.28	302.77

Notes:

Results are pending data validation and DUSR preparation.
Results do not include laboratory data qualifier codes.
ND = Not detected above given laboratory reporting limit.
NR = Not reported
NA = Not Analyzed
Bold = Detected above reporting limit.
ppm = Parts per million (mg/kg)
D = Diluted results

Table 8: Remaining Sediment Contamination

Location ID Cell Location Sample Date SDG Units	PWEXBM02 031 Cell 3 10/17/2016 R1611025-003 (ug/kg)	PWEXBM02 035 Cell 4 10/31/2016 R1611543-004 (ug/kg)	PWEXBM02 042 Cell 5A 12/8/2016 R1612959-001 (ug/kg)	PWEXBM02047 Cell 6A 12/8/2016 R1700210-002 (ug/kg)
Parameter				
2-Methylnaphthalene	15000 U	4000	25000	57000 U
Acenaphthene	30000	5500	33000	57000 U
Acenaphthylene	15000 U	2400 U	11000 U	57000 U
Anthracene	51000	3700	32000	160000
Benzo(a)anthracene	62000	2400 U	26000	260000
Benzo(a)pyrene	52000	2400 U	21000	270000
Benzo(b)fluoranthene	52000	2400 U	22000	290000
Benzo(g,h,i)perylene	26000	2400 U	12000	190000
Benzo(k)fluoranthene	21000	2400 U	11000 U	100000
Chrysene	48000	2400 U	21000	260000
Dibenzo(a,h)anthracene	15000 U	2400 U	11000 U	57000 U
Fluoranthene	150000	3800	59000	740000
Fluorene	32000	3900	29000	75000
Indeno(1,2,3-cd)pyrene	33000	2400 U	13000	180000
Naphthalene	15000 U	8400	59000	57000 U
Phenanthrene	160000	14000	94000	830000
Pyrene	110000	2400 U	45000	710000
tPAH17	827000	43300	491000	4065000

Notes:

This is a summary table. Only detected analytes are presented.

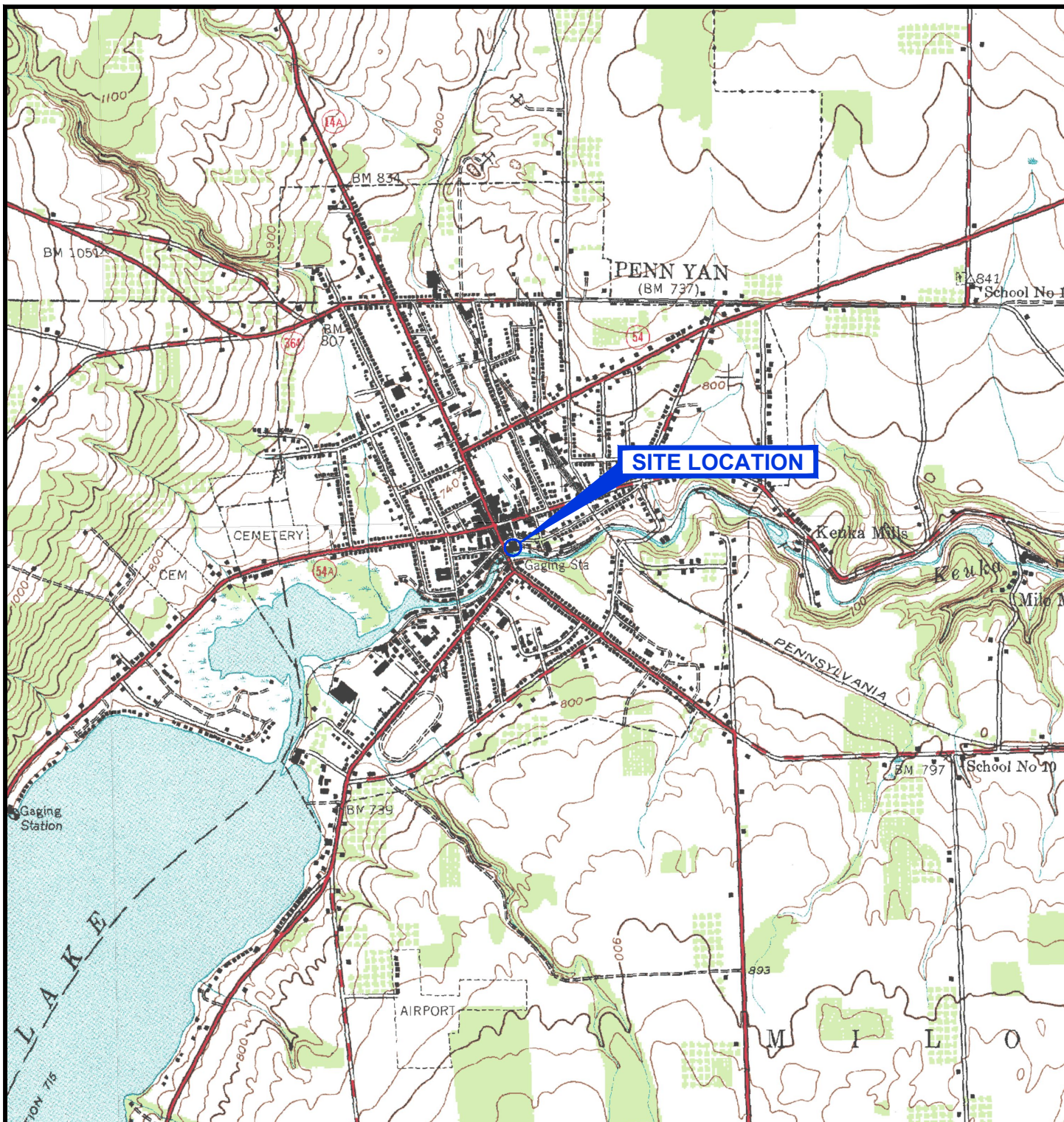
U = Not detected above given laboratory reporting limit.

Bold = Detected above reporting limit.

Orange highlighted cells exceed the Record of Decision (ROD) remediation goal for tPAH17 of 43 mg/kg

ug/kg = Micrograms per kilogram

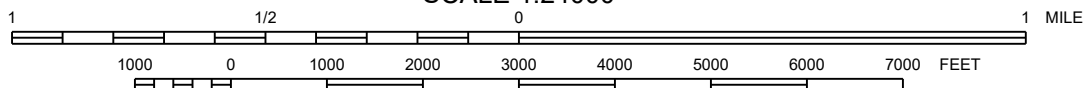
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UNITED STATES GEOLOGIC SURVEY
PENN YAN QUADRANGLE
NEW YORK
7.5 MINUTE SERIES (TOPOGRAPHY)

PENN YAN, NY.
1983
PHOTOREVISED 1995

SCALE 1:24000



AECOM

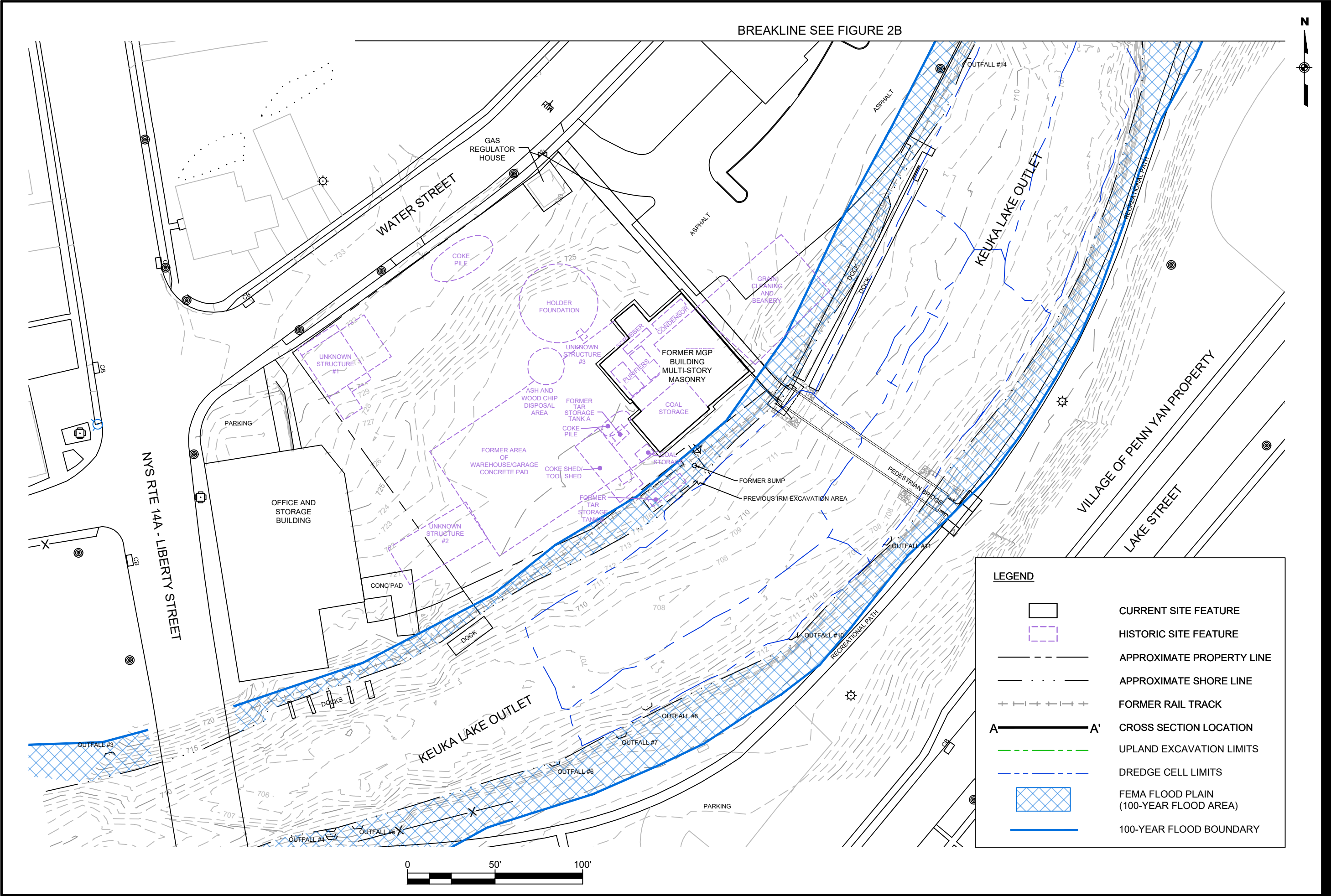
PENN YAN WATER STREET
FORMER MGP SITE
FINAL ENGINEERING REPORT

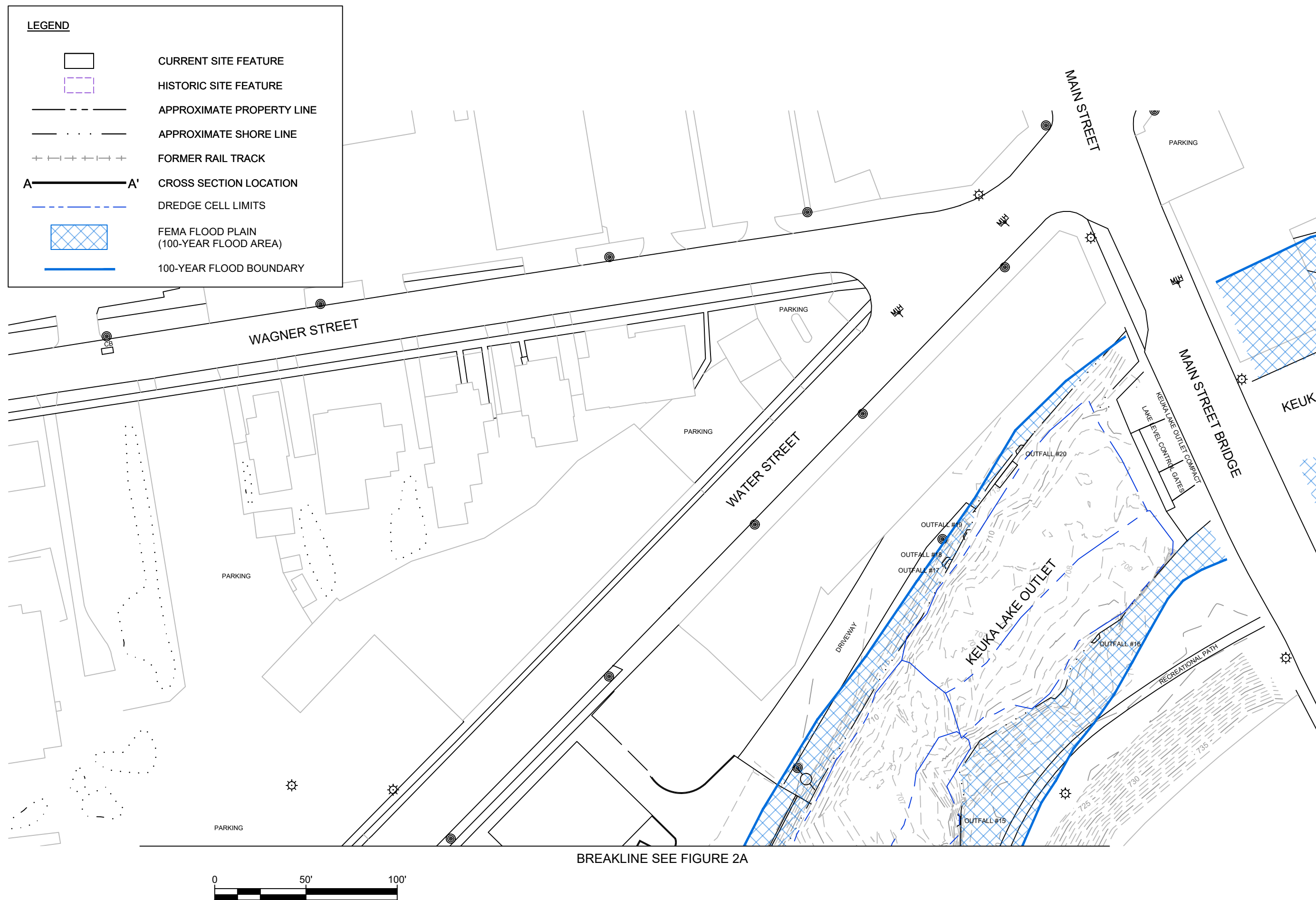
SITE LOCATION MAP

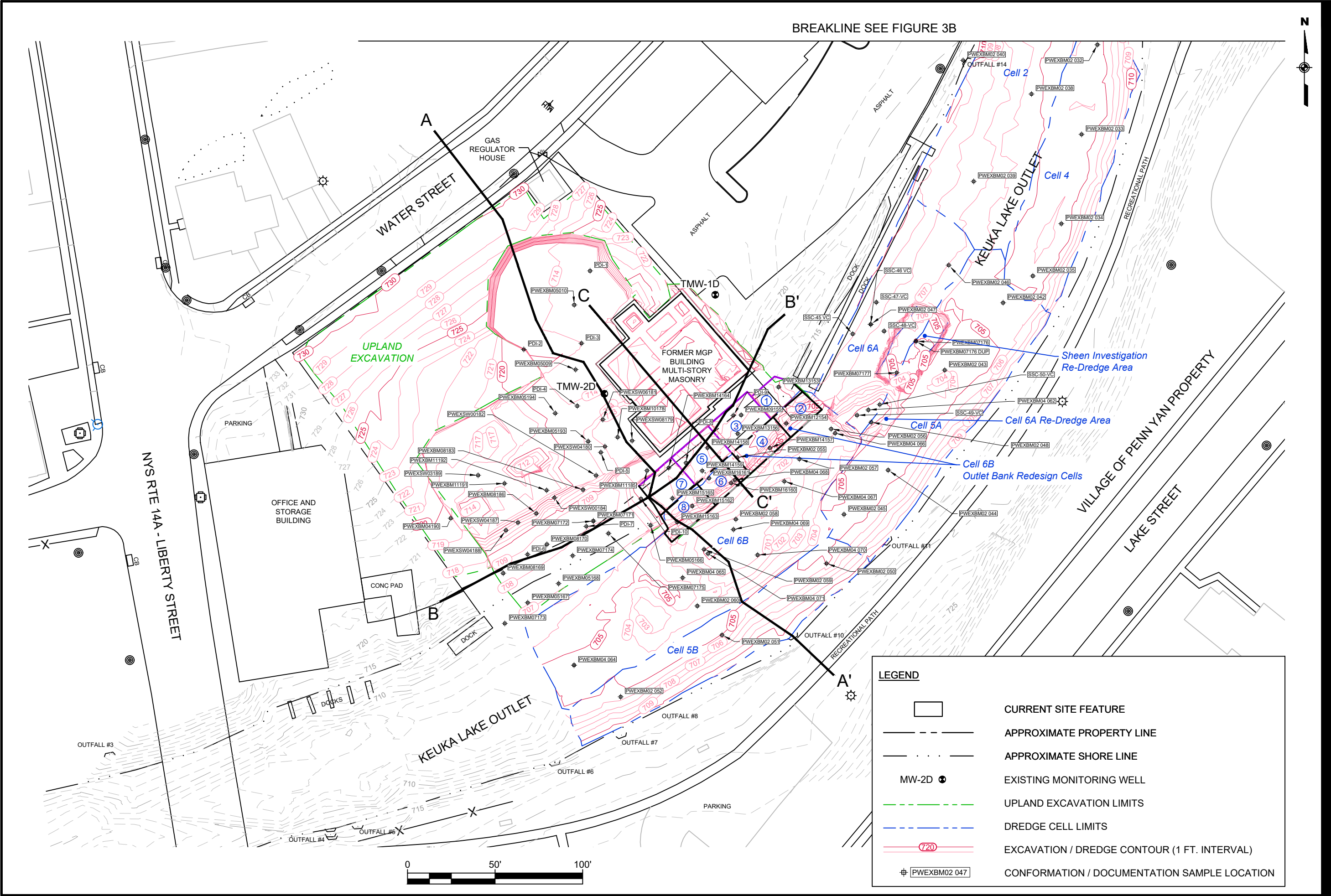
DATE: MAY 2021

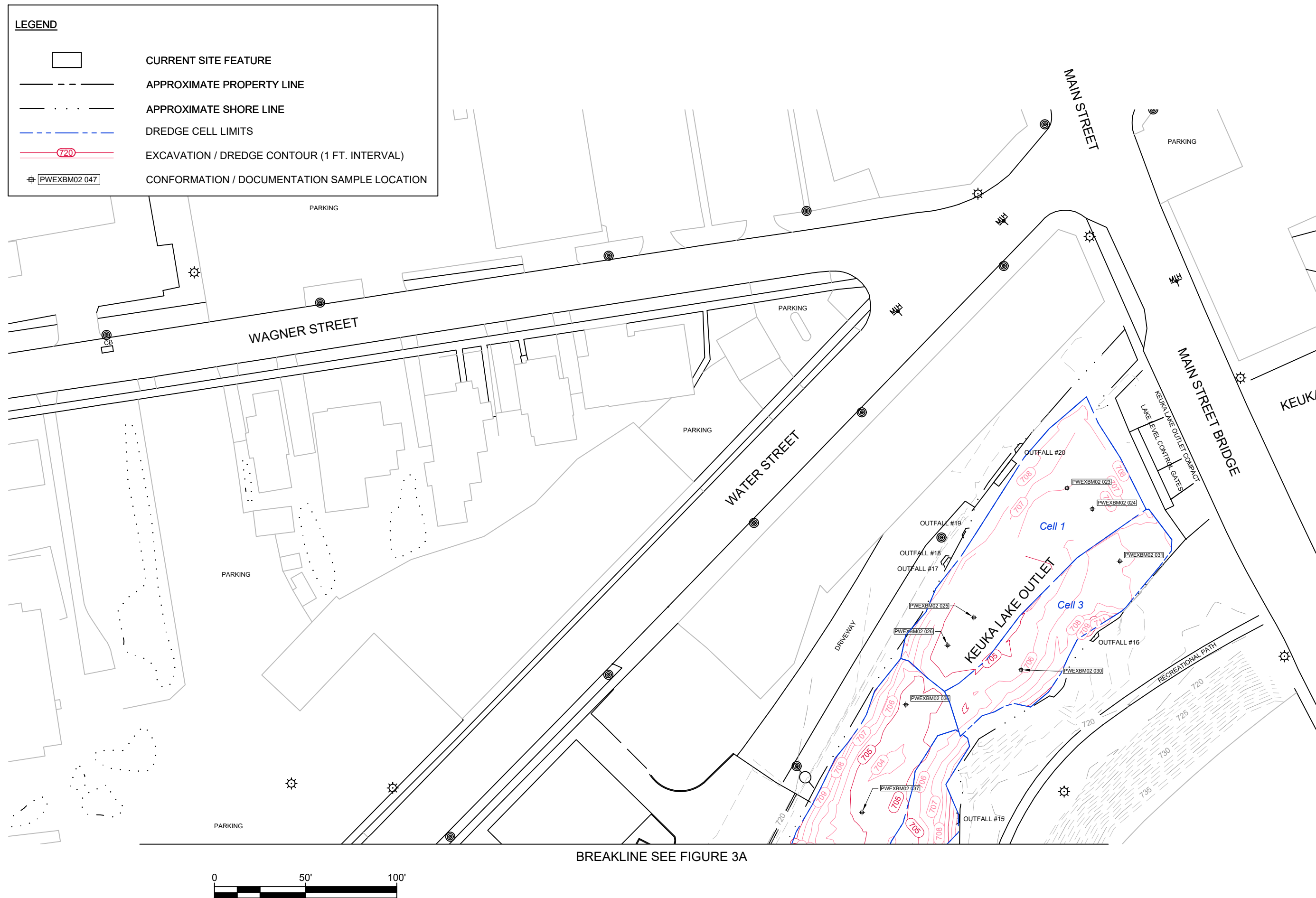
DRWN:

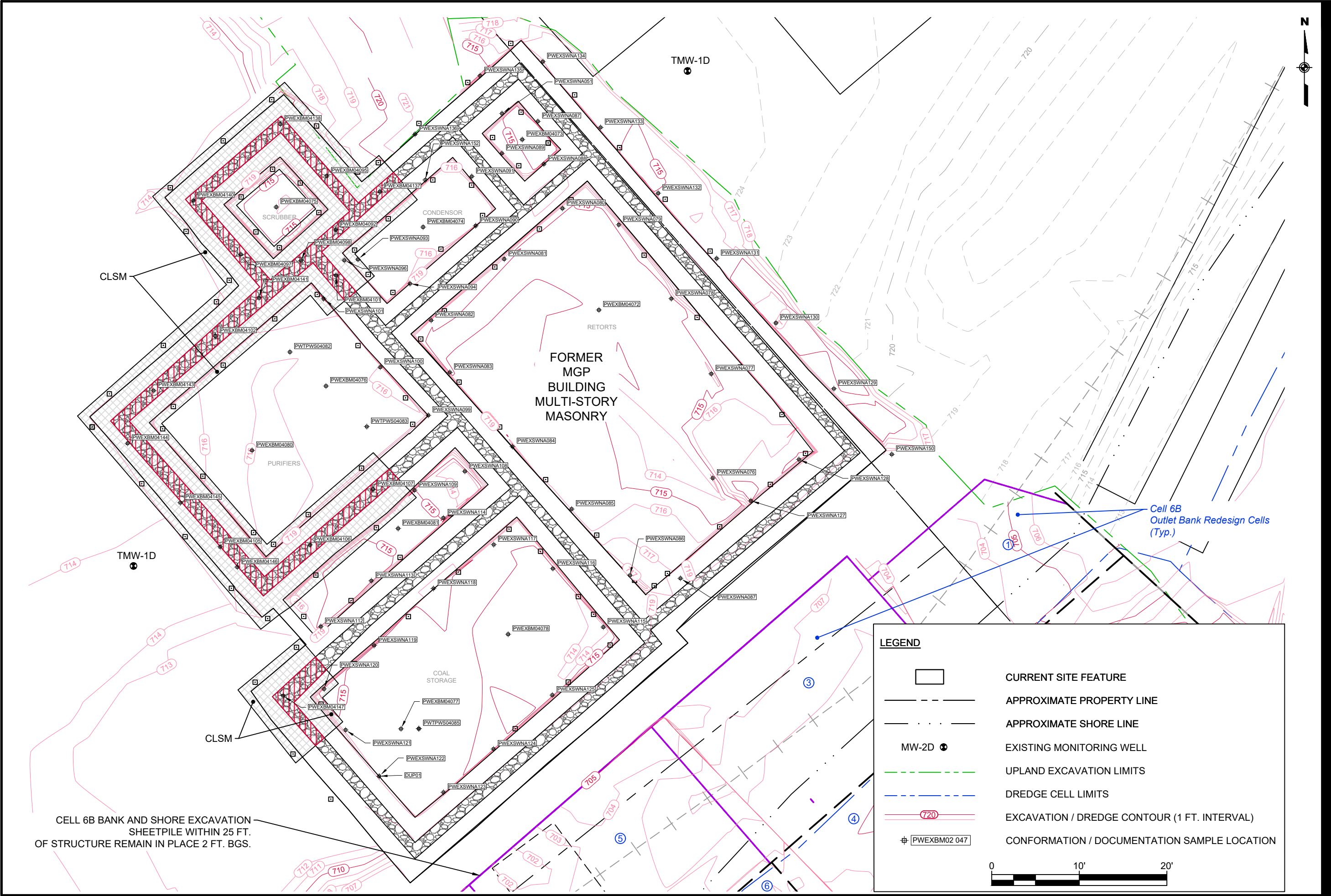
FIGURE 1



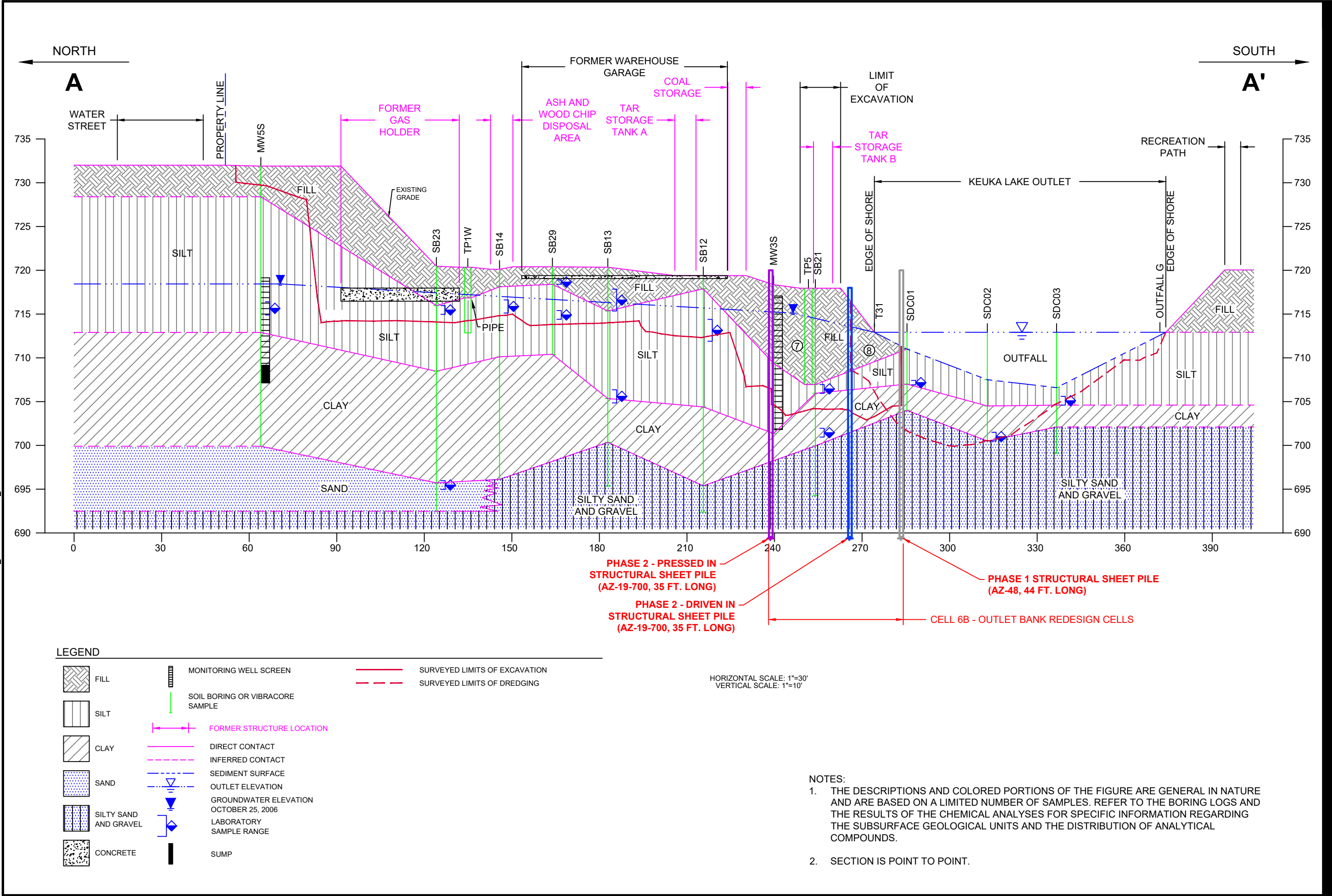


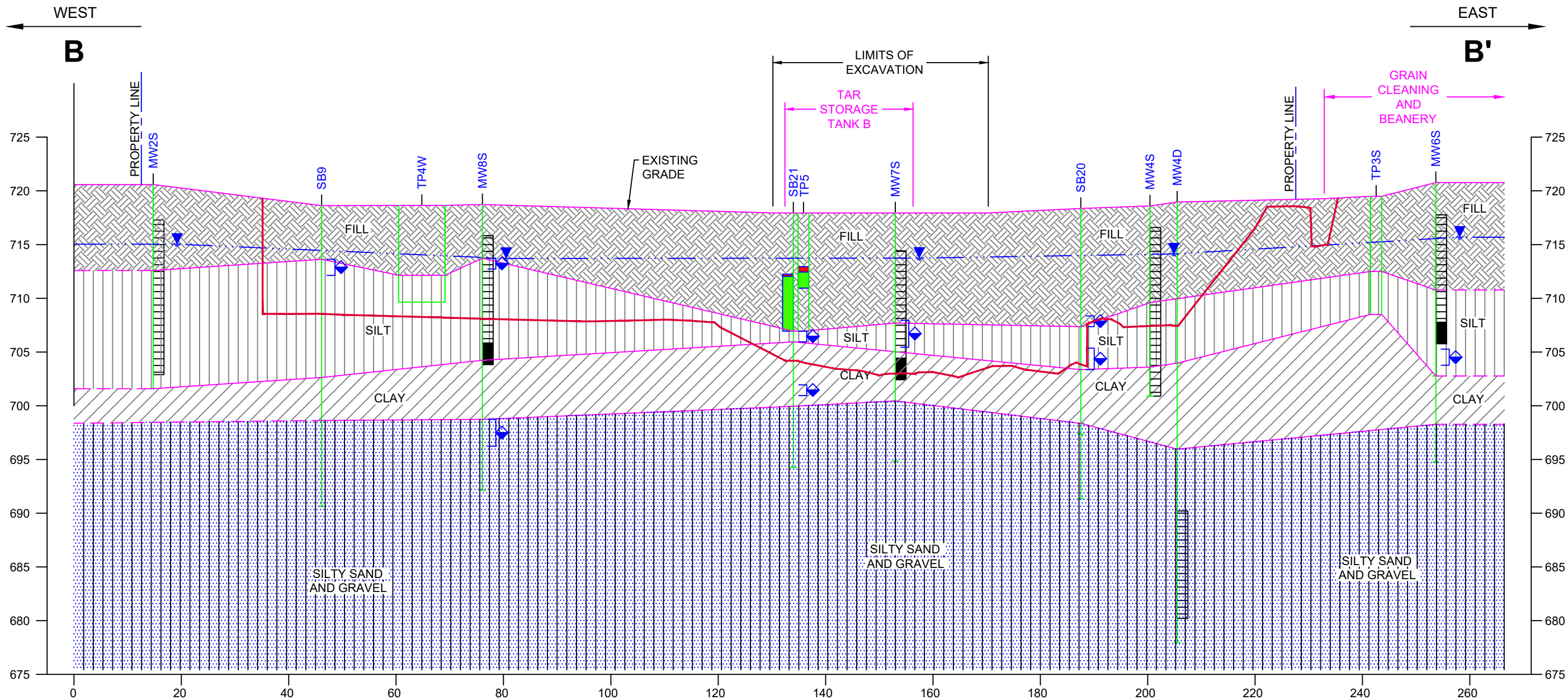




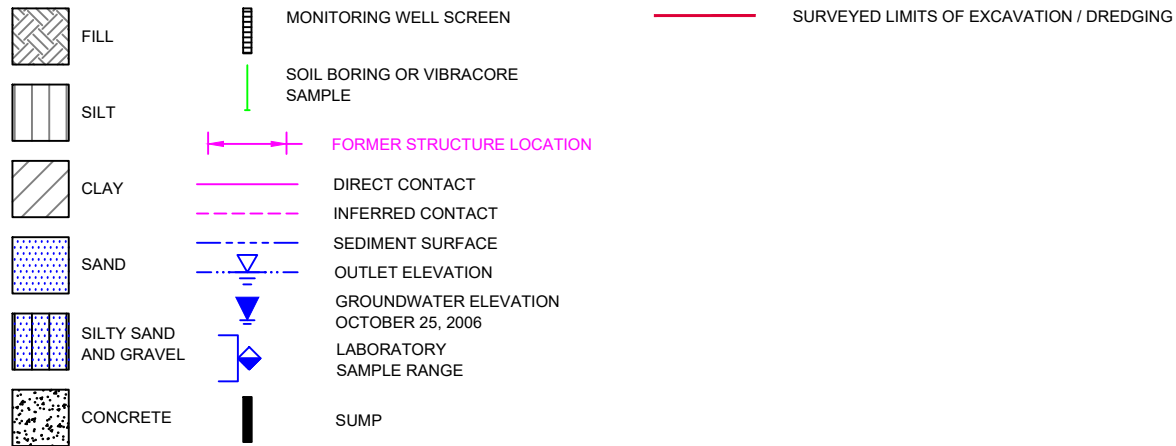


Last saved by: MEISTERK(2022-02-03) Last Plotted: 2022-02-11
Filename: C:\USERS\MEISTERK\AECOM\YSEG PENN YAN MGP - 900 - CAD\C\IFER20-SHEETS\FINAL\IFER - SECT A-A.DWG
Project Management Initials: Designer: Checked: Approved: ANSIB 11" x 17"



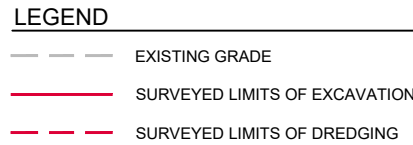


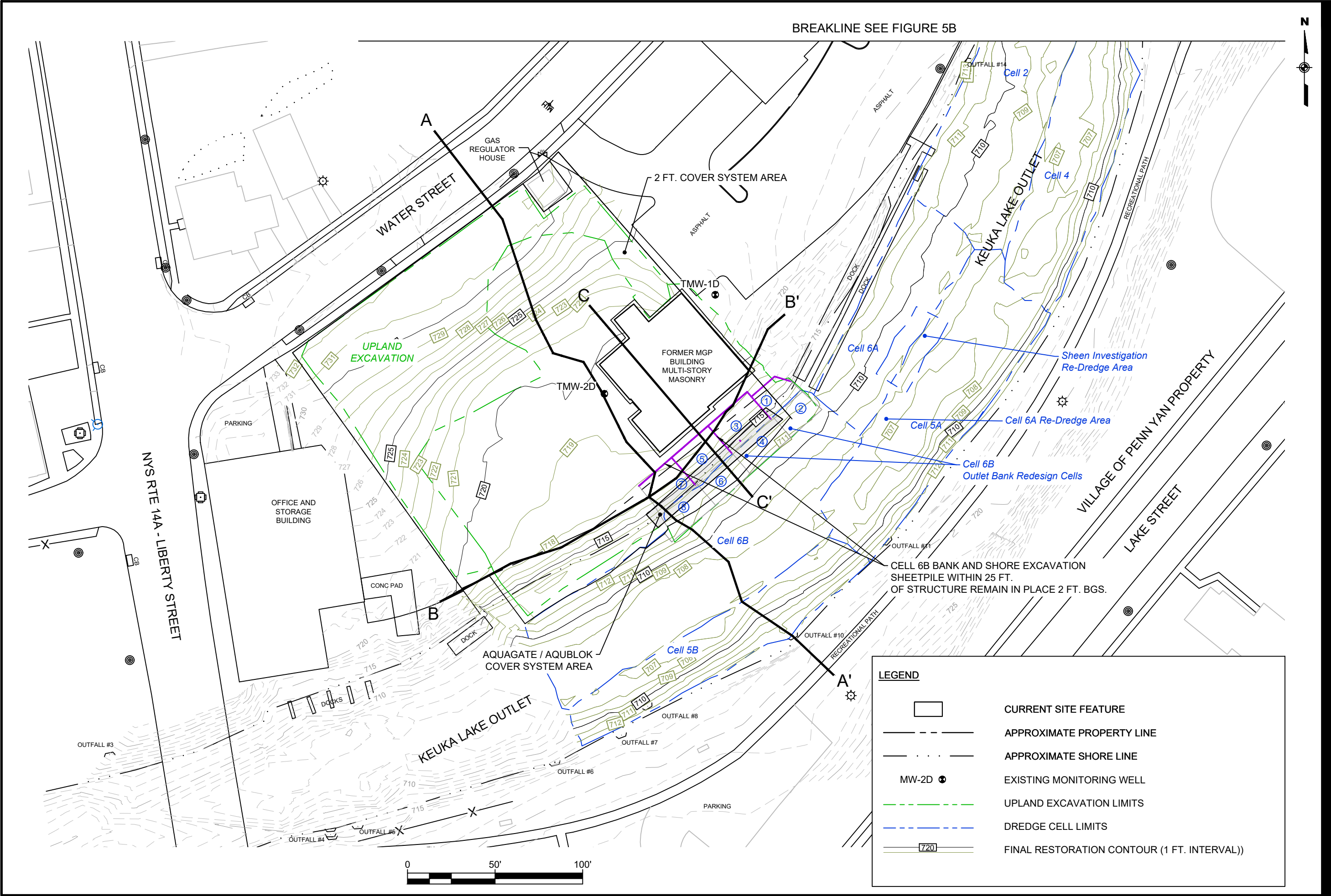
LEGEND

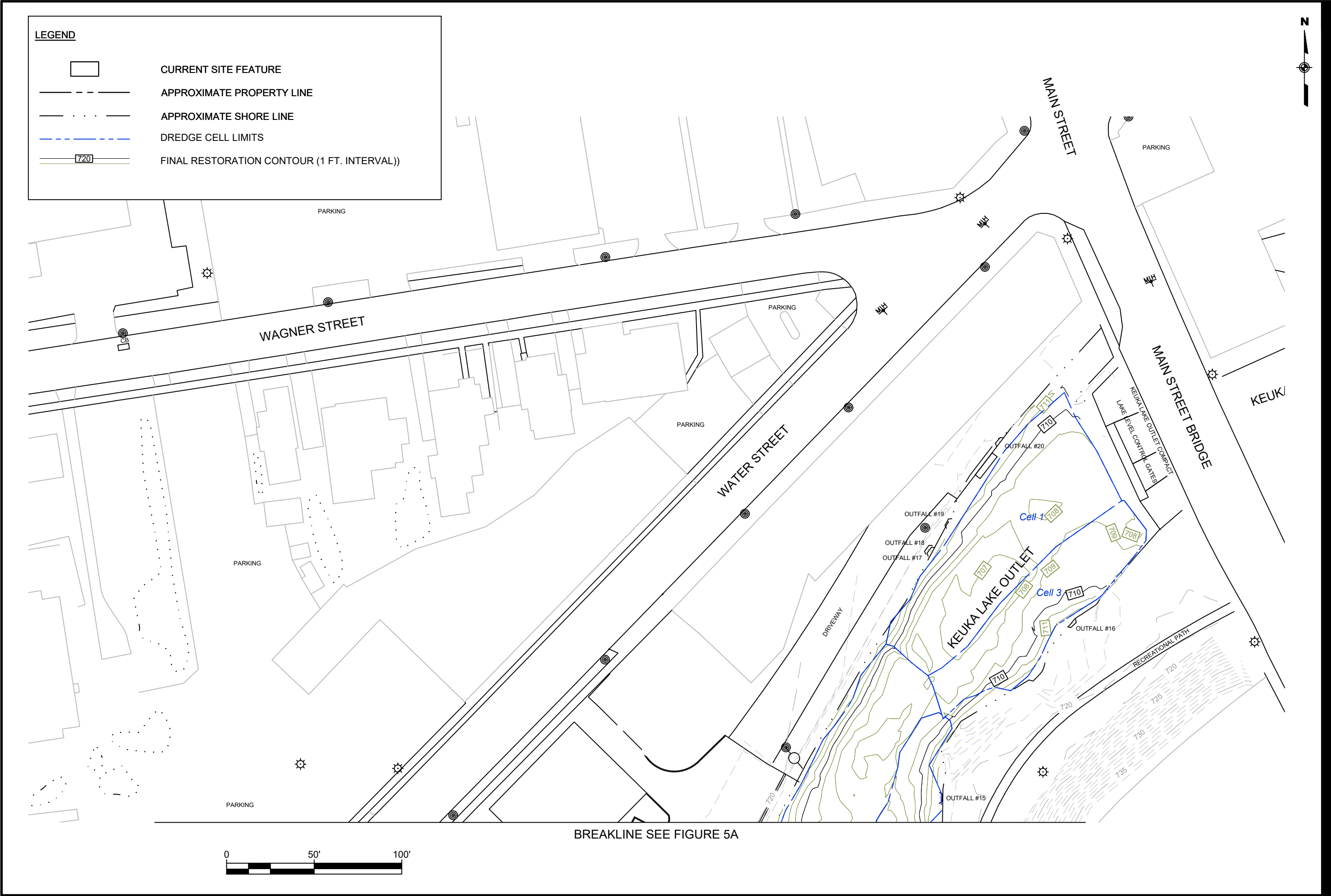


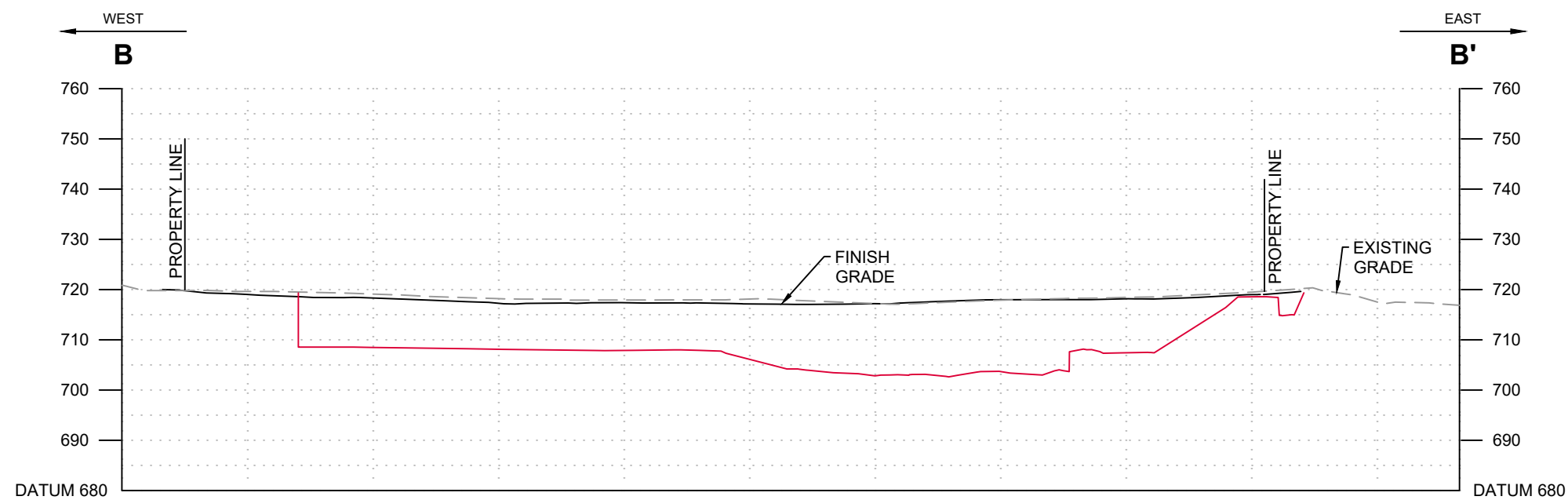
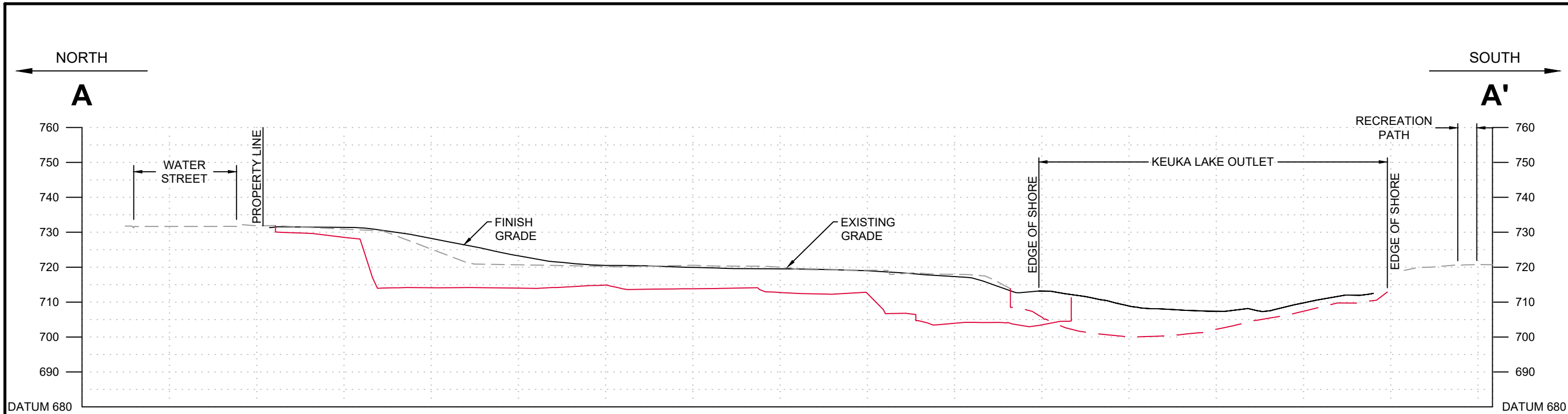
NOTES:

- THE DESCRIPTIONS AND COLORED PORTIONS OF THE FIGURE ARE GENERAL IN NATURE AND ARE BASED ON A LIMITED NUMBER OF SAMPLES. REFER TO THE BORING LOGS AND THE RESULTS OF THE CHEMICAL ANALYSES FOR SPECIFIC INFORMATION REGARDING THE SUBSURFACE GEOLOGICAL UNITS AND THE DISTRIBUTION OF ANALYTICAL COMPOUNDS.
- SECTION IS POINT TO POINT.









LEGEND

- — — EXISTING GRADE
 — SURVEYED LIMITS OF EXCAVATION
 — SURVEYED LIMITS OF DREDGING
 — FINISH GRADE

